

NMPG Investment Funds Australia & New Zealand

Market Practice

For ISO 20022 Messages

Order and Confirmation Processing (Final)

Version 3

7 July 2017

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1 Introduction

This document (and the associated message usage guidelines) contains the market practice guidelines for the interpretation and usage of ISO 20022¹ order and confirmation messages for the automation of the Australian domestic investment funds industry. It defines a standard set of rules for the interpretation and usage of the messages.

This document serves as a reference for the work of Australian Investment Funds Working Group "AIFWG", a sub-group of the Australian Securities Market Practice Group (SMPG). It shall be considered as the basis for Australian market practices in the investment fund business in Australia in conjunction with the work already established by SwimEC². The definition of such market practices is an important task of the AIFWG.

The document is intended for:

- Institutional investors
- Distributors of investment fund units
- Custodians and registry providers
- Fund hubs
- Fund management companies and asset managers

The document was prepared by the following members of the Australian Investment Funds Working Group:

- ABN Amro Asset Management
- ANZ Custodian Services
- Ausmaq
- Barclays Global Investors
- BNP Paribas Securities Services
- BT Financial Group (wrap)
- Colonial First State
- HSBC Security Services
- JP Morgan Chase Bank
- Macquaire Bank (wrap)
- National Australia Bank, Custodian Services
- RBC Dexia Investor Services
- State Street Australia Limited
- SWIFT
- Vanguard Investments Australia

The main goal of this collaboration is to increase efficiency in the process of distribution and settlement in the investment fund business.

¹ The International Organization for Standardization (ISO) is a worldwide federation of national standards bodies (ISO member bodies). International Standard ISO 20022 was prepared by Technical Committee ISO TC68 Financial Services. The standard provides the financial industry with a common platform for the development of messages in a standardized XML syntax. The registration authority for ISO 20022 is SWIFT. For more information: www.ISO20022.org and www.swift.com

² SwimEC (Super, Wealth and Investment Management Electronic Commerce) is the industry initiative mounted by the Association of Superannuation Funds of Australia (ASFA), the Investment and Financial Services Association (IFSA) and the Financial Planning Association (FPA).

2 Scope

The scope of this market practice are the order, order status, confirmation and cancellation processes when dealing in investment funds. It is focused on the order and confirmation process that takes place between an instructing party and an executing party, usually a transfer agent/registry.

2.1 Messages used in this market practice

This market practice covers the following ISO 20022 messages:

#	Message Name	Message Number
1	SubscriptionOrder	setr.010
2	RedemptionOrder	setr.004
3	OrderInstructionStatusReport	setr.016
4	SubscriptionOrderCancellationRequest	setr.011
5	RedemptionOrderCancellationRequest	setr.005
6	OrderCancellationStatusReport	setr.017
7	SubscriptionOrderConfirmation	setr.012
8	RedemptionOrderConfirmation	setr.006
9	SubscriptionOrderConfirmationCancellationInstruction	setr.047
10	RedemptionOrderConfirmationCancellationInstruction	setr.051
11	RequestForOrderStatusReport	setr.018

2.2 Terminology

- The term 'units' is used to represent units or shares of a fund.
- The generic term 'subscription' is interchangeable with the term 'application' as used in Australia
- Subscription an instruction (order) given to the executing party, to purchase (subscribe for) units in a fund.
- Redemption an instruction (order) given to the executing party, to sell (redeem) units in a fund.
- Confirmation a message sent to the to confirm the execution details of an order. This will confirm the financial and contractual details of the transaction.
- Order cancellation request request for the cancellation of an order that has been previously sent. The processing of a cancellation may be subject to the agreement of the executing party and the time at which the cancellation request is received.
- Order confirmation cancellation instruction cancellation instruction of an order confirmation that has been previously sent.

2.3 Related Documentation

SWIFTNet Funds Documentation

<u>SWIFTNet Funds User Handbook (UHB)</u>. The current version (documentation and schema files) for the funds order (setr) messages for live use in the SWIFTNet Funds solution from November 2017) is Funds 5.0:

(Should there be issues accessing the UHB, then please contact support@swift.com.)

<u>SWIFTNet Funds Service Description</u>. The current version is Funds 5.0.

SMPG Investment Funds global market practice published on MyStandards

- [1] Log into MyStandards (if you are not a user, then create an account, a BIC is not necessary),
- [2] Enter "SMPG IF" in the search box >
- [3] Click on "Groups"
- [4] Click on SMPG IF



[5] Click SMPG-Global-IF-OrderProcessing-Final_IF (2017-05-05)

MyStandard Standards me	
	SMPG IF
	Usage Guidelines
	SMPG-Global-IF-Statements-CONSOLIDATED-Draft (2017-05-18)
	SMPG-Global-IF-OrderProcessing-Final_AIF (2017-05- 17)
	SMPG-Global-IF-AccountManagement-Final (2017-05- 11)
[5]	SMPG-Global-IF-OrderProcessing-Final_IF (2017-05- 05)
	SMPG-Global-IF-AccountManagement-Final (2016-04- 06)
	more guidelines

[6] When the collection is opened, click on 'show details' to access the 'process document' "SMPG-IFWG-MP-OrdersProcessing-Final_SR2017_IF_2017-05-05". This document is a complement to the usage guidelines.



[7] Click on a usage guideline to view the message restrictions.

2.4 Usage Guidelines on MyStandards

On the MyStandards platform, a group has been set up for the publication of the Australian investment funds market practice (NMPG AU NZ IF). The usage guidelines for the Australian investment funds market practice for the order process are published in the collection "NMPG-AU_NZ-IF-OrderProcessing-DRAFT_IF (2017-mm-dd)". To search for the collection on MyStandards:

- Log into MyStandards (if you are not a user, then create an account, a BIC is not necessary)
- Enter "NMPG AU NZ" in the search box
- Click on "Groups " > NMPG AU NZ IF > NMPG-AU_NZ-IF-OrderProcessing-DRAFT_IF (2017-mm-dd)"

This takes you to a screen listing the usage guidelines of the collection. Click on 'show details' to get access to the collection description and the documents posted with the collection.

2.5 Representation on MyStandards

The Australian investment funds usage guidelines make recommendations about the usage of messages in the usage guidelines (UGs). These are published on the MyStandards platform (see section 7). The SMPG IF working group has agreed upon a set of fields or elements that serve as a basis for market practices in the investment fund business.

A usage guideline represents the actual market practice recommendation (or 'baseline'):

- Any optional or mandatory field/element remaining in the usage guideline is part of the recommendation.
- Any 'removed' optional element/field is not part of the recommendation. The notation used to indicate an element that must not be used or is not part of the SMPG IF recommendation is denoted by:



In some cases, SMPG IF provides some usage information for an element denoted as state why an element is not part of the SMPG IF recommendation.

3 Market Participants - Roles and Relationships

The following roles, among others, are commonly used at the international level for the actors/agents involved in the distribution/settlement process along with the name that this role is commonly referred to within the Australian Market:

Actors/Agents	Role	Actor within Australian Market
Employer	An entity that owes salary to an investor, and which arranges for tax-advantaged investments in lieu of salary.	Employer
RegulatorThe regulator lays down the legal basis binding for the market participants.Defines the code of conduct and the conventions within the framework of self-regulation.		The Australian Securities and Investments Commission (ASIC), The Australian Prudential Regulatory Authority (APRA), The Investment and Financial Services Association (IFSA)
Investor	The party whose money is invested and who benefits from the performance of the investment. It can either be an individual or an institutional investor.	Final Customer
Fund Company (Responsible Entity)	The company that launches the fund, determines the investment strategy, appoints the service providers, and makes all major decisions for the fund. It is responsible for the distribution and marketing of the fund.	Fund Manager (The Responsible Entity can be a Custodian, Trustee or FM)
Asset Manager / Investment Manager	The asset manager is in charge of financial assets and manages them based on the fund's investment policy guidelines laid down in the prospectus.	The terms Investment Manager and Asset Manager are interchangeable in AU market
Fund Accountant The fund accountant records the fund's assets and liabilities and calculates the fund's net asset value (NAV) as well as the subscription and redemption price.		Typically the role of the Registry service– this can be in-house with the Fund Manager or out-sourced to a registry service provider / fund accountant
Representative Legal representative of the fund to investors and regulators, hence it is mainly responsible for the mandatory publication and other information of the fu the representative is a bank, it also takes on the role the paying agent (see below).		For Australian investment funds, the fund manager is the fiduciary owner of the fund's assets. From an operational point of view, however, the registry provider plays the core role as it takes care of all subscriptions as well as payment transactions. Further subscription and paying agents may be mentioned in the prospectus.
Paying Agent The paying agent can accept money, pay proceeds from investment fund units redemptions and disburse dividends.		The registry functions cash bank.
Custodian	The custodian is responsible for the safe-keeping and monitoring of the fund's assets	Custodian
Registry / Transfer Agent The transfer agent/registry updates the fund accounts to reflect the daily unit sales and redemptions, switches, transfers and changes of registrations. It ensures prompt settlement of orders and is able to provide tax information to the investor and its intermediaries. It can calculate,		Registry provider – fund manager, custodian, separate independent registry provider.

Actors/Agents	Role	Actor within Australian Market
	receive and set off commissions. It prepares and sends out order confirmations and the resulting cash account statements to the investor or its intermediary. It responds to requests concerning securities account holdings and has a control function. It executes payments.	
Registrar	It is appointed by the fund company and keeps the investor registers. It keeps the records of investor securities accounts. These records represent the fund's liabilities. It prepares the account statements (securities holdings and cash) for the investor and/or its intermediary and makes them available on a periodic or ad hoc basis. It can provide tax information to the investor or its intermediary. It can be appointed "corporate secretary" for exercising voting rights. It reports to the regulator and the unit holder and can appoint a sub-registrar.	Not valid in the Australian Market
Intermediary	 The Intermediary is an agent between two transacting parties but usually acts in its own name. It centralizes certain activities and thus generates economies of scale. Fund supermarkets and wrap providers provide the custody, settlement and accounting for all investments with on-line consolidated valuation and reporting to the investor. These providers can comprise the following: Broker/ Dealer Employer Planner & Administrator Clearing Broker 	Platforms (Master trusts / wraps), Distributor, Fund hubs
Financial Advisor	Works with investor to determine investor's financial objectives and degree of risk aversion. Develops a financial plan showing asset allocation and continuing investment necessary to achieve objectives. Recommends financial products for inclusion in investor's portfolio. Provides investor with prospectus, facilitates creation and submission of application by or for investor.	Financial Advisor
Hub	It manages and centralizes communication, settlement and coordination among the various parties.	Fund Hub
 (I)CSD Central Securities Depository (CSD) – an organisation holding securities either in certificated or un-certificated (dematerialised) form, to enable book entry transfer of securities; it further deals with transaction processing such as clearing and settlement of securities in electronic form. International Central Securities Depository (ICSD) - A CSD that offers additional services in cross-border securities settlement. 		Not valid in the Australian Market
Cash Correspondent	A financial institution that makes or receives payments on behalf of a fund.	Bank – see also Paying Agent
Trustee	 a) A person or company that has legal responsibility for financial aspects (receipts, disbursements and investment of funds) b) A trust company which acts in a capacity of trust as a fiduciary and to which assets have been conveyed for the benefit of another party. The trustee in this case oversees the behaviour of the manager in relation to the operation 	Trustee

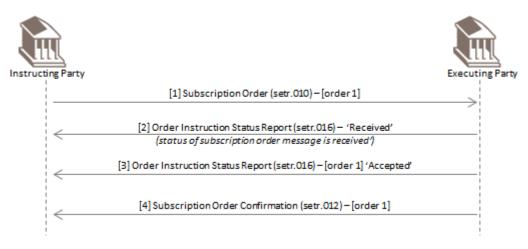
Actors/Agents	Role	Actor within Australian Market
	of a unit trust.	
(Executing) Broker/Dealer	Maintains records of investor's holdings. Distributes periodic consolidated statements to investor. Ensures that conduct of investor's order placements are in compliance with all relevant legal and regulatory requirements.	(Executing) Broker/Dealer, Dealer Group
Branch level of an executing broker	Advisors are recognised within a hierarchical structure comprising of group level, branch level and individual advisors. This helps the registry provider to identify the executing individual advisors.	Dealer Branch
Clearing Broker	Maintains custody of investor's holdings. Settles the investor's transactions, receiving or delivering title to securities, versus payment. Creates periodic consolidated statements of investor's holdings. Adjusts records of investor holdings to accommodate corporate actions such as dividends, interest payments, reinvestment, splits, name changes, mergers and acquisitions.	Clearing Broker, Managed Fund Administrator or Custodian.
Employer Planner & Administrator	Sets up tax-deferred investment plans on behalf of an employer, maintains records of employees' holdings and elections for investment of future deposits, produces periodic reports to employees. Coordinates flows of deposits from employer to Broker/Dealer for investment.	Employer Planner & Administrator
deposits from employer to Broker/Dealer for investment.NomineeA Nominee company is set up by a broker or funds supermarket to hold shares or units on behalf of the ultimate investor.Shares or units are registered in the name of the nominee company (a.k.a. "street name" in the US), with an optional "designation" linked to the underlying client. The client retains all rights and receives all dividends. If the client places buy or sell orders officials of the nominee company sign the transfer forms (or electronic equivalent) required to settle the transactions. The nominee company's officials are usually employees of the broker or funds-supermarket.The regulator requires nominee companies to regularly reconcile their records of holdings with the share & unit registrars and with client records.		Nominee

4 Business Flows

The following scenarios show the message flows that the Australian market practice group assigned the highest priority for automation. This does not exclude the possibility of automating messages and flows which are beyond the set that is described in this document. When the need arises, the market practice group will meet to determine the flows and message constructs and those will be incorporated into this document at that time.

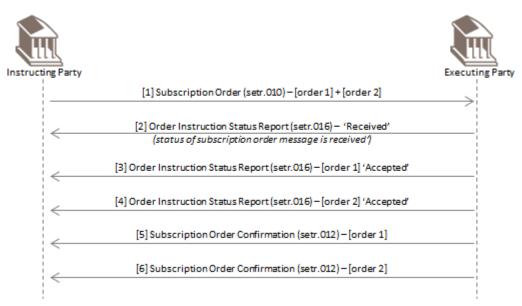
4.1 Subscription

4.1.1 One order - executed



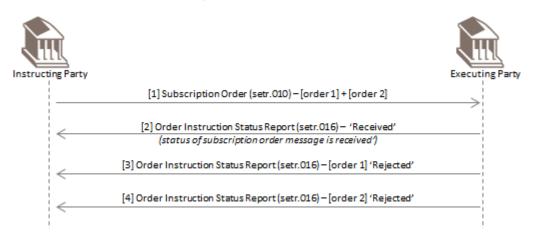
The instructing party sends a subscription order message with one order. The executing party reports the status of the message is received (RECE). Subsequently the order, with reference 'order 1' is accepted (PACK), executed and then confirmed.

4.1.2 Two orders - both executed



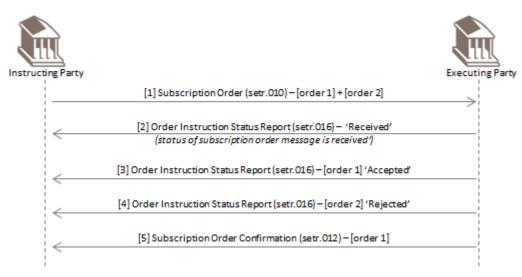
The instructing party sends a subscription order message with two orders. The executing party reports the status of the message is received (RECE). Subsequently both orders are accepted (PACK), executed and then confirmed.

4.1.3 Two orders - both rejected



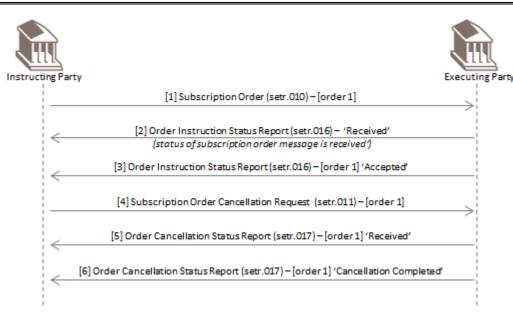
The instructing party sends a subscription order message with two orders. The executing party reports the status of the message is received (RECE). Subsequently both orders are rejected <Rjctd>.

4.1.4 Two orders - one accepted, one rejected



The instructing party sends a subscription order message with two orders. The executing party reports the status of the message is received (RECE). Subsequently, the executing party rejects <Rjctd> the order with order reference 'order 2' and executes and then confirms the order with order reference 'order 1'.

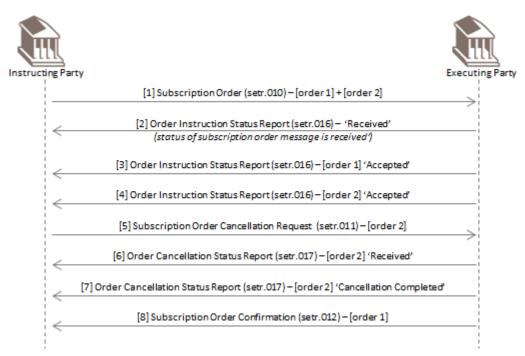
4.1.5 One order - cancellation



The instructing party sends a subscription order message with one order. The executing party reports the status of the message is received (RECE). Later, the order, with reference 'order 1' is accepted (PACK).

The instructing party cancels the order. The executing party reports the cancellation status of 'order 1' is received (RECE). As 'order 1' has not yet been executed, the executing party executes the cancellation and reports the status of 'order 1' is cancelled (CAND).

4.1.6 Two orders - one cancelled, one executed

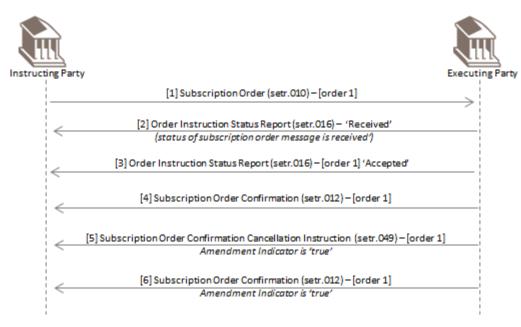


The instructing party sends a subscription order message with two orders. The executing party reports the status of the message is received (RECE) and then reports that both orders are accepted (PACK).

The instructing party cancels the order with order reference 'order 2'. The executing party reports the cancellation status of 'order 2' is received (RECE). As 'order 2' has not yet been executed, the executing party executes the cancellation and reports the status of 'order 2' is cancelled (CAND).

The executing party executes and confirms the order with order reference 'order 1'.

4.1.7 One order - confirmation amendment



The instructing party sends a subscription order message with one order. The executing party reports the status of the message is received (RECE). Later, the order, with reference 'order 1' is accepted (PACK). The executing party executes and confirms the order with order reference 'order 1'.

Soon after, the executing party cancels the order confirmation with order reference 'order 1' and indicates it will be followed by an amendment. Subsequently, the executing party sends a second confirmation for the order, using the amendment indicator to specify it is an amendment of a confirmation.

4.1.8 Two orders - one executed, one confirmation amendment

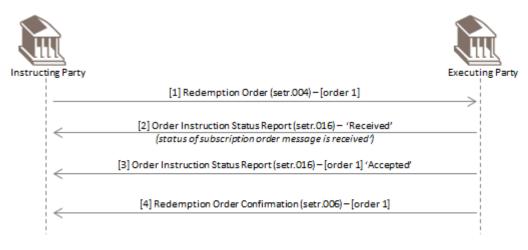


The instructing party sends a subscription order message with two orders. The executing party reports the status of the message is received (RECE). Later, both orders are accepted (PACK). The executing party executes and confirms each orders.

Soon after, the executing party cancels the order confirmation with order reference 'order 2' and indicates it will be followed by an amendment. Subsequently, the executing party sends a second confirmation for 'order 2', using the amendment indicator to specify it is an amendment of a confirmation.

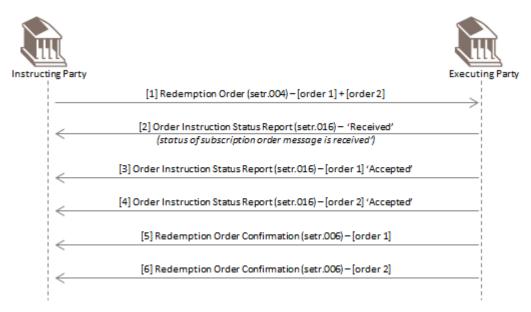
4.2 Redemption

4.2.1 One order - executed



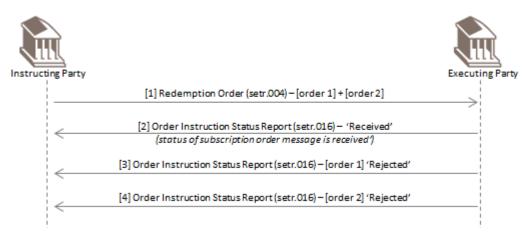
The instructing party sends a redemption order message with one order. The executing party reports the status of the message is received (RECE). Subsequently the order, with reference 'order 1' is accepted (PACK), executed and then confirmed.

4.2.2 Two orders - both executed



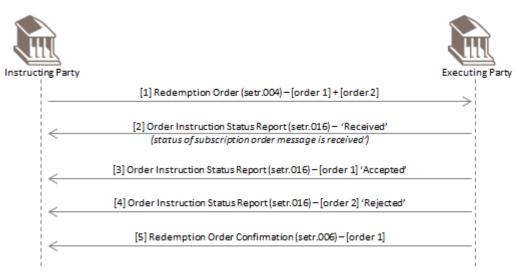
The instructing party sends a redemption order message with two orders. The executing party reports the status of the message is received (RECE). Subsequently both orders are accepted (PACK), executed and then confirmed.

4.2.3 Two orders - both rejected



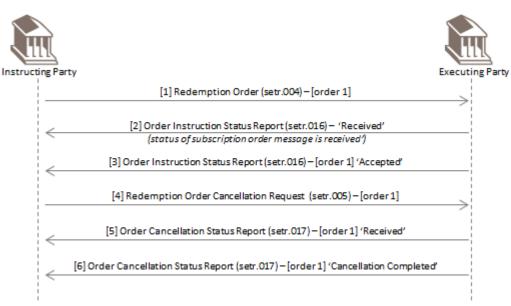
The instructing party sends a redemption order message with two orders. The executing party reports the status of the message is received (RECE). Subsequently both orders are rejected <Rjctd>.

4.2.4 Two orders - one accepted, one rejected



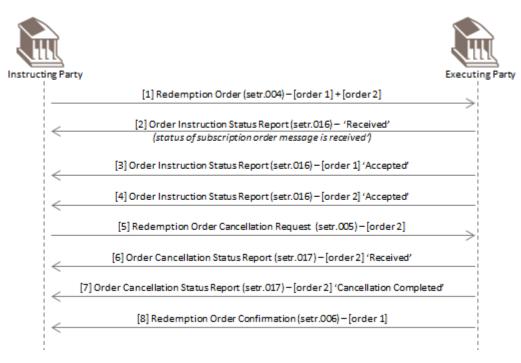
The instructing party sends a redemption order message with two orders. The executing party reports the status of the message is received (RECE). Subsequently, the executing party rejects <Rjctd> the order with order reference 'order 2' and executes and then confirms the order with order reference 'order 1'.

4.2.5 One order - cancellation



The instructing party sends a redemption order message with one order. The executing party reports the status of the message is received (RECE). Later, the order, with reference 'order 1' is accepted (PACK).

The instructing party cancels the order. The executing party reports the cancellation status of 'order 1' is received (RECE). As 'order 1' has not yet been executed, the executing party executes the cancellation and reports the status of 'order 1' is cancelled (CAND).



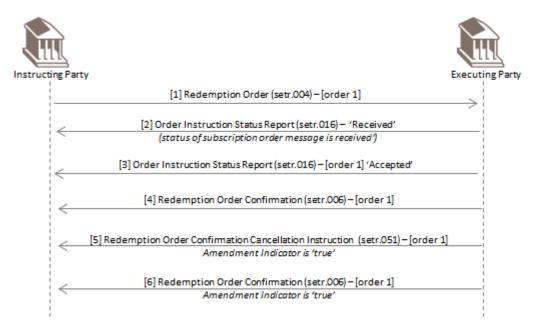
4.2.6 Two orders - one cancelled, one executed

The instructing party sends a redemption order message with two orders. The executing party reports the status of the message is received (RECE) and then reports that both orders are accepted (PACK).

The instructing party cancels the order with order reference 'order 2'. The executing party reports the cancellation status of 'order 2' is received (RECE). As 'order 2' has not yet been executed, the executing party executes the cancellation and reports the status of 'order 2' is cancelled (CAND).

The executing party executes and confirms the order with order reference 'order 1'.

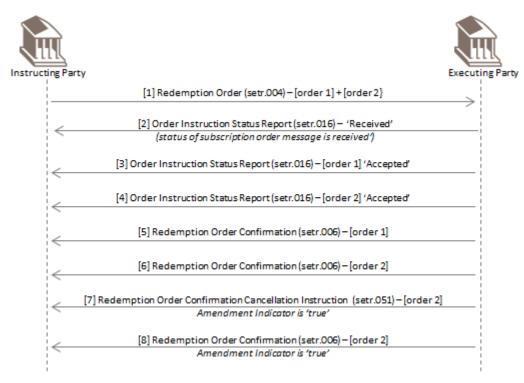
4.2.7 One order - confirmation amendment



The instructing party sends a redemption order message with one order. The executing party reports the status of the message is received (RECE). Later, the order, with reference 'order 1' is accepted (PACK). The executing party executes and confirms the order with order reference 'order 1'.

Soon after, the executing party cancels the order confirmation with order reference 'order 1' and indicates it will be followed by an amendment. Subsequently, the executing party sends a second confirmation for the order, using the amendment indicator to specify it is an amendment of a confirmation.

4.2.8 Two orders - one executed, one confirmation amendment



The instructing party sends a redemption order message with two orders. The executing party reports the status of the message is received (RECE). Later, both orders are accepted (PACK). The executing party executes and confirms each orders.

Soon after, the executing party cancels the order confirmation with order reference 'order 2' and indicates it will be followed by an amendment. Subsequently, the executing party sends a second confirmation for 'order 2', using the amendment indicator to specify it is an amendment of a confirmation.

5 Business Data Requirements

For the detailed global market practice for the use of the ISO 20022 funds order messages, see MyStandards:

5.1 Order

Collection Name:

NMPG-AU_NZ-IF-OrderProcessing-DRAFT_IF (2017-mm-dd)

Message Usage Guidelines:

01_SubscriptionOrderV04_setr.010.001.04

02_RedemptionOrderV04_setr.004.001.04

5.2 Confirmation

Collection Name:

NMPG-AU_NZ-IF-OrderProcessing-DRAFT_IF (2017-mm-dd)

Message Usage Guidelines:

 $03_SubscriptionOrderConfirmationV04_setr.012.001.04$

04_RedemptionOrderConfirmationV03_setr.006.001.04

5.3 Order Status

Collection Name:

NMPG-AU_NZ-IF-OrderProcessing-DRAFT_IF (2017-mm-dd)

Message Usage Guidelines:

05_OrderInstructionStatusReportV04_setr.016.001.04 (Received)

06_OrderInstructionStatusReportV04_setr.016.001.04 (Accepted)

07_OrderInstructionStatusReportV04_setr.016.001.04 (Rejected)

15_RequestForOrderStatusReportV04_setr.018.001.04

5.4 Order Cancellation

Collection Name:

NMPG-AU_NZ-IF-OrderProcessing-DRAFT_IF (2017-mm-dd)

Message Usage Guidelines:

 $08_SubscriptionOrderCancellationRequestV04_setr.011.001.04$

 $09_RedemptionOrderCancellationRequestV04_setr.005.001.04$

5.5 Order Cancellation Status

Collection Name:

NMPG-AU_NZ-IF-OrderProcessing-DRAFT_IF (2017-mm-dd)

Message Usage Guidelines:

10_OrderCancellationStatusReportV04_setr.017.001.04 (Received)

11_OrderCancellationStatusReportV04_setr.017.001.04 (Completed)

12_OrderCancellationStatusReportV04_SETR.017.001.04 (Rejected)

5.6 Confirmation Cancellation

Collection Name:

NMPG-AU_NZ-IF-OrderProcessing-DRAFT_IF (2017-mm-dd)

Message Usage Guidelines:

 $13 _ Subscription Order Confirmation Cancellation Instruction V02_setr.047.001.02$

 $14_RedemptionOrderConfirmationCancellationInstructionV02_setr.051.001.02$

6 Market Practice Additional Information

In addition to the market practice specified in the message usage guidelines on the MyStandards platform, the following sections cover a number of basic concepts.

6.1 Multiple Orders Per Message

Australian market practice supports the inclusion of multiple orders in both subscription and redemption order messages. Back-office systems should be built to accept subscription and redemption order messages which may contain single or multiple orders.

Subsequent 'Accepted' and 'Rejected' order status updates and confirmations are at the individual order level, that is, one status or confirmation message per order reference. Cancellation requests are also handled at the individual order level.

6.2 Identification of the Fund

Australian Managed Funds players predominantly use the APIR code (<u>www.apir.com.au</u>) to identify the security/fund within a transaction. However, internationally, ISIN is the default standard. Since every APIR code also has a published ISIN code and an ISIN can be determined directly from the APIR, it was decided that ISINs are to be used within the Australian market for security identification. Another benefit of using the ISIN code is that SWIFT will be able to validate the format of the ISIN and reject messages which do not conform to the standard.

Funds order processing systems will need to be enhanced to be able to take an APIR code and convert this into an ISIN for the outbound message. On the inbound side, systems will need to read an ISIN and convert this back into an APIR code if this is the identifier which is used for further internal processing.

See Appendix A for details on how to derive an ISIN from an APIR code and vice versa.

6.2.1 Fund Name.

The name of the fund may be optionally specified.

6.3 Future-traded orders

Australian market practice supports the inclusion of a 'RequestedFutureTradeDate' on the order messages. The registry/fund manager will receive the order but will only execute (including cash settlement) on the requested trade date.

The Requested Future Trade Date element applies to the whole message rather than an individual order within a message. Therefore, when requesting a future trade date, all orders within that message will execute on the same requested trade date.

6.4 Order Date Time

This is optional in the market and potentially set by the system. Registry providers will not use Order Date/Time for cut-off purposes but the date/time recorded at receipt of the order.

6.5 Subscription Amount

The ISO 20022 subscription order message supports the specification of the subscription amount as a choice between the Net Amount, Gross Amount and Units Number elements.

Most subscription orders are for an amount of money rather than a number of units. Net Amount is the most frequently used method in the Australian market. Gross Amount is not frequently used.

6.6 Redemption Amount

The ISO 20022 redemption message supports the specification of the redemption amount as a choice between the Net Amount, Gross Amount, Units Number and Holdings Redemption Rate elements.

It was agreed that redemption orders should only be instructed using either Net Amount, Units Number or Holdings Redemption Rate (percentage). If a redemption order is expressed as a percentage of holding then this must be for 100% of the holding.

Most redemption orders in the Australian market are expressed as a Net Amount. Gross Amount is not frequently used.

6.7 Decimal Places/Rounding

The Australian market practice group agreed there is a need to standardise the number of decimals used in price quotations and holdings. This should be done using recommendations by the Investment and Financial Services Association (IFSA, www.ifsa.com.au). This is currently being investigated and will be incorporated into the market practice document in due course.

6.8 Related Party Details

The optional Related Party Details sequence can be used to capture Advisor details. Where possible a BIC code should be used as to identify the party, however APIR codes can be used to identify to the individual advisors where appropriate in the Identification/ProprietaryIdentification element.

6.9 Bank Account Identification

Australian market practice has decided that, where possible, bank account details should be included in order and confirmation messages, in the Cash Settlement Details sequence.

Australian Bank accounts must be identified by the Australian Bank State Branch (BSB) Code (AustralianExtensiveBranchNetworkIdentification), and the account number. These are two separate elements within the ISO 20022 messages.

At a minimum, the account of the beneficiary of the money (CreditorAccount) and its bank (CreditorAgent) should be specified.

6.10 Identification of a Banking Payment Reference

When submitting a subscription order, it is highly recommended that the subscribing party populate the order message with the reference to the accompanying payment transaction (that is, the reference that will appear on the bank statement of the beneficiary of the money). The same principle applies on a redemption confirmation sent from the order executing party. This will greatly enhance the reconciliation processes and will be a significant step forward for the Australian investment funds industry.

The element to be used for this payment reference is the Reference element in the CashSettlementDetails/PaymentInstrument/CreditTransferDetails sequence.

6.11 Data Elements Not Required in Order Messages

The following elements were discussed in the Australian market practice group and it was agreed that the following elements are not required:

#	Order Message	Comment	
1	Order Date Time	Registry providers will not use Order Date/Time for cut-off purposes but the date/time recorded at receipt of the order.	
2	Client Reference		
3	Income Preference		
4	Transaction Overhead / Individual Fee (previously named Charge Details)	Charges and commissions are captured in the gross amount value in the order and do not need to be detailed in the message.	
	Transaction Overhead / Individual Fee (previously named Commission Details)		

6.12 Status Updates

It was agreed by the Australian market practice group that the following order status updates are required:

6.12.1 Order 'Received'

An order instruction status message is sent by the registry/fund manager to advise that the order message (which may contain multiple orders within the same message) has been received. This is not an acceptance of the order/s. In order to report the status of a message, the Order Details Report sequence with Status/RECE is used to specify the received status. The Message Identification/Identification from the original order message must be used in the Related Reference/Reference element.

6.12.2 Order 'Accepted'

An order instruction status message is sent by the registry/fund manager to advise that a particular order has been accepted for processing. Individual order instruction status messages must be sent for each order specified in the original subscription or redemption order message.

In order to report the status of an individual order, the Individual Order Details Report sequence is used. Within this sequence is the mandatory Order Reference element. The order reference is the key element which is used to link the order status to the individual order. Related Reference is irrelevant in this message and will be ignored by the instructing party (account owner).

6.12.3 Order 'Rejected'

An order instruction status message is sent by the registry/fund manager to advise that a particular order has been 'rejected'. Individual order instruction status messages must be sent for each order specified in the original subscription or redemption order message.

In order to report the status of an individual order, the Individual Order Details Report sequence is used. Within this sequence is the mandatory Order Reference element. The order reference is the key element which is used to link the order status to the individual order. Related Reference is irrelevant in this message and will be ignored by the instructing party (account owner).

6.13 Trade Date Time

The Trade Date Time element is in the subscription and redemption order confirmation messages. The purpose of this element is to specify the date the units are price and the order is executed. (This is NOT the date/time of receipt of the instruction.)

In the Australian market, the trade date is expressed as a date only. The time of execution is not relevant as funds are only priced once a day.

6.14 Dealing Price Details

This is the price at which the order is executed. It comprises two elements, the Type and the Value.

6.14.1 Type of Price

The following Type codes are used:

Code	Name	Comment	Messages in which used
OFFR	Offer	Buying price of the units for an investor. The application price.Subscription Order Confirmation	
BIDE	Bid	Selling price of the units for the investor	Redemption Order Confirmation
NAVL			Subscription Order Confirmation + Redemption Order Confirmation

6.14.2 Price Method

This is mandatory for the Australian market. The default value is FORW (forward pricing).

6.15 Settlement Amount

In the confirmations the settlement amount is mandatory. For the Australian market, this should be the same value as the Net Amount element in the subscription order or redemption order messages, if the order was specified as a net amount.

6.16 Partially Executed Indicator

This is a mandatory element in the confirmation messages. The default value to use is 'false' or '0'. In the Australian market it is unlikely that an order would be partially executed.

6.17 Cum Dividend Indicator

This is a mandatory element in the confirmation messages. The default value to use is 'true' or '1'. In the Australian market, dividend is always included in the price of the fund at execution.

6.18 Fees (charges)

If fees (charges) are applicable to a redemption confirmation, they must be specified. Fee amounts are specified in the Transaction Overhead/Individual Fee sequence. The fee charged comprises three elements, the Type, the Applied Amount and the Informative Indicator.

The following Type codes are used:

Code	Name	Comment
BEND	BackEndLoad	Sales charge paid by the investor when redeeming an investment (most likely to be used)
PENA	Penalty	Fee charged to the investor for early redemption of the fund
CDSC	ContingentDeferredSalesCharge	Deferred sales charge

The Informative Indicator must be 'false' or '0'. The rate may optionally be specified in the AppliedRate element.

6.19 Unsolicited Transactions

Unsolicited confirmation messages are sent for transactions on the account for which no originating instruction has been sent. (for example, income-reinvestments, management fee rebates, expenses on the account and cash distributions).

Unsolicited subscription order confirmations are used for transactions creating an increase in the value of the account, for example. management fee rebates, reinvestments and cash distributions.

Unsolicited redemption order confirmations are used for transactions creating a decrease in the value of the account, for example, expenses.

If a message is not solicited by the receiver, then the value of the Order Reference element in Multiple Execution Details/Individual Execution Details must be 'UNSOLICITED'.

6.20 Amendment of a Confirmation

In the 2007 version of the ISO 20022 order message set there were specific messages for order confirmation amendment. The Australian market practice group agreed that these messages would not be used. In the 2017 release, the order confirmation amendment messages were withdrawn from the ISO 20022 message set and an Amendment Indicator was added to the order confirmation messages to indicate whether or not the order confirmation is an amendment of a previously sent order confirmation

In the Australian market, order confirmation amendment is supported by the sending of a subscription or redemption order confirmation cancellation instruction message, with the Amendment Indicator set to 'true' or '1'. The subsequent subscription or redemption order confirmation message should then have the value 'true' or '1' in the Amendment Indicator.

In the cases where the registry/fund manager is required to advise a reason as to why the confirmation is cancelled and subsequently replaced with an amendment, this can be done with the use of the Cancellation Reason element in the confirmation cancellation message, or achieved through existing mechanisms, for example, phone, fax and e-mail.

6.21 Order Confirmation Status Report

The Order Confirmation Status Report (setr.057) message may be sent in response to a Subscription Order Confirmation Cancellation Instruction (setr.047) or Redemption Order Confirmation Cancellation Instruction (setr.051) message to report the status of an order confirmation or an order confirmation amendment.

The Australian market practice group has decided that this message is out-of-scope for the initial phase of the market practice process. Incorrectly assigned confirmations will be dealt as exceptions and with manual work flows.

7 Implementation Considerations

7.1 Uniqueness of Message References

Message references must be unique across all message types from a particular sender. From the receiver's point of view however there is no guarantee that message references are unique. It is perfectly possible to receive messages with the same message references from two senders. Receivers must always combine the identity of the sender and the message reference to create a unique identifier for a message. If messages are received via the SWIFTNet Funds service then the SWIFT message wrapper must be examined to obtain the SWIFT certified BIC of the sender. Where other delivery mechanisms are used it is essential that the mechanism provides a means of guaranteeing the identity of the message sender – only then can a unique message identifier be created.

7.2 Message Sequencing

Technically, it is possible to receive messages in a sequence which is not logical. For instance, the network (and messaging interfaces) may deliver an Order Cancellation request before the original order message was received. In this case, the system at the receiving party will not know with which order the cancellation request relates.

Application developers need to develop systems which can cater for the possibility that messages may arrive out of sequence and introduce mechanisms that allow for the successful processing in these circumstances.

Some examples that should be considered include:

- The instructing party may receive an order status of 'Accepted' before the expected 'Received' status was received.
- The executing party may receive an order cancellation message before they have received the original order message.
- The instructing party receives a subscription / redemption confirmation message before they have received the order status to advise that the order was 'Accepted'
- The executing party has rejected an order but the instructing party has sent a cancellation before the rejection status was received. In this scenario, executing party needs to be able to handle a rejection order status after they have sent a cancellation message and the instructing party needs to be able to handle a cancellation request for a trade that it has already rejected.

7.3 Timestamps for Outbound Messages

When generating an outbound message, the Creation Date Time element in the Application Header and Body must always be populated with the local time related to the legal entity sending the message. For example, if the operations of a fund manager are located in Sydney, then the time used within the message should be the local Sydney time (even if the SWIFT infrastructure or back office systems are located at an off-shore hub). If the message related to an entity located in Adelaide, then the time within the message will be Adelaide time (i.e. 30 mins behind Australian Eastern Standard time).

7.4 Order and Deal References

When using the subscription and redemption order messages, the Order Reference element is the key reference that will be used throughout the lifecycle of the trade. The Order Reference is generated by the entity that initiates the subscription or redemption order and must be unique for each order. The party executing the trade will then need to use this order reference to update status and confirm the trade.

When using the subscription and redemption confirmation messages, the Deal Reference element is a unique identifier of the trade. It is generated by the fund manager/registry and must be unique for each confirmation.

Most institutions would already have some form of unique identifier for an order and confirmation and it in envisaged that these would be used when moving to the messaging environment.

7.5 Investor Id linked to the message Sender

It is technically possible that a received message may contain an investor account for which the sender should not have access. For example, a custodian may send a redemption order to a fund manager attempting to redeem a sum of money, but the fund manager does not recognise the sender/Investor Id relationship. When receiving messages, application developers should build mechanisms which ensure the validity of the sender's access to the specified Investor Id, and reject those messages which fail this validity check.

8 XML Message Examples

This section contains example messages that conform to Australian market practice guidelines. Where possible, the message examples that have been used are those that reflect real usage, although some of the business data has been changed to ensure confidentiality.

In all the message examples, the PEFIAU22 is the instructing party and BDAPAU22 is the executing party.

8.1 Scenario 1

- SubscriptionOrder (setr.010) with two orders
- OrderInstructionStatusReport (setr.016) with received (RECE) status for the subscription message
- OrderInstructionStatusReport (setr.016) with accepted (PACK) status for each order
- SubscriptionOrderConfirmation (setr.012) for each order execution

8.1.1 SubscriptionOrder (setr.010)

XML	Comment
Sender PEFIAU22	
Receiver BDAPAU22	
<sbcptordr></sbcptordr>	Setr.010.001.04
<msgld></msgld>	
<id>SNF001_BTFGAU6A_15</id>	Message reference
<credttm>2017-07-10T09:45:00</credttm>	Creation date and time
<mltplordrdtls></mltplordrdtls>	
<invstmtacctdtls></invstmtacctdtls>	
<acctid>V000003IF003</acctid>	Investor identification
<indvordrdtls></indvordrdtls>	Start of first order
<ordrref>Order 1</ordrref>	Order reference
<fininstrmdtls></fininstrmdtls>	
<id></id>	
<isin>AU60VAN00022</isin>	Fund specified as an ISIN. APIR code = VAN0002AU
<nm>Green Strategy Growth Funds </nm>	Name of the fund.
<amtorunits></amtorunits>	
<netamt ccy="AUD">20000.00</netamt>	Net amount of subscription
<physdlvryind>false</physdlvryind>	No physical delivery
	End of first order
<indvordrdtls></indvordrdtls>	Start of second order
<ordrref>Order 2</ordrref>	Order reference
<fininstrmdtls></fininstrmdtls>	
<id></id>	

XML	Comment
<isin>AU60VAN00030</isin>	Fund specified as an ISIN. APIR code = VAN0002AU
<nm>Technology Strategy Growth Fund </nm>	Name of the fund.
<amtorunits></amtorunits>	
<netamt ccy="AUD">70575.00</netamt>	Order is expressed as a net amount
<physdlvryind>false</physdlvryind>	No physical delivery
	End of second order

8.1.2 OrderInstructionStatusReport (setr.016) - Received

XML	Comment
Sender BDAPAU22	
Receiver PEFIAU22	
<ordrinstrstsrpt></ordrinstrstsrpt>	Setr.010.001.04
<msgld></msgld>	
<id>CD983-001</id>	Message reference
<credttm>2017-07-10T09:49:00</credttm>	Creation date and time
<ref></ref>	
<rltdref></rltdref>	
<ref>SNF001_BTFGAU6A_15</ref>	Reference of the message for which the status is given
<stsrpt></stsrpt>	
<ordrdtlsrpt></ordrdtlsrpt>	Status of the orders in the referenced message
<ordrsts></ordrsts>	
<sts>RECE</sts>	Status is received

8.1.3 OrderInstructionStatusReport (setr.016) - Order 1 - Accepted

XML	Comment
Sender BDAPAU22	
Receiver PEFIAU22	
<ordrinstrstsrpt></ordrinstrstsrpt>	Setr.010.001.04
<msgld></msgld>	
<id>CD983-022</id>	Message reference
<credttm>2017-07-10T09:55:00</credttm>	Creation date and time

XML	Comment
<stsrpt></stsrpt>	
<indvordrdtlsrpt></indvordrdtlsrpt>	Status is for an individual order
<ordrref>Order 1</ordrref>	Order reference of the order for which the status is given
<ordrsts></ordrsts>	
<sts>PACK</sts>	Status is accepted and ready for execution

8.1.4 OrderInstructionStatusReport (setr.016) - Order 2 - Accepted

XML	Comment
Sender BDAPAU22	
Receiver PEFIAU22	
<ordrinstrstsrpt></ordrinstrstsrpt>	Setr.010.001.04
<msgld></msgld>	
<id>CD983-026</id>	Message reference
<credttm>2017-07-10T09:57:00</credttm>	Creation date and time
<stsrpt></stsrpt>	
<indvordrdtlsrpt></indvordrdtlsrpt>	Status is for an individual order
<ordrref>Order 2</ordrref>	Order reference of the order for which the status is given
<ordrsts></ordrsts>	
<sts>PACK</sts>	Status is accepted and ready for execution

8.1.5 SubscriptionOrderConfirmation (setr.012) - Order 1

XML	Comment
Sender BDAPAU22	
Receiver PEFIAU22	
<sbcptordrconf></sbcptordrconf>	Setr.012.001.04
<msgld></msgld>	
<id>CD983-298</id>	Message reference
<credttm>2017-07-12T14:00:00</credttm>	Creation date and time
<mltplexctndtls></mltplexctndtls>	
<invstmtacctdtls></invstmtacctdtls>	
<acctid>V000003IF003</acctid>	Investor identification
<indvexctndtls></indvexctndtls>	
<ordrref>Order 1</ordrref>	Order reference (as specified in subscription order message)

XML	Comment
<dealref>Deal 1</dealref>	
<fininstrmdtls></fininstrmdtls>	
d	
<isin>AU60VAN00022</isin>	Fund specified as an ISIN. APIR code = VAN0002AU
<nm>Green Strategy Growth Funds </nm>	Name of the fund.
<unitsnb>8809.02</unitsnb>	Units (settlement amount / price in this example)
<traddttm></traddttm>	
<dt>2017-07-12</dt>	Date the price was applied
<dealgpricdtls></dealgpricdtls>	
<tp></tp>	
<cd>OFFR</cd>	Type of price
<val></val>	
<amt ccy="AUD">2.2704</amt>	Price
<pricmtd>FORW</pricmtd>	Forward price
<sttlmamt ccy="AUD">20000.00</sttlmamt>	Settlement amount (net amount from order)
<prtlyexctdind>false</prtlyexctdind>	
<cumdvddind>true</cumdvddind>	
<physdlvryind>false</physdlvryind>	

8.1.6 SubscriptionOrderConfirmation (setr.012) - Order 2

XML	Comment
Sender BDAPAU22	
Receiver PEFIAU22	
<sbcptordrconf></sbcptordrconf>	Setr.012.001.04
<msgld></msgld>	
<id>CD983-299</id>	Message reference
<credttm>2017-07-12T14:04:00</credttm>	Creation date and time
<mltplexctndtls></mltplexctndtls>	
<invstmtacctdtls></invstmtacctdtls>	
<acctid>AU60VAN00030</acctid>	Investor identification
<indvexctndtls></indvexctndtls>	
<ordrref>Order 1</ordrref>	Order reference (as specified in subscription order message)
<dealref>Deal 1</dealref>	Executing party's reference for the trade.
<fininstrmdtls></fininstrmdtls>	

XML	Comment
<id></id>	
<isin>AU60VAN00030</isin>	Fund specified as an ISIN. APIR code = VAN0002AU
<nm>Technology Strategy Growth Fund</nm>	Name of the fund.
<unitsnb>7057.5</unitsnb>	Units (settlement amount / price in this example)
<traddttm></traddttm>	
<dt>2017-07-12</dt>	Date the price was applied
<dealgpricdtls></dealgpricdtls>	
<tp></tp>	
<cd>OFFR</cd>	Type of price
<val></val>	
<amt ccy="AUD">10</amt>	Price
<pricmtd>FORW</pricmtd>	Forward price
<sttlmamt ccy="AUD">70575.00</sttlmamt>	Settlement amount (net amount from order)
<prtlyexctdind>false</prtlyexctdind>	
<cumdvddind>true</cumdvddind>	
<physdlvryind>false</physdlvryind>	

8.2 Scenario 2

- Subscription Order (setr.010) with one order
- Order Instruction Status Report (setr.016) with received (RECE) status for the subscription message
- Order Instruction Status Report (setr.016) with accepted (PACK) status for the order
- Subscription Order Cancellation Request (setr.011)
- Order Cancellation Status Report (setr.017) with received (RECE) status for the subscription cancellation request message
- Order Cancellation Status Report (setr.017) with cancellation completed (CAND)

8.2.1 SubscriptionOrder (setr.010)

XML	Comment
Sender PEFIAU22	
Receiver BDAPAU22	
<sbcptordr></sbcptordr>	Setr.010.001.04
<msgld></msgld>	
<id>SNF001_BTFGAU6A_98</id>	Message reference
<credttm>2017-07-11T09:30:00</credttm>	Creation date and time

XML	Comment
	comment
<mitplordrdtls></mitplordrdtls>	
<pre><reqdfutrtraddt>2017-07-13</reqdfutrtraddt></pre>	Requested Future Trade Date
<pre></pre> <pre></pre> <pre></pre>	
v000003IF003	Investor identification
	
<pre></pre> <pre></pre>	
<pre></pre>	Order reference
<pre><fininstrmdtls></fininstrmdtls></pre>	
<isin>AU60VAN00022</isin>	Fund specified as an ISIN. APIR code = VAN0002AU
<pre></pre>	Name of the fund.
<pre><amtorunits></amtorunits></pre>	
<pre></pre> <pre><</pre>	Net amount of subscription
<pre></pre>	
<pre></pre>	
<pre><cshsttlmdtls></cshsttlmdtls></pre>	
<pre><pmtinstrm></pmtinstrm></pre>	
<cdttrfdtls></cdttrfdtls>	
<ref>PEFI-PAYM-001</ref>	Payment reference
<cdtragt></cdtragt>	
<pty></pty>	
<pre></pre>	
<pre></pre> <aubra <="" label{eq:aubra="" label}="" pre=""> <aubra <="" label{eq:aubra="" label}="" pre=""></aubra></aubra>	Creditor agent. BSB of bank where BDAPAU22 is to be paid
<cdtracct></cdtracct>	
<id></id>	
<othr></othr>	
<id>123456789</id>	Creditor account. Account of BDAPAU22

8.2.2 OrderInstructionStatusReport (setr.016) - Received

XML	Comment
Sender BDAPAU22	

XML	Comment
Receiver PEFIAU22	
<ordrinstrstsrpt></ordrinstrstsrpt>	Setr.010.001.04
<msgld></msgld>	
<id>CD983-294</id>	Message reference
<credttm>2017-07-11T09:33:00</credttm>	Creation date and time
<ref></ref>	
<rltdref></rltdref>	
<ref> CD983-299</ref>	Reference of the message for which the status is given
<stsrpt></stsrpt>	
<ordrdtlsrpt></ordrdtlsrpt>	Status of the orders in the referenced message
<ordrsts></ordrsts>	
<sts>RECE</sts>	Status is received

8.2.3 OrderInstructionStatusReport (setr.016) - Accepted

XML	Comment
Sender BDAPAU22	
Receiver PEFIAU22	
<ordrinstrstsrpt></ordrinstrstsrpt>	Setr.010.001.04
<msgid></msgid>	
<id> CD983-298</id>	Message reference
<credttm>2017-07-11T09:40:00</credttm>	Creation date and time
<stsrpt></stsrpt>	
<indvordrdtlsrpt></indvordrdtlsrpt>	Status is for an individual order
<ordrref>Order 10</ordrref>	Order reference of the order for which the status is given
<ordrsts></ordrsts>	
<sts>PACK</sts>	Status is accepted and ready for execution

8.2.4 Subscription Order Cancellation Instruction (setr.011)

XML		Comment
Sender	PEFIAU22	
Receiver	BDAPAU22	

XML	Comment
<sbcptordrcxlreq></sbcptordrcxlreq>	Setr.011.001.04
<msgld></msgld>	
<id>SNF001_BTFGAU6A_98</id>	Message reference
<credttm>2017-07-11T09:50:00</credttm>	Creation date and time
<ordrrefs></ordrrefs>	
<ordrref>Order 10</ordrref>	Reference of the order to be cancelled (as specified in subscription order message)

8.2.5 OrderCancellationStatusReport (setr.017) - Received

XML	Comment
Sender BDAPAU22	
Receiver PEFIAU22	
<ordrcxlstsrpt></ordrcxlstsrpt>	Setr.017.001.04
<msgld></msgld>	
<id>CD983-301</id>	Message reference
<credttm>2017-07-11T09:55:00</credttm>	Creation date and time
<stsrpt></stsrpt>	
<indvcxlstsrpt></indvcxlstsrpt>	
<ordrref>Order 10</ordrref>	Reference of the order for which the cancellation status is reported (as specified in subscription order cancellation request message)
<cxlsts></cxlsts>	
<sts>RECE</sts>	Status is received.

8.2.6 OrderCancellationStatusReport (setr.017) - Received

XML	Comment
Sender BDAPAU22	
Receiver PEFIAU22	
<ordrcxlstsrpt></ordrcxlstsrpt>	Setr.017.001.04
<msgld></msgld>	
<id>CD983-309</id>	Message reference
<credttm>2017-07-11T09:59:00</credttm>	Creation date and time
<stsrpt></stsrpt>	

XML	Comment
<indvcxlstsrpt></indvcxlstsrpt>	
<ordrref>Order 10</ordrref>	Reference of the order for which the cancellation status is reported (as specified in subscription order cancellation request message)
<cxlsts></cxlsts>	
<sts>CAND</sts>	Status is cancellation is completed.

8.3 Other XML examples

8.3.1 OrderInstructionStatusReport (setr.016) - rejected

XML	Comment
Sender BDAPAU22	
Receiver PEFIAU22	
<ordrinstrstsrpt></ordrinstrstsrpt>	Setr.016.001.04
<msgld></msgld>	
<id>CD983-354</id>	Message reference
<credttm>2017-07-11T10:05:00</credttm>	Creation date and time
<stsrpt></stsrpt>	
<indvordrdtlsrpt></indvordrdtlsrpt>	Status is for an individual order
<ordrref>Order 11</ordrref>	Order reference of the order for which the status is given
<ordrsts></ordrsts>	
<rjctd></rjctd>	Status is rejected
<rsn></rsn>	
<cd>DSEC</cd>	Rejected reason is 'Identification of the security is not
	recognised or is invalid'. Advises that the order is rejected because of an incorrect Fund/ISIN.

8.3.2 OrderCancellationStatusReport (setr.017) - rejected

XML	Comment
Sender BDAPAU22	
Receiver PEFIAU22	
<ordrcxlstsrpt></ordrcxlstsrpt>	Setr.017.001.04
<msgld></msgld>	

XML	Comment
<id>CD983-370</id>	Message reference
<credttm>2017-07-11T10:15:00</credttm>	Creation date and time
<stsrpt></stsrpt>	
<indvcxlstsrpt></indvcxlstsrpt>	
<ordrref>Order 13</ordrref>	Order reference of the order for which the status is given
<cxlsts></cxlsts>	
<rjctd></rjctd>	Cancellation status is rejected
<rsn></rsn>	
<cd>CUTO</cd>	Rejected reason is "Instruction has been received after the cut-off time". The cancellation of the order cannot be action because it is too late.

8.3.3 SubscriptionOrderConfirmationCancellationInstruction setr.049)

XML	Comment
Sender BDAPAU22	
Receiver PEFIAU22	
<sbcptordrconfcxiinstr></sbcptordrconfcxiinstr>	Setr.047.001.02
<msgid></msgid>	
<id>CD983-359</id>	Message reference
<credttm>2017-07-11T10:08:00</credttm>	Creation date and time
<amdmntind>false</amdmntind>	
<ordrrefs></ordrrefs>	
<ordrref>Order 12</ordrref>	Reference of the order for which the confirmation is cancelled (as specified in subscription order & confirmation messages)
<dealref>Deal 12</dealref>	Reference of the subscription order confirmation that is cancelled (as specified in subscription order confirmation message)

8.3.4 RedemptionOrder (setr.004)

XML		Comment
Sender	PEFIAU22	
Receiver	BDAPAU22	

XML	Comment
<redordr></redordr>	Setr.004.001.04
<msgld></msgld>	
<id>SNF001_BTFGAU6A_102</id>	Message reference
<credttm>2017-07-10T09:30:00</credttm>	Creation date and time
<mltplordrdtls></mltplordrdtls>	
<invstmtacctdtls></invstmtacctdtls>	
<acctid>V000003IF003</acctid>	Investor identification
<indvordrdtls></indvordrdtls>	
<ordrref>Order 20</ordrref>	Order reference
<fininstrmdtls></fininstrmdtls>	
<id></id>	
<isin>AU60VAN01103</isin>	Fund specified as an ISIN.
<amtorunitsorpctg></amtorunitsorpctg>	
<netamt ccy="AUD">30000.00</netamt>	Net amount of redemption
<physdlvryind>false</physdlvryind>	

8.3.5 RedemptionOrderCancellationRequest (setr.005)

XML	Comment
Sender PEFIAU22	
Receiver BDAPAU22	
<redordrcxireq></redordrcxireq>	Setr.005.001.04
<msgid></msgid>	
<id>SNF001_BTFGAU6A_106</id>	Message reference
<credttm>2017-07-10T09:38:00</credttm>	Creation date and time
<ordrrefs></ordrrefs>	
<ordrref>Order 20</ordrref>	Reference of the order to be cancelled (as specified in redemption order message)

8.3.6 RedemptionOrderConfirmation (setr.006)

XML	Comment	
Sender BDAPAU22		

XML	Comment		
Receiver PEFIAU22			
<redordrconf></redordrconf>	Setr.006.001.04		
<msgld></msgld>			
<ld><ld><ld><ld><ld><ld><ld><ld><ld><ld< td=""><td colspan="3">Message reference</td></ld<></ld></ld></ld></ld></ld></ld></ld></ld></ld>	Message reference		
<credttm>2017-07-12T09:30:00</credttm>	Creation date and time		
<mltplexctndtls></mltplexctndtls>			
<invstmtacctdtls></invstmtacctdtls>			
<acctid>V000003IF003</acctid>	Investor identification		
<indvexctndtls></indvexctndtls>			
<ordrref>Order 20</ordrref>	Order reference (as specified in redemption order message)		
<dealref>Deal 20</dealref>	Executing party's reference for the trade.		
<fininstrmdtls></fininstrmdtls>			
<id></id>			
<isin>AU60VAN01103</isin>	Fund specified as an ISIN		
<unitsnb>1500</unitsnb>	Units (settlement amount / price in this example)		
<traddttm></traddttm>			
<dt>2017-07-12</dt>	Date the price was applied		
<dealgpricdtls></dealgpricdtls>			
<tp></tp>			
<cd>BIDE</cd>	Type of price		
тр			
<val></val>			
<amt ccy="AUD">20</amt>	Price		
<pricmtd>FORW</pricmtd>	Forward price		
<sttlmamt ccy="AUD">30000.00</sttlmamt>	Settlement amount (net amount from order)		
<prtlyexctdind>false</prtlyexctdind>			
<cumdvddind>true</cumdvddind>			
<physdlvryind>false</physdlvryind>			

8.3.7 RedemptionOrderConfirmation (setr.006) - BEND charge

XML		Comment
Sender	BDAPAU22	
Receiver	PEFIAU22	
<redordrc< td=""><td>onf></td><td>Setr.006.001.04</td></redordrc<>	onf>	Setr.006.001.04

KML	Comment		
<msgld></msgld>			
<id>CD983-398</id>	Message reference		
<credttm>2017-07-14T09:00:00</credttm>	Creation date and time		
<mltplexctndtls></mltplexctndtls>			
<invstmtacctdtls></invstmtacctdtls>			
<acctid>V000003IF003</acctid>	Investor identification		
<indvexctndtls></indvexctndtls>			
<ordrref>Order 30</ordrref>	Order reference (as specified in redemption order message)		
<dealref>Deal 30</dealref>	Executing party's reference for the trade.		
<fininstrmdtls></fininstrmdtls>			
<id></id>			
<isin>AU60VAN01103</isin>	Fund specified as an ISIN		
<unitsnb>1750</unitsnb>	Unit ((settlement amount - BEND fee) / price) in this example)		
<traddttm></traddttm>			
<dt>2017-07-14</dt>	Date the price was applied		
<dealgpricdtls></dealgpricdtls>			
<tp></tp>			
<cd>BIDE</cd>	Type of price		
<val></val>			
<amt ccy="AUD">20</amt>	Price		
	Forward price		
<pre><sttlmamt ccy="AUD">40000.00</sttlmamt></pre>	Settlement amount (net amount from order)		
<prtlyexctdind>false</prtlyexctdind>			
<pre><cumdvddind>true</cumdvddind></pre>			
<txovrhd></txovrhd>			
<indvfee></indvfee>			
<tp></tp>			
<cd>BEND</cd>	Type of fee is BEND (sales charge paid by the investor)		
<pre><apidamt ccy="AUD">500</apidamt></pre>	BEND fee amount		
<pre><inftvind>false</inftvind></pre>			
<pre><physdlvryind>false</physdlvryind></pre>			

8.3.8 Redemption Order Confirmation Cancellation Instruction (setr.051)

XML	Comment
Sender BDAPAU22	
Receiver PEFIAU22	
<redordrconfcxiinstr></redordrconfcxiinstr>	Setr.051.001.02
<msgld></msgld>	
<id>CD983-371</id>	Message reference
<credttm>2017-07-12T09:32:00</credttm>	Creation date and time
<amdmntind>false</amdmntind>	
<ordrrefs></ordrrefs>	
<ordrref>Order 20</ordrref>	Reference of the order for which the confirmation is cancelled (as specified in redemption order & confirmation messages)
<dealref>Deal 20</dealref>	Reference of the subscription order confirmation that is cancelled (as specified in redemption order confirmation message)

9 Appendix A - APIR-ISIN Conversion

Every APIR code that is registered also has an associated ISIN code. The ISIN codes are available on the APIR web site (<u>www.apir.com.au</u>) go >Directories>Yellowbook enter APIR Code to see the product data including ISIN).

Algorithm to convert from APIR to ISIN

Take the 9 character APIR Code and remove the last two characters which are the Country Code (CC). For an Australian Security, this will be AU.

Move the Country Code (CC) to the front, and insert "60" at the beginning to give 11 characters (6 is the code allocated by ASX to indicate ISIN code from APIR, 0 is spare for the time being).

The final character is determined using the modulus 10 "double-add-double" check digit algorithm in accordance with ISO 6166 Annex A to complete the 12 character ISIN (see <u>www.standards.com.au</u> for more details).

Example of a mod 10 "double-add-double" check digit calculation

After using the above guidelines, you should have determined the first 11 digits of the ISIN based on the APIR code.

Using an example on VANGUARD HIGH GROWTH INDEX FUND. The ISIN for this instrument is AU60VAN01111

The final digit (that is, 1) was determined using the following steps:

[1] Firstly, convert any letters to numbers:

Conversion table for characters

A = 10	F = 15	K = 20	P = 25	U = 30	Z = 35
B = 11	G = 16	L = 21	Q = 26	V = 31	
C = 12	H = 17	M = 22	R = 27	W = 32	
D = 13	l = 18	N = 23	S = 28	X = 33	
E = 14	J = 19	O = 24	T = 29	Y = 34	

A = 10, U = 30, V = 31, A = 10, N = 23. AU60VAN0111 → 103060

1030603110230111

- [2] Collect odd and even numbers:
 1030603110230111 = (1, 3, 6, 3, 1, 2, 0, 1), (0, 0, 0, 1, 0, 3, 1, 1)
- [3] Multiply the group containing the rightmost character (which is the SECOND group) by 2: (0, 0, 0, 2, 0, 6, 2, 2)
- [4] Add up the individual digits:

(1 + 3 + 6 + 3 + 1 + 2 + 0 + 1) + (0 + 0 + 0 + 2 + 0 + 6 + 2 + 2) = 29

- [5] Take the 10s modulus of the sum:29 mod 10 = 9
- [6] Subtract from 10:

10 - 9 = 1

[7] Take the 10s modulus of the result (this final step is important in the instance where the modulus of the sum is 0, as the resulting check digit would be 10).

 $1 \mod 10 = 1$

So the ISIN check digit is three making the final ISIN AU60VAN01111

Algorithm to convert from ISIN to APIR

It is much simpler to convert an ISIN into an APIR code because the check digit is not used.

Using the above as an example:

ISIN: AU60VAN01111

- The first 7 characters of the ISIN are the 4th 10th characters of the ISIN: VAN0111
- The final 2 characters of the APIR are the first 2 characters of the ISIN: AU
- So the APIR code for this example is: VAN0111AU

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