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SUPERSTREAM

Rollover V3 Conformance Testing Guide

A guide to the rollover v3 conformance testing process for funds and solution providers

VERSION 0.6 DRAFT



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For further information or questions,
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VERSION CONTROL

Version	Release date	Description of changes
V0.1	24.4.2020	Initial draft
V0.2	22.5.2020	Initial draft for internal review
V0.3	2.10.2020	Initial draft limited external review
V0.4	9.10.2020	Initial draft external review
V0.5	22.10.2020	Re-introduced interoperability test cases Added USM test cases inbound to ATO Other minor changes
V0.6	30.10.2020	Extended EPF tests for handling introduction of SMSF's Other minor changes

ENDORSEMENT

APPROVAL Pending

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1 INTRODUCTION

1.1 PURPOSE

The SuperStream *Data and Payment Standards Rollover Message Implementation Guide (MIG) v1.0* was published in July 2013. Version 2.0 (v2.0) of the specification, constituting a major release of the Standard, was published in December 2015. Version 3.0 was released in November 2019 as a further major release.

The purpose of this document is to provide guidance for software developers when undertaking conformance testing against the SuperStream Rollover MIG version 3.0.

The testing timetable will mirror the functional release schedule for the areas of functionality defined in the Rollover MIG v3.0:

Fund transactions

- a. Initiate Rollover Request transactions (IRR)
- b. Initiate Rollover Error Response transactions (IRER)
- c. Rollover Transaction Request (RTR)
- d. Rollover Request Outcome Response (RTOR)
- e. Section 20C Notice Error Response (S20CER)
- f. Unclaimed Superannuation Money (USM)
- g. Release Authority Error Response (RAER)
- h. Release Authority Statement (RAS)

Government transactions

- i. Unclaimed Superannuation Money (USM)
- j. Unclaimed Superannuation Money Outcome Response (USMOR)
- k. Electronic Portability Form (EPF)
- l. Section 20C Notice (S20C)
- m. Release Authority (RA)
- n. Release Authority Statement Outcome Response (RASOR)

1.2 AUDIENCE

The audience for this document is any fund, software developer and solution providers that will be developing or extending their software to make it compliant with the Superannuation Data and Payment Standard 2012 ([The 'Standard'](#)).

This document has been written for an audience expected to be familiar with the following:

- XBRL – www.xbrl.org
- ebMS3.0/AS4 - www.oasis-open.org/standards
- SuperStream program – www.ato.gov.au/datastandards
- SBR Program – www.sbr.gov.au.

1.3 DOCUMENT CONTENT

The document provides sample test cases for execution by Software Developers as part of a self-certification process up to and including peer to peer testing. This document contains a list of test cases to assist in validating the following:

- AS4 ebMS message conformance and testing supporting SuperStream business to business exchange of data
- The application code complies with the business rules defined in the corresponding Message Implementation Guide (MIG) for the transaction.
- The application code generates an XBRL message instance that complies with the XBRL Definitional and Report Taxonomies and associated Schematron rules.
- The application code correctly processes a message received including exception handling.

1.4 DOCUMENT STRUCTURE

The detailed content of this document is divided into the following four major sections and an overview of the content of each is provided below:

- Section 2 Conformance testing
- Section 3 Message level conformance and Interoperability testing
- Section 4 Rollover v3 test cases
- Section 5 Peer-to-Peer test cases

1.4.1 Section 2 - Conformance testing

This section focuses on the different solution scenarios and the many components involved in the messaging implementations that will be developed by funds, gateways and solution providers to support SuperStream Rollover MIG v3.

An overview of integration testing, interoperability and peer-to-peer testing is provided for both fund and government transactions.

1.4.2 Section 3 – Message level conformance and Interoperability testing

This section provides a summary of the test cases and conformance criteria that will test the interoperability within a rollover transaction sequence.

1.4.3 Section 4 - Rollover V3 test cases

This section gives an overview of rollover v3 testing requirements and lists the test cases that form the basic requirement for integration testing, gateway interoperability and peer-to-peer testing for both funds and government.

1.4.4 Section 5 - Peer-to-peer (P2P) test cases

Fund to Fund transactions (B2B)

The tables in this section provide a catalogue of the rollover v3 tests and then specify the detailed messaging steps involved in each of the peer-to peer test sequences listed for IRR and RTR messages, the corresponding IRER and RTOR response messages.

Government to Fund transactions (G2B)

The tables in this section provide a catalogue of the rollover v3 tests and the steps involved in each of the peer to peer test sequences listed for EPF, S20C, USM, RA and RAS and the corresponding S20CER, USMOR, RAER and RASOR response messages.

1.5 OTHER RELATED DOCUMENTS

This document is to be used in conjunction with these related documents:

- Data and Payment Standards Rollover Message Implementation Guide v3.0
- Supporting XBRL reporting taxonomy
- Data and Payment Standards Terms and Definitions (***Draft Schedule 2***)
- Data and Payment Standards Payment Definitions (***Draft Schedule 3***)
- Data and Payment Standards Message Orchestration and Profiles (***Draft Schedule 5***)
- Data and Payment Standards Error Code Management (***Draft Schedule 6***)
- SuperTICK User Guide v3.0
- Fund Validation Service (FVS) User Guide v 3.2
- SVS Business Implementation Guide
- SMSF Member TICK Business Implementation Guide
- Business Response Messaging Framework User Guide Final v1.1

2 CONFORMANCE TESTING

The test conformance process encompasses the following key principles:

2.1 GENERAL

General principles are as follows:

- The scope of the test conformance suite includes integration testing, interoperability testing and peer to peer testing for both business and government transactions.
- The test scope for SuperStream encompasses business-to-business AS4 ebMS message exchange and payload (XBRL) testing, government-to-business USM and EPF and also B2G
- The testing also makes reference to the ATO enabling services, which are as follows:
 - SuperTICK – SBR within the ATO owns this service which is referenced as part of the data standard
 - FVS – SBR within the ATO owns this service which is referenced as part of the data standard
 - SMSFMBRVERFY – SBR within the ATO owns this service which is referenced as part of the data standard
 - SMSFVERFY – SBR within the ATO owns this service which is referenced as part of the data standard
- B2B test use cases are initiated from fund registry systems, therefore processes will vary to capture the required set of data to support a rollover transaction. The test cases defined in this document will provide a generic set of steps to support these activities. It is the responsibility of the fund to capture data in their specific process.
- To streamline testing the following rules apply to registry system testing:
 - If multiple funds use a common registry system, a single pass through for a chosen fund would constitute a pass for all other funds associated with the registry system.
 - In a more complex environment, that contains multiple registry systems with various funds, at least one fund within each registry system should be tested as best practice.
 - One Unique Superannuation Identifier (USI) (product) for each fund is the minimum requirement for testing. Funds are not expected to test all products within their systems.

2.2 INTEGRATION TEST CASES

Integration test cases are the responsibility of each solution implementation team.

A checklist of integration test cases is provided in section 4 and represents the minimum requirement. The full extent of integration testing will need to be agreed between each fund and their solution provider/s.

3 MESSAGE LEVEL CONFORMANCE AND INTEROPERABILITY CHECKLISTS

3.1 Interoperability test case summary

This section lists the types of test cases for interoperability testing. The checklist below provides a summary of the functional requirements for test cases that will test the interoperability within a rollover transaction sequence.

The interoperability test cases documented are the minimum test cases required to meet the interoperability testing phase exit criteria. To assist in testing it is assumed Gateways may require additional test cases agreed upon with their testing cohort.

Interoperability test cases are listed in detail in the Superannuation Transaction Network (STN) Interoperability Test Plan at <https://www.gngb.com.au/documents-links/and> and are managed by the Gateway Network Governance Body (GNGB).

1. Fund Gateway to Fund Gateway
 - 1.1 Transport Layer connectivity
 - 1.2 Message Service Handler (MSH) Layer connectivity
 - 1.3 Application Layer connectivity – all gateways

2. Fund Gateway to / from ATO
 - 2.1 Transport Layer connectivity
 - 2.2 Message Service Handler (MSH) Layer connectivity
 - 2.3 Application Layer connectivity

3.2 PEER TO PEER TEST CASE SUMMARY

This section provides a summary of the Rollover peer-to-peer test case scenarios for fund to fund testing and ATO to fund testing.

In each case the following basic capabilities are tested along with the business process outcome:

1. Message sender:
 - a. XBRL message construction
 - b. ebMS message transmission
2. Message receiver:
 - a. ebMS message receipt
 - b. XBRL message deconstruction

3. Response message sender:
 - a. XML message construction
 - b. ebMS message transmission
4. Response message receiver:
 - a. ebMS message receipt

b. XML message deconstruction

APRA Fund to APRA Fund scenarios Fund to Fund (B2B) sending IRR

1. Fund to Fund (B2B) receiving IRR
 - 1.1 IRR processed and either RTR or IRRER generated
2. Fund to Fund (B2B) sending IRRER
 - 2.1 Error response generated
3. Fund to Fund (B2B) receiving IRRER
 - 3.1 Error response message processed
4. Fund to Fund (B2B) sending RTR
5. Fund to Fund (B2B) receiving RTR
 - 5.1 RTR processed to registry and outcome response generated
6. Fund to Fund (B2B) sending RTOR
 - 6.1 Outcome response generated
7. Fund to Fund (B2B) receiving RTOR
 - 7.1 Error or outcome response processed

ATO to APRA Fund scenarios

8. Government to Fund (G2B) – ATO sending USM
9. Government to Fund (G2B) - Fund receiving USM
 - 9.1 USM processed, and outcome generated
10. Fund to Government (B2G) – Fund sending USMOR
 - 10.1 Outcome response generated
11. Fund to Government (B2G) - ATO receiving USMOR
 - 11.1 Outcome response generated
12. Government to Fund (G2B) - ATO sending EPF
 - 12.1 Requesting rollover from APRA to APRA
 - 12.2 Requesting rollover from APRA to SMSF
13. Government to Fund (G2B) - Fund receiving EPF
 - 13.1 EPF processed
14. Government to Fund (G2B) - ATO sending S20C
15. Government to Fund (G2B) -Fund receiving S20C
 - 15.1 S20C processed

16. Fund to Government (B2G – Fund sending S20CER
17. Fund to Government (B2G) - ATO receiving S20CER
 - 17.1 Error response processed

18. Fund to Government (B2G) – Fund sending USM
 - 18.1 Appropriate use of USM reason codes including L - Inactive Low Balance Account or P - Insoluble lost member accounts (insoluble and lost) where applicable
19. Fund to Government (B2G) - ATO receiving USM
 - 19.1 Unclaimed Superannuation Money processed, and outcome generated
20. Government to Fund (G2B) – ATO sending USMOR
21. Government to Fund (G2B) - Fund receiving USMOR
 - 21.1 Outcome response processed

22. Government to Fund (G2B) – ATO Sending RA
23. Government to Fund (G2B) – Fund receiving RA
 - 23.1 RA processed to registry and outcome response generated
24. Fund to Government (B2G) -Fund Sending RAER
 - 24.1 Error response generated
25. Fund to Government (B2G) – ATO receiving RAER
26. Government to Fund (G2B) - Fund Sending RAS
27. Government to Fund (G2B) - ATO receiving RAS
 - 27.1 RAS processed, outcome response generated
28. Government to Fund (G2B) - ATO sending RASOR
29. Government to Fund (G2B) – Fund receiving RASOR
 - 29.1 Outcome response processed

APRA Fund to SMSF Fund scenarios

30. Fund to Fund (B2B) sending IRR
31. Fund to Fund (B2B) receiving IRR
 - 31.1 IRR processed and either RTR or IRER generated
32. Fund to Fund (B2B) sending IRER
 - 32.1 Error response generated
33. Fund to Fund (B2B) receiving IRER
 - 33.1 Error response message processed

- 34. Fund to Fund (B2B) sending RTR
- 35. Fund to Fund (B2B) receiving RTR
 - 35.1 RTR processed to registry and outcome response generated
- 36. Fund to Fund (B2B) sending RTOR
 - 36.1 Outcome response generated
- 37. Fund to Fund (B2B) receiving RTOR
 - 37.1 Error or outcome response processed

SMSF Fund to APRA Fund scenarios

- 38. Fund to Fund (B2B) sending IRR
- 39. Fund to Fund (B2B) receiving IRR
 - 39.1 IRR processed and either RTR or IRRER generated
- 40. Fund to Fund (B2B) sending IRRER
 - 40.1 Error response generated
- 41. Fund to Fund (B2B) receiving IRRER
 - 41.1 Error response message processed
- 42. Fund to Fund (B2B) sending RTR
- 43. Fund to Fund (B2B) receiving RTR
 - 43.1 RTR processed to registry and outcome response generated
- 44. Fund to Fund (B2B) sending RTOR
 - 44.1 Outcome response generated
- 45. Fund to Fund (B2B) receiving RTOR
 - 45.1 Error or outcome response processed

SMSF Fund to SMSF Fund scenarios

- 46. Fund to Fund (B2B) sending IRR
- 47. Fund to Fund (B2B) receiving IRR
 - 47.1 IRR processed and either RTR or IRRER generated
- 48. Fund to Fund (B2B) sending IRRER
 - 48.1 Error response generated
- 49. Fund to Fund (B2B) receiving IRRER
 - 49.1 Error response message processed
- 50. Fund to Fund (B2B) sending RTR
- 51. Fund to Fund (B2B) receiving RTR
 - 51.1 RTR processed to registry and outcome response generated
- 52. Fund to Fund (B2B) sending RTOR

- 52.1 Outcome response generated
- 53. Fund to Fund (B2B) receiving RTOR
 - 53.1 Error or outcome response processed

ATO to SMSF Fund scenarios

- 54. Government to Fund (G2B) - ATO sending EPF
- 55. Government to Fund (G2B) - Fund receiving EPF
 - 55.1 EPF processed
- 56. Government to Fund (G2B) – ATO Sending RA
- 57. Government to Fund (G2B) – Fund receiving RA
 - 57.1 RA processed to registry and outcome response generated
- 58. Fund to Government (B2G) -Fund Sending RAER
 - 58.1 Error response generated
- 59. Fund to Government (B2G) – ATO receiving RAER
- 60. Government to Fund (G2B) - Fund Sending RAS
- 61. Fund to Government(B2G) - ATO receiving RAS
 - 61.1 RAS processed; outcome response generated
- 62. Government to Fund (G2B) - ATO sending RASOR
- 63. Government to Fund (G2B) – Fund receiving RASOR
 - 63.1 Error or outcome response processed

4 ROLLOVER VERSION 3 TEST CASES

4.1 ROLLOVER VERSION 3 TESTING OVERVIEW

This section gives an overview of rollover testing and lists the test cases that form the basic requirement for integration, interoperability and peer-to-peer testing for both fund and government transactions.

4.2 B2B (FUND TO FUND) TEST CASES

4.2.1 B2B (APRA Fund to APRA Fund) peer to peer tests - send and receive the following:

1. Initiate Rollover Request (IRR)

- 1.1. Single member IRR message successfully
- 1.2. Multiple member IRR message successfully (optional to send, mandatory to test receiving)
- 1.3. Valid message with Other Details tuples populated with agreed value
- 1.4. Valid message with Record Count populated
2. Initiate Rollover Error Response (IRER)
 - 2.1. IRER Business error - member doesn't exist
 - 2.2. IRER message with Context ID included (optional to send, mandatory to receive)
3. Rollover Transaction Request (RTR)
 - 3.1. Valid single member rollover for processing (validate all figures based on rollover transaction)
 - 3.2. Multiple member RTR message successfully (optional to send, mandatory to test receiving)
 - 3.3. Valid member rollover with no TFN processed
 - 3.4. Valid member rollover with Other Details tuple populated
 - 3.5. Valid member rollover with Record Count populated
 - 3.6. Valid member death benefit recipient age category Adult
 - 3.7. Valid member death benefit recipient age category Child
 - 3.8. Valid member rollover with additional message linkage elements
4. Rollover Transaction Outcome Response (RTOR)
 - 4.1. Rollover processed successfully
 - 4.2. Business error: member not found (member level refund)
 - 4.3. Business error: Roll over message but no money paid - document level response with no refund
 - 4.4. Business error resulting in document level refund
 - 4.5. RTOR with Context ID included (optional to send, mandatory to receive)

4.2.2 B2B (APRA Fund to SMSF) peer to peer tests - send and receive the following:

5. Initiate Rollover Request (IRR)
 - 1.5. Single member IRR message successfully
 - 1.6. Multiple member IRR message successfully (optional to send, mandatory to test receiving)
 - 1.7. Valid message with Other Details tuples populated with agreed value
 - 1.8. Valid message with Record Count populated
6. Initiate Rollover Error Response (IRER)
 - 6.1. IRER Business error - member doesn't exist
 - 6.2. IRER message with Context ID included (optional to send, mandatory to receive)

7. Rollover Transaction Request (RTR)

- 7.1. Valid single member rollover for processing (validate all figures based on rollover transaction)
- 7.2. Multiple member RTR message successfully (optional to send, mandatory to test receiving)
- 7.3. Valid member rollover with no TFN processed
- 7.4. Valid member rollover with Other Details tuple populated
- 7.5. Valid member rollover with Record Count populated

8. Rollover Transaction Outcome Response (RTOR)

- 8.1. Rollover processed successfully
- 8.2. Business error: member not found (member level refund)
- 8.3. Business error: Roll over message but no money paid - document level response with no refund
- 8.4. Business error resulting in document level refund
- 8.5. RTOR with Context ID included (optional to send, mandatory to receive)

4.2.3 B2B (SMSF to APRA Fund) peer to peer tests - send and receive the following:

9. IRR

- 1.9. Single member IRR message successfully
- 1.10. Multiple member IRR message successfully (optional to send, mandatory to test receiving)
- 1.11. Valid message with Other Details tuples populated with agreed value
- 1.12. Valid message with Record Count populated

10. IRER

- 10.1. IRER Business error - member doesn't exist
- 10.2. IRER message with Context ID included (optional to send, mandatory to receive)

11. RTR

- 11.1. Valid single member rollover for processing (validate all figures based on rollover transaction)
- 11.2. Multiple member RTR message successfully (optional to send, mandatory to test receiving)
- 11.3. Valid member rollover with no TFN processed
- 11.4. Valid member rollover with Other Details tuple populated
- 11.5. Valid member rollover with Record Count populated

12. RTOR

- 12.1. Rollover processed successfully
- 12.2. Business error: member not found (member level refund)

- 12.3. Business error: Roll over message but no money paid - document level response with no refund
- 12.4. Business error resulting in document level refund
- 12.5. RTOR with Context ID included (optional to send, mandatory to receive)

4.2.4 B2B (SMSF to SMSF) peer to peer tests - send and receive the following:

13. IRR

- 1.13. Single member IRR message successfully
- 1.14. Multiple member IRR message successfully (optional to send, mandatory to test receiving)
- 1.15. Valid message with Other Details tuples populated with agreed value
- 1.16. Valid message with Record Count populated

14. IRER

- 14.1. IRER Business error - member doesn't exist
- 14.2. IRER message with Context ID included (optional to send, mandatory to receive)

15. RTR

- 15.1. Valid single member rollover for processing (validate all figures based on rollover transaction)
- 15.2. Multiple member RTR message successfully (optional to send, mandatory to test receiving)
- 15.3. Valid member rollover with no TFN processed
- 15.4. Valid member rollover with Other Details tuple populated
- 15.5. Valid member rollover with Record Count populated

16. RTOR

- 16.1. Rollover processed successfully
- 16.2. Business error: member not found (member level refund)

4.3 G2B (ATO TO FUND) TEST CASES

4.3.1 G2B (ATO TO APRA FUND) PEER TO PEER TESTS - SEND AND RECEIVE THE FOLLOWING:

17. USM - from ATO to Fund and Fund to ATO

- 17.1. Valid single member USM rollover for processing
- 17.2. Valid multiple member USM rollovers for processing
- 17.3. Valid member USM rollover with no TFN processed

- 17.4. Valid member USM rollover with Other Details tuple populated
- 17.5. Valid member USM message with all fields populated that will be sent in a normal message
- 17.6. Valid member USM message with only the minimum number of mandatory fields populated
- 17.7. Valid member USM message with Record Count populated
- 18. USMOR - from Fund to ATO and ATO and Fund
 - 18.1. USM rollover processed successfully
 - 18.2. Business error: member doesn't exist (member level refund)
 - 18.3. Business error: Roll over message but no money paid. OOB response
 - 18.4. Business error resulting in document level refund
 - 18.5. USMOR with Context ID included (mandatory to send and receive)
- 19. EPF - from ATO to APRA Fund
 - 19.1. Single member EPF message successfully
 - 19.1.1. Requesting rollover from APRA to APRA
 - 19.1.2. Requesting rollover from APRA to SMSF
 - 19.2. EPF message with Other Details tuples populated with agreed value
 - 19.3. EPF message with Record Count populated
 - 19.4. Requesting rollover from APRA to APRA
 - 19.5. Requesting rollover from APRA to SMSF
- 20. RA – From ATO to Fund
 - 20.1. Valid member First home super saver (FHSS) scheme
 - 20.2. Valid member Excess Concessional Contributions (ECC)
 - 20.3. Valid member Excess Non-Concessional Contributions (ENCC)
 - 20.4. Valid member Excess Non-Concessional Contributions Tax (ENCCT)
 - 20.5. Valid member Division 293 due and payable (Div293)
 - 20.6. Valid member Division 293 deferred debt (DivDef)
- 21. RAS – From Fund To ATO
 - 21.1. Release Authority Statement (RAS)
 - 21.2. Release Authority Statement (RAS) partial release
- 22. RAER – From Fund to ATO
 - 22.1. Business error: member doesn't exist
 - 22.2. Business error: member exists but no balance
 - 22.3. Business error: member exists but no open account
 - 22.4. Business error: member exist but DB or non-commutable income stream
- 23. RASOR – From ATO to Fund

- 23.1. RAS successfully processed
- 23.2. RAS unsuccessfully processed

4.3.2 G2B (ATO TO SMSF) PEER TO PEER TESTS - SEND AND RECEIVE THE FOLLOWING:

24. EPF - from ATO to SMSF Fund

- 24.1. Single member EPF message successfully
 - 24.1.1. Requesting rollover from SMSF to APRA
 - 24.1.2. Requesting rollover from SMSF to SMSF
- 24.2. EPF message with Other Details tuples populated with agreed value
- 24.3. EPF message with Record Count populated

25. RA – From ATO to SMSF Fund

- 25.1. Valid member Division 293 deferred debt (DivDef)
- 25.2. Valid member First home super saver (FHSS) scheme
- 25.3. Valid member Excess Concessional Contributions (ECC)
- 25.4. Valid member Excess Non-Concessional Contributions (ENCC)
- 25.5. Valid member Excess Non-Concessional Contributions Tax (ENCCT)
- 25.6. Valid member Division 293 due and payable (Div293)

26. RAS – From SMSF Fund to ATO

- 26.1. Release Authority Statement (RAS)
- 26.2. Release Authority Statement (RAS) partial release

27. RAER – From SMSF Fund to ATO

- 27.1. Business error: member doesn't exist
- 27.2. Business error: member exists but no balance
- 27.3. Business error: member exists but no open account
- 27.4. Business error: member exist but DB or non-commutable income stream

28. RASOR– From ATO to SMSF Fund

- 28.1. RAS successfully processed
- 28.2. RAS unsuccessfully processed

4.4 INTEGRATION TEST CASES

This section gives an overview of test cases that should form the basis of application integration testing for funds.

Integration testing checklist

1. Fund and Service Provider/s testing sending messages
 - 1.1. FVS call
 - 1.2. SuperTICK call
 - 1.3. SMSFVRFY call
 - 1.4. SMSFMBRVRFY call
 - 1.5. XBRL message construction
 - 1.6. ebMS message transmission
2. Fund and Service Provider/s testing receiving messages
 - 2.1. ebMS message receipt
 - 2.2. XBRL message deconstruction
 - 2.3. Process rollover into registry system and generate response
3. Fund and Service Provider/s testing sending responses
 - 3.1. Error or outcome messages generated
 - 3.2. XML message construction
 - 3.3. ebMS message transmission
4. Fund and Service Provider/s testing receiving responses
 - 4.1. ebMS message receipt
 - 4.2. XML response message deconstruction
 - 4.3. Error or outcome message processed
5. Government and Service Provider/s testing sending:
 - 5.1. FVS call
 - 5.2. XBRL message construction
 - 5.3. ebMS message transmission
6. Government and Service Provider/s testing receiving responses
 - 6.1. ebMS message receipt
 - 6.2. XML response message deconstruction
 - 6.3. Error or outcome message processed

Message structure and content tests

1. Presence of fields
 - 1.1. Mandatory fields present
 - 1.2. Conditional and dependent fields present if required
2. Values
 - 2.1. Values according to taxonomy

- 2.2. Cross field validations
- 2.3. Other business rules – fund
- 3. XBRL
 - 3.1. Message correctly formed
 - 3.2. Message internally consistent – context and data
- 4. XML (responses)
 - 4.1. Message correctly formed
 - 4.2. Message internally consistent – parameters and event items
 - 4.3. Refund parameters match the Business Response Messaging Framework
- 5. ebMS
 - 5.1. Header and wrapper correct
 - 5.2. Transmission and receipt successful
 - 5.3. Response messages correctly packaged
 - 5.4. Response message transmission and receipt successful

4.5 TEST DATA

Sample message instances will be available separately to this document.

4.6 GATEWAY INTEROPERABILITY TEST SCENARIO CATALOGUE

This section gives an overview of tests required as part of interoperability testing between gateway to gateway and gateway to government.

Gateways can commence peer to peer testing prior to completing interoperability as long as they have completed interoperability with other gateway participants in the peer group. Prior to production it is required that all gateways have successfully completed testing with one another.

Refer to Appendix A for further detail of the tests listed below.

B2B – Existing gateways		
Test number	V3	Description
INTERB1.1	✓	Send a RTR message with correct data
INTERB1.2	✓	Send a RTOR message (if applicable to gateway)
INTERB1.3	Optional	Repeat above test with mismatched payload (if applicable to gateway)
INTERB1.4	✓	Send an IRR message with correct data
INTERB1.5	✓	Send an IRER message with correct data
INTERB1.6	✓	Repeat above tests with SMSF data sets
INTERB1.7*	✓	Fund A v3 and Fund B v2 - incorrect versioning - IRR sent by fund A to fund B in v3. *See Note 1 below.

Note 1: INTERB1.7: This test may not be able to be initiated by some gateways for interoperability testing because of the structure of their interaction with their funds. In those cases, the B2B fund to fund versioning test cases will cover this scenario.

G2B – ATO to existing gateways		
Test number	V3	Description* * See Note 2 below.
Transport and MSH layer testing		
INTERG1.1	✓	Establish https connection between endpoints Note: ATO has already established connectivity for EPF, however for USM, connection also needs to go the other way (because of USMOR) so tests are to be repeated
INTERG1.2	✓	Send a simplified message from the sender MSH to the receiver MSH
INTERG1.3	✓	Send a simplified message from the sender MSH to the receiver MSH with PayloadInfo part properties configured for a particular source / target fund combination
INTERG1.4	✓	Test message signing and signature validation
INTERG1.5	✓	Test message compression
INTERG1.6	✓	Multiple payloads - non compressed
INTERG1.7	✓	Multiple payloads – compressed

Note 2: These low-level G2B test cases provide a checklist of message structure requirements and do not need to be performed separately if not appropriate.

A single well-formed, signed, compressed message as specified in tests INTERG1.8, INTERG1.9 and INTERG1.10 will automatically provide a test of these requirements.

G2B – ATO to existing gateways		
Test number	V3	Description
Application layer testing		
INTERG1.8	✓	Send a USM Rollover message with correct data
INTERG1.9	✓	Send a USM Rollover Outcome Response message with correct data
INTERG1.10	✓	Send an Electronic Portability Form message with correct data
INTERG1.11	✓	BIP4 - check routing is consistent with BIP4
INTERG1.14	✓	ATO sends EPF v2 and Fund B is v2
INTERG1.16	✓	ATO sends RA message with correct data
INTERG1.17	✓	Send a RAS with correct data
INTERG1.18	✓	ATO sends RASOR with correct data

4.7 PEER TO PEER TEST SCENARIO CATALOGUE

The following test case scenarios are the minimum test scenarios required for Peer to Peer testing. It is the responsibility of the trustee to ensure these tests are completed successfully for each solution, regardless of whether the fund or their service provider conducts the test.

4.7.1 Peer to Peer Test Case Scenarios – B2B

Each test case should be performed by Funds taking on both a sending and a receiving role. i.e. Fund A sending to Fund B, and then repeated with Fund B sending to Fund A.

Each test requires checking of both sending and receiving solution correctness – refer to the test cases in section 5 for further detail.

Note 1: The response pattern used by the responding party may be any of Error, Partial or Progressive. The receiving party for a response must be able to process all response pattern types.

Note 2: Payment reconciliation cannot be tested in a testing environment as no actual payments are created.

IRR		
Test number	V3	Description
IRR1.1	✓	Valid single member IRR message
IRR1.2	✓	Valid multiple member IRR message

		Note: it is optional to send a multiple member IRR but all funds must test that they can receive a multiple member IRR
IRR1.3	✓	Valid IRR message with Other Details tuple populated with an agreed value between peers Note: optional to send, mandatory to receive
IRR1.4	✓	Valid IRR message with Record Count populated

IRER		
Test number	V3	Description
IRER2.1	✓	IRER Business error - member doesn't exist, SUPER.GEN.GEN.21 - Member not found with supplied information
IRER2.2	✓	IRER message with Context ID included Note: optional to send, mandatory to receive

RTR		
Test number	V3	Description
RTR3.1	✓	Valid single member RTR message
RTR3.2	✓	Valid multiple member RTR message successfully Note: optional to send, mandatory to receive
RTR3.3	Optional	Valid member rollover with no TFN processed (using Member ID)
RTR3.4	✓	Valid member rollover with Other Details tuple populated Note: optional to send, mandatory to receive
RTR3.5	✓	Valid member rollover with Record Count populated
RTR3.6	✓	Valid member death benefit recipient age category Adult
RTR3.7	✓	Valid member death benefit recipient age category Child
RTR3.8	✓	Valid member rollover with additional message linkage elements

RTOR		
Test number	V3	Description
RTOR4.1	✓	Rollover response processed successfully
RTOR4.2	✓	Business error: - Member level refund because member doesn't exist, SUPER.GEN.GEN.21 - Member not found with supplied information
RTOR4.3	✓	RTOR with Context ID included Note: optional to send, mandatory to receive

4.7.2 Peer to peer test case catalogue – G2B

USM – from ATO to Fund		
Test number	V3	Description
USM6.1	✓	Valid single member USM rollover
USM6.2	✓	Valid multiple member USM rollovers

USM6.3	✓	Valid member USM rollover with no TFN, including Member ID
USM6.4	✓	Valid member USM rollover with Other Details tuple populated
USM6.5	✓	Valid member USM message with all fields populated that will be sent in a normal message
USM6.6	✓	Valid member USM message with only the minimum number of mandatory fields populated
USM6.7	✓	Valid member USM message with Record Count populated

USMOR – from Fund to ATO		
Test number	V3	Description
USMOR7.1	✓	USM rollover response processed successfully
USMOR7.2	✓	Business error: - Member level refund because member doesn't exist, SUPER.GEN.GEN.21 - Member not found with supplied information
USMOR7.3	✓	USMOR with Context ID included Note: mandatory to send and receive

USM – from Fund to ATO		
Test number	V3	Description
USM6.8	✓	Valid single member USM rollover
USM6.9	✓	Valid multiple member USM rollovers
USM6.10	✓	Valid member USM rollover with no TFN, including Member ID
USM6.11	✓	Valid member USM rollover with Other Details tuple populated
USM6.12	✓	Valid member USM message with all fields populated that will be sent in a normal message
USM6.13	✓	Valid member USM message with only the minimum number of mandatory fields populated
USM6.14	✓	Valid member USM message with Record Count populated

USMOR – from ATO to Fund		
Test number	V3	Description
USMOR7.4	✓	USM rollover response processed successfully
USMOR7.5	✓	Business error: - Member level refund because member doesn't exist, SUPER.GEN.GEN.21 - Member not found with supplied information
USMOR7.6	✓	USMOR with Context ID included Note: mandatory to send and receive

EPF		
Test number	V3	Description
EPF8.1	✓	Valid Single member EPF message
EPF8.2	✓	Valid EPF message with Other Details tuples populated with agreed value Note: optional to send, mandatory to receive

EPF8.3	✓	Valid EPF message with Record Count populated
EPF8.4	✓	ATO sends EPF v2 and Fund is v2
EPF8.5	✓	ATO sends EPF v2 and Fund is v3 (INCORRECT)
EPF8.6	✓	ATO sends EPF v3 and Fund is v3
EPF8.7	✓	ATO sends EPF v3 and Fund is v2 (INCORRECT)

RA – from ATO to Fund		
Test number	V3	Description
RA9.1	✓	Valid member First home super saver (FHSS) scheme
RA9.2	✓	Valid member Division 293 deferred debt (DivDef)
RA9.3	✓	Valid member Excess Concessional Contributions (ECC)
RA9.4	✓	Valid member Excess Non-Concessional Contributions (ENCC)
RA9.5	✓	Valid member Excess Non-Concessional Contributions Tax (ENCCT)
RA9.6RA9.6	✓	Valid member Division 293 due and payable (Div293)

RAS – From Fund To ATO		
Test number	V3	Description
RAS9.1	✓	Release Authority Statement (RAS)
RAS9.2	✓	Release Authority Statement (RAS) partial release

RAER – From Fund to ATO		
Test number	V3	Description
RAER9.1	✓	Member not found SUPER.GEN.GEN.21
RAER9.2	✓	Member exists but no open account SUPER.GEN.GEN.22
RAER9.3	✓	Member exist but DB or non-commutable income stream SUPER.GEN.RLVR.6
RAER9.4	✓	Member has account but cannot release for other reasons SUPER.GEN.RLVR.9

RASOR– From ATO to Fund		
Test number	V3	Description
RASOR9.1	✓	RAS successfully processed

RASOR 9.2	✓	RAS unsuccessfully processed - ATO cannot find the original RA
RASOR 9.3	✓	RAS unsuccessfully processed – mismatch of ABN, USI, product, year or member account number
RASOR 9.4	✓	
RASOR 9.5	✓	
RASOR 9.6	✓	

5 PEER TO PEER TEST CASES

5.1 SEND AND RECEIVE IRR AND IRER

5.1.1 IRR test cases

IRR1.1 Valid single member IRR message			
Fund A		Fund B	
IRR1.1.FNDA.01	Fund A Send IRR		
		IRR1.1.FNDB.01	Fund B Receive IRR
		IRR1.1.FNDB.02	Fund B Send RTR
IRR1.1.FNDA.02	Fund A Receive RTR		
IRR1.1.FNDA.03	Fund A Send RTOR		
		IRR1.1.FNDB.03	Fund B Receive RTOR

IRR1.2 Valid multiple member IRR message Note: it is optional to send a multiple member IRR but all funds must test that they can receive a multiple member IRR			
Fund A		Fund B	
IRR1.2.FNDA.01	Fund A Send IRR		
		IRR1.2.FNDB.01	Fund B Receive IRR
		IRR1.2.FNDB.02	Fund B Send RTR
IRR1.2.FNDA.02	Fund A Receives RTR		
IRR1.2.FNDA.03	Fund A Send RTOR		
		IRR1.2.FNDB.03	Fund B Receive RTOR

IRR1.3 Valid IRR message with Other Details tuple populated with an agreed value between peers Note: optional to send, mandatory to receive			
Fund A		Fund B	
IRR1.3.FNDA.01	Fund A Send IRR		
		IRR1.3.FNDB.01	Fund B Receive IRR
		IRR1.3.FNDB.02	Fund B Send RTR
IRR1.3.FNDA.02	Fund A Receives RTR		
IRR1.3.FNDA.03	Fund A Send RTOR		
		IRR1.3.FNDB.03	Fund B Receive RTOR

IRR1.4 Valid IRR message with Record Count populated			
Fund A		Fund B	
IRR1.4.FNDA.01	Fund A Send IRR		
		IRR1.4.FNDB.01	Fund B Receive IRR
		IRR1.4.FNDB.02	Fund B Send RTR
IRR1.4.FNDA.02	Fund A Receives RTR		
IRR1.4.FNDA.03	Fund A Send RTOR		
		IRR1.4.FNDB.03	Fund B Receive RTOR

5.1.2 IRER test cases

IRER2.1 IRER Business error - member doesn't exist, SUPER.GEN.GEN.21 - Member not found with supplied information			
Fund A		Fund B	
IRER2.1.FNDA.01	Fund A Send IRR		
		IRER2.1.FNDB.01	Fund B Receive IRR
		IRER2.1.FNDB.02	Fund B Send IRER
IRER2.1.FNDA.02	Fund A Receive IRER		

IRER2.2 IRER message with Context ID included			
Note: optional to send, mandatory to receive			
Fund A		Fund B	
IRER2.2.FNDA.01	Fund A Send IRR		
		IRER2.2.FNDB.01	Fund B Receive IRR
		IRER2.2.FNDB.02	Fund B Send IRER
IRER2.2.FNDA.02	Fund A Receive IRER		

5.2 SEND AND RECEIVE RTR AND RTOR

5.2.1 RTR Test cases

RTR3.1 Valid single member RTR message			
Fund A		Fund B	
RTR3.1.FNDA.01	Fund A Send RTR		
		RTR3.1.FNDB.01	Fund B Receive RTR
		RTR3.1.FNDB.02	Fund B Send RTOR
RTR3.1.FNDA.02	Fund A Receive RTOR		

RTR3.2 Valid multiple member RTR message successfully Note: optional to send, mandatory to receive			
Fund A		Fund B	
RTR3.2.FNDA.01	Fund A Send RTR		
		RTR3.2.FNDB.01	Fund B Receive RTR
		RTR3.2.FNDB.02	Fund B Send RTOR
RTR3.2.FNDA.02	Fund A Receive RTOR		

RTR3.3 Valid member rollover with no TFN processed (using Member ID)			
Fund A		Fund B	
RTR3.3.FNDA.01	Fund A Send RTR		
		RTR3.3.FNDB.01	Fund B Receive RTR
		RTR3.3.FNDB.02	Fund B Send RTOR
RTR3.3.FNDA.02	Fund A Receive RTOR		

RTR3.4 Valid member rollover transaction, Other Details tuples provided Note: optional to send, mandatory to receive			
Fund A		Fund B	
RTR3.4.FNDA.01	Fund A Send RTR		
		RTR3.4.FNDB.01	Fund B Receive RTR
		RTR3.4.FNDB.02	Fund B Send RTOR
RTR3.4.FNDA.02	Fund A Receive RTOR		

RTR3.5 Valid member rollover transaction, Record count populated			
Fund A		Fund B	
RTR3.5.FNDA.01	Fund A Send RTR		
		RTR3.5.FNDB.01	Fund B Receive RTR
		RTR3.5.FNDB.02	Fund B Send RTOR
RTR3.5.FNDA.02	Fund A Receive RTOR		

RTR3.6 Valid member death benefit recipient age category Adult			
Fund A		Fund B	
RTR3.6.FNDA.01	Fund A Send RTR		
		RTR3.6.FNDB.01	Fund B Receive RTR
		RTR3.6.FNDB.02	Fund B Send RTOR

RTR3.6.FNDA.02	Fund A Receive RTOR	
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RTR3.7 Valid member death benefit recipient age category Child		
Fund A		Fund B
RTR3.7.FNDA.01	Fund A Send RTR	
		RTR3.7.FNDB.01 Fund B Receive RTR
		RTR3.7.FNDB.02 Fund B Send RTOR
		RTR3.7.FNDB.03 Fund B Send Death Benefit Rollover Statement 11.4.4 Schedule 4b
	Fund A Receive RTOR	

RTR3.8 Valid member rollover with additional message linkage elements		
		Fund B
RTR3.7.FNDA.01	Fund A Send RTR	
		RTR3.7.FNDB.01 Fund B Receive RTR
		RTR3.7.FNDB.02 Fund B Send RTOR
RTR3.7.FNDA.02	Fund A Receive RTOR	

5.2.2 RTOR test cases

RTOR4.1 Rollover processed successfully			
Fund A		Fund B	
RTOR4.1.FNDA.01	Fund A Receive RTR		
		RTOR4.1.FNDB.01	Fund B Send RTR
		RTOR4.1.FNDB.02	Fund B Send RTOR
RTOR4.1.FNDA.02	Fund A Receive RTOR		

RTOR4.2 Business error: - Member level refund because member doesn't exist, SUPER.GEN.GEN.21 - Member not found with supplied information			
Fund A		Fund B	
RTOR4.2.FNDA.01	Fund A Receive RTR		
		RTOR4.2.FNDB.01	Fund B Send RTR
		RTOR4.2.FNDB.02	Fund B Send RTOR
RTOR4.2.FNDA.02	Fund A Receive RTOR		

RTOR4.3 RTOR with Context ID included Note: optional to send, mandatory to receive			
Fund A		Fund B	
RTOR4.3.FNDA.01	Fund A Receive RTR		
		RTOR4.3.FNDB.01	Fund B Send RTR
		RTOR4.3.FNDB.02	Fund B Send RTOR
RTOR4.3.FNDA.02	Fund A Receive RTOR		

5.3 SEND AND RECEIVE USM AND USMOR MESSAGES

5.3.1 USM test cases

USM6.1 Valid single member USM rollover			
ATO		Fund A	
USM6.1.ATO.01	ATO Send USM		
		USM6.1.FNDA.01	Fund A receive USM
		USM6.1.FNDA.02	Fund A Send USMOR
USM6.1.ATO.02	ATO Receive USMOR		

USM6.2 Valid multiple member USM rollovers			
ATO		Fund A	
USM6.2.ATO.01	ATO Send USM		
		USM6.2.FNDA.01	Fund A receive USM
		USM6.2.FNDA.02	Fund A Send USMOR
USM6.2.ATO.02	ATO Receive USMOR		

USM6.3 Valid member USM rollover with no TFN, including Member ID			
ATO		Fund A	
USM6.3.ATO.01	ATO Send USM		
		USM6.3.FNDA.01	Fund Receive USM
		USM6.3.FNDA.02	Fund Send USMOR
USM6.3.ATO.02	ATO Receive USMOR		

USM6.4 Valid member USM rollover with Other Details tuple populated			
ATO		Fund A	
USM6.4.ATO.01	ATO Send USM		
		USM6.4.FNDA.01	Fund Receive USM
		USM6.4.FNDA.02	Fund Send USMOR
USM6.4.ATO.02	ATO Receive USMOR		

USM6.5 Valid member USM message with all fields populated that will be sent in a normal message			
ATO		Fund A	
USM6.5.ATO.01	ATO Send USM		
		USM6.5.FNDA.01	Fund Receive USM
		USM6.5.FNDA.02	Fund Send USMOR
USM6.5.ATO.02	ATO Receive USMOR		

USM6.6 Valid member USM message with only the minimum number of mandatory fields populated			
ATO		Fund A	
USM6.6.ATO.01	ATO Send USM		
		USM6.6.FNDA.01	Fund Receive USM
		USM6.6.FNDA.02	Fund Send USMOR

USM6.6.ATO.02	ATO Receive USMOR	
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USM6.7 Valid member USM message with Record Count populated

ATO		Fund A	
USM6.7.ATO.01	ATO Send USM		
		USM6.7.FNDA.01	Fund Receive USM
		USM6.7.FNDA.02	Fund Send USMOR
USM6.7.ATO.02	ATO Receive USMOR		

USM6.8 Valid single member USM rollover

Fund A		Fund A	
USM6.8. FNDA.01	Fund A Send USM		
		USM6.8.ATO.01	ATO receive USM
		USM6.8.ATO.02	ATO send USMOR
USM6.8. FNDA.02	Fund A Receive USMOR		

USM6.9 Valid multiple member USM rollovers

Fund A		Fund A	
USM6.9. FNDA.01	Fund A Send USM		
		USM6.9.ATO.01	ATO receive USM
		USM6.9.ATO.02	ATO send USMOR
USM6.9. FNDA.02	Fund A Receive USMOR		

USM6.10 Valid member USM rollover with no TFN, including Member ID

Fund A		Fund A	
USM6.10. FNDA.01	Fund A Send USM		
		USM6.10.ATO.01	ATO receive USM
		USM6.10.ATO.02	ATO send USMOR
USM6.10. FNDA.02	Fund A Receive USMOR		

USM6.11 Valid member USM rollover with Other Details tuple populated

Fund A		Fund A	
USM6.11. FNDA.01	Fund A Send USM		
		USM6.11.ATO.01	ATO receive USM
		USM6.11.ATO.02	ATO send USMOR
USM6.11. FNDA.02	Fund A Receive USMOR		

USM6.12 Valid member USM rollover with Other Details tuple populated

Fund A		Fund A	
USM6.12. FNDA.01	Fund A Send USM		

		USM6.12.ATO.01	ATO receive USM
		USM6.12.ATO.02	ATO send USMOR
USM6.12. FNDA.02	Fund A Receive USMOR		

USM6.13 Valid member USM message with only the minimum number of mandatory fields populated			
Fund A		Fund A	
USM6.13. FNDA.01	Fund A Send USM		
		USM6.13.ATO.01	ATO receive USM
		USM6.13.ATO.02	ATO send USMOR
USM6.13. FNDA.02	Fund A Receive USMOR		

USM6.14 Valid member USM rollover with Other Details tuple populated			
Fund A		Fund A	
USM6.14. FNDA.01	Fund A Send USM		
		USM6.14.ATO.01	ATO receive USM
		USM6.14.ATO.02	ATO send USMOR
USM6.14. FNDA.02	Fund A Receive USMOR		

5.3.2 USMOR test cases

USMOR7.1 USM rollover processed successfully			
ATO		Fund A	
USMOR7.1.ATO.01	ATO Send USM		
		USMOR7.1.FNDA.01	Fund A Receive USM
		USMOR7.1.FNDA.02	Fund A Send USMOR
USMOR7.1.ATO.02	ATO Receive USMOR		

USMOR7.2 Business error: - Member level refund because member doesn't exist, SUPER.GEN.GEN.21 - Member not found with supplied information			
ATO		Fund A	
USMOR7.2.ATO.01	ATO Send USM		
		USMOR7.2.FNDA.01	Fund A Receive USM
		USMOR7.2.FNDA.02	Fund A Send USMOR
USMOR7.2.ATO.02	ATO Receive USMOR		

USMOR7.3 USMOR with Context ID included Note: mandatory to send and receive			
ATO		Fund A	
USMOR7.3.ATO.01	ATO Send USM		
		USMOR7.3.FNDA.01	Fund A Receive USM
		USMOR7.3.FNDA.02	Fund A Send USMOR
USMOR7.3.ATO.01	ATO Receive USMOR		

USMOR7.4 USM rollover processed successfully			
Fund A		ATO	
USMOR7.4.FNDA.01	Fund A Send USM		
		USMOR7.4.ATO.01	ATO Receive USM
		USMOR7.4.ATO.02	ATO Send USMOR
USMOR7.4.FNDA.02	Fund A Receive USMOR		

USMOR7.5 Business error: - Member level refund because member doesn't exist, SUPER.GEN.GEN.21 - Member not found with supplied information			
Fund A		ATO	
USMOR7.5.FNDA.01	Fund A Send USM		
		USMOR7.5.ATO.01	ATO Receive USM
		USMOR7.5.ATO.02	ATO Send USMOR
USMOR7.5.FNDA.02	Fund A Receive USMOR		

USMOR7.6 USMOR with Context ID included			
Fund A		ATO	
USMOR7.6.FNDA.01	Fund A Send USM		
		USMOR7.6.ATO.01	ATO Receive USM
		USMOR7.6.ATO.02	ATO Send USMOR
USMOR7.6.FNDA.02	Fund A Receive USMOR		

5.4 SEND AND RECEIVE EPF

5.4.1 EPF test cases

EPF8.1 Valid Single member EPF message			
ATO		Fund A	
EPF8.1.ATO.01	ATO Send EPF		
		EPF8.1.FNDA.01	Fund A Receive EPF

EPF.8.2 Valid EPF message with Other Details tuples populated with agreed value (OPTIONAL)			
ATO		Fund A	
EPF8.2.ATO.01	ATO Send EPF		
		EPF8.2.FNDA.01	Fund A Receive EPF

EPF 8.3 Valid EPF message with Record Count populated			
ATO		Fund A	
EPF8.3.ATO.01	ATO Send EPF		
		EPF8.3.FNDA.01	Fund A Receive EPF

EPF 8.4 ATO sends EPF v1 and Fund is v1			
ATO		Fund A	
EPF8.4.ATO.01	ATO Send EPF v1		
		EPF8.3.FNDA.01	Fund A Receive EPF v1

EPF 8.5 ATO sends EPF v1 and Fund is v2 (INCORRECT)			
ATO		Fund A	
EPF8.5.ATO.01	ATO Send EPF v1		
		EPF8.5.FNDA.01	Fund A does not receive EPF

EPF 8.6 ATO sends EPF v2 and Fund is v2			
ATO		Fund A	
EPF8.6.ATO.01	ATO Send EPF v2		
		EPF8.6.FNDA.01	Fund A Receive EPF v2

EPF 8.7 ATO sends EPF v2 and Fund is v1 (INCORRECT)			
ATO		Fund A	
EPF8.7.ATO.01	ATO Send EPF v2		
		EPF8.7.FNDA.01	Fund A does not receive EPF

5.5 SEND AND RECEIVE RA AND RAS MESSAGES

5.5.1 RA test cases

RA9.1 Valid member First home super saver (FHSS) scheme			
ATO		Fund A	
RA9.1.ATO.01	ATO Send RA		
		RA9.1.FNDA.01	Fund A receive RA
		RA9.1.FNDA.02	Fund A send RAS
RA9.1.ATO.02	ATO Receive RAS		
RA9.1.ATO.03	ATO Send RASOR		
		RA9.1.FNDA.03	Fund A receive RASOR

RA9.2 Valid member Division 293 deferred debt (DivDef)			
ATO		Fund A	
RA9.2.ATO.01	ATO Send RA		
		RA9.2.FNDA.01	Fund A receive RA
		RA9.2.FNDA.02	Fund A send RAS
RA9.2.ATO.02	ATO Receive RAS		
RA9.2.ATO.03	ATO Send RASOR		
		RA9.2.FNDA.03	Fund A receive RASOR

RA9.3 Valid member Excess Concessional Contributions (ECC)			
ATO		Fund A	
RA9.3.ATO.01	ATO Send RA		
		RA9.3.FNDA.01	Fund A receive RA
		RA9.3.FNDA.02	Fund A send RAS
RA9.3.ATO.02	ATO Receive RAS		
RA9.3.ATO.03	ATO Send RASOR		
		RA9.3.FNDA.03	Fund A receive RASOR

RA9.4 Valid member Excess Non-Concessional Contributions (ENCC)			
ATO		Fund A	
RA9.4.ATO.01	ATO Send RA		
		RA9.4.FNDA.01	Fund A receive RA
		RA9.4.FNDA.02	Fund A send RAS
RA9.4.ATO.02	ATO Receive RAS		
RA9.4.ATO.03	ATO Send RASOR		
		RA9.4.FNDA.03	Fund A receive RASOR

RA9.5 Valid member Excess Non-Concessional Contributions Tax (ENCCT)			
ATO		Fund A	
RA9.5.ATO.01	ATO Send RA		
		RA9.5.FNDA.01	Fund A receive RA
		RA9.5.FNDA.02	Fund A send RAS
RA9.5.ATO.02	ATO Receive RAS		
RA9.5.ATO.03	ATO Send RASOR		

		RA9.5.FNDA.03 Fund A receive RASOR
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RA9.6 Valid member Division 293 due and payable (Div293)		
ATO		Fund A
RA9.6.ATO.01	ATO Send RA	
		RA9.6.FNDA.01 Fund A receive RA
		RA9.6.FNDA.02 Fund A send RAS
RA9.6.ATO.02	ATO Receive RAS	
RA9.6.ATO.03	ATO Send RASOR	
		RA9.6.FNDA.03 Fund A receive RASOR

5.5.2 RAS test cases

RAS9.1 Release Authority Statement (RAS) – full release of ATO request		
ATO		Fund A
RAS9.1.ATO.01	ATO Send RA	
		RAS9.1.FNDA.01 Fund A receive RA
		RAS9.1.FNDA.02 Fund A send RAS
RAS9.1.ATO.02	ATO Receive RAS	
RAS9.1.ATO.03	ATO Send RASOR	
		RAS9.1.FNDA.03 Fund A receive RASOR

RAS9.2 Release Authority Statement (RAS) – partial release of ATO request		
ATO		Fund A
RAS9.2.ATO.01	ATO Send RA	
		RAS9.2.FNDA.01 Fund A receive RA
		RAS9.2.FNDA.02 Fund A send RAS
RAS9.2.ATO.02	ATO Receive RAS	
RAS9.2.ATO.03	ATO Send RASOR	
		RAS9.2.FNDA.03 Fund A receive RASOR

5.5.3 RAER test cases

RAER9.1 Member not found SUPER.GEN.GEN.21		
ATO		Fund A
RAER9.1.ATO.01	ATO Send RA	
		RAER9.1.FNDA.01 Fund A receive RA
		RAER9.1.FNDA.02 Fund A send RAER
RAER9.1.ATO.02	ATO Receive RAER	

RAER9.2 Member exists but no open account SUPER.GEN.GEN.22

ATO		Fund A	
RAER9.2.ATO.01	ATO Send RA		
		RAER9.2.FNDA.01	Fund A receive RA
		RAER9.2.FNDA.02	Fund A send RAER
RAER9.2.ATO.02	ATO Receive RAER		

RAER9.3 Member exist but DB or non-commutable income stream SUPER.GEN.RLVR.6			
ATO		Fund A	
RAER9.3.ATO.01	ATO Send RA		
		RAER9.3.FNDA.01	Fund A receive RA
		RAER9.3.FNDA.02	Fund A send RAER
RAER9.3.ATO.02	ATO Receive RAER		

RAER9.4 Member has account but cannot release for other reasons SUPER.GEN.RLVR.9			
ATO		Fund A	
RAER9.4.ATO.01	ATO Send RA		
		RAER9.4.FNDA.01	Fund A receive RA
		RAER9.4.FNDA.02	Fund A send RAER
RAER9.4.ATO.02	ATO Receive RAER		

5.5.4 RASOR test cases

RASOR9.1 RAS successfully processed			
ATO		Fund A	
RASOR9.1.ATO.01	ATO Send RA		
		RASOR9.1.FNDA.01	Fund A receive RA
		RASOR9.1.FNDA.02	Fund A send RAS
RASOR9.1.ATO.02	ATO Receive RAS		
RASOR9.1.ATO.03	ATO Send RASOR		
		RASOR9.1.FNDA.03	Fund A receive RASOR

RASOR9.2 RAS unsuccessfully processed - ATO cannot find the original RA			
ATO		Fund A	
RASOR9.2.ATO.01	ATO Send RA		
		RASOR9.2.FNDA.01	Fund A receive RA
		RASOR9.2.FNDA.02	Fund A send RAS
RASOR9.2.ATO.02	ATO Receive RAS		
RASOR9.2.ATO.03	ATO Send RASOR		
		RASOR9.2.FNDA.03	Fund A receive RASOR

RASOR9.3 RAS unsuccessfully processed – mismatch of ABN, USI, product, year or member account number			
ATO		Fund A	
RASOR9.3.ATO.01	ATO Send RA		
		RASOR9.3.FNDA.01	Fund A receive RA
		RASOR9.3.FNDA.02	Fund A send RAS
RASOR9.3.ATO.02	ATO Receive RAS		
RASOR9.3.ATO.03	ATO Send RASOR		
		RASOR9.3.FNDA.03	Fund A receive RASOR

APPENDIX A – INTEROPERABILITY TEST CASE DETAIL

Test number	V3	Test	Action	Description	Expected Results
		B2B – Existing gateways			
INTERB1.1	✓	Send a RTR message with correct data	Sender application generates a RTR payload that is sent as an AS4/ebMS3 message via the MSH to the receiver MSH which passes it onto the receiver application for processing	Tests the chain of communications links between sender and receiver application layers. Also tests the formatting and validation code of each application layer (if applicable to that gateway)	Receiver application should have received and processed a RTR message eb:To and eb:From set correctly,
INTERB1.2	✓	Send a RTOR message (if applicable to gateway)	As above plus the Receiver replies with a RTOR message which the Sender of the original message processes	Tests the generation, sending, receiving, routing, validation (if provided by the gateway) of rollover transaction request & outcome response messages	Originators of RTR message should receive appropriate RTOR message
INTERB1.3	Optional	Repeat above test with mismatched payload (if applicable to gateway)	Exercise a negative scenario where payloadInfo part properties contain a target fund ABN/USI that is serviced by the destination gateway but where the XBRL payload data does not match the target fund ABN/USI provided in the PayloadInfo part properties.	Tests behaviour of application layer in regard to how it deals with mismatched payload and payloadInfo part properties data	Receiver should send an RTOR back to the sender with an error explaining that the mismatch.
INTERB1.4	✓	Send an IRR message with correct data	Sender application generates an IRR payload that is sent as an AS4/ebMS3 message via the MSH to the receiver MSH which passes it onto the receiver application for processing	Tests the chain of communications links between sender and receiver application layers. Also tests the formatting and validation code of each application layer (if applicable to that gateway)	Receiver application should have received and processed a IRR message

Test number	V3	Test	Action	Description	Expected Results
INTERB1.5	✓	Send an IRER message with correct data	As above plus the Receiver replies with a IRER message which the Sender of the original message processes	Tests the generation, sending, receiving, routing, validation (if provided by the gateway) of initiate rollover request & outcome response messages	Originators of IRR message should receive appropriate IRER message
INTERB1.6	✓	Repeat above tests with SMSF data sets	The additional elements defined in an EPF and IRR for SMSFs 1.FinancialInstitutionAccount (Tuple) this group of elements contains the financial institution details for the SMSF. 2.ElectronicContact.ElectronicServiceAddressAlias.Text - this element contains the electronic service address alias provided by the SMSF messaging service provider.	Test the introduction of SMSF entities to rollover conformance.	As per above
INTERB1.7	✓	Fund A v2 and Fund B v1 - incorrect versioning - IRR sent by fund A to fund B in v2	Sender application generates an IRR in v2, however receiving fund is still on v1 so sending solution gateway rejects and does not send the message.	Tests that incorrect version does not get sent to receiving application	Receiver application does not receive IRR
		G2B			
INTERG1.1	✓	Establish https connection between endpoints Note: ATO has already established connectivity for EPF, however for USM, connection also needs to go the other way (because of USMOR) so tests are to be repeated	Use telnet, wget or curl etc., to establish that appropriate ports are open. Curl can be used to submit a file containing an ebMS3 message and should display the signal message reply	The two parties performing the interoperability testing exchange endpoint URLs, certificates and username and password. Each party configures their ebMS3 / AS4 MSH to register the other party. It is recommended that any	Both parties have configured their infrastructure to allow the flow of ebbs messages from the internet to their MSH. It is not required that any signal message returned to the sender is a success message

Test number	V3	Test	Action	Description	Expected Results
				messages received by the MSH during this phase should not be submitted to the application for processing	
INTERG1.2	✓	Send a simplified message from the sender MSH to the receiver MSH	Sender MSH pushes uncompressed, unsigned, single payload message with arbitrary payload contents using Username/Password authentication. Receiving MSH should receive the message if no MSH errors. Sender reviews signal message response. Receiver reviews received message, ignoring payload	<p>A simple message with any payload is sent from each party to the other party. This test verifies that to/from PartyId header fields have been set correctly and that the sender and receiver have been configured correctly to send and receive messages to and from the other party. The payload included with the message is ignored by the other party</p> <p>Any complexities in relation to certificates used for signing, compression etc., are eliminated by this simple test. It will, however, be necessary to have the SSL certificate configured to allow https to work</p>	Sender should receive a success receipt. Receiver should receive message without error. Note: as the payload is arbitrary this may cause failures in your application layer if it is connected to the MSH at this time. In this phase of testing it is expected that you will ignore application layer failures
INTERG1.3	✓	Send a simplified message from the sender MSH to the receiver MSH with PayloadInfo part properties configured for a particular source / target fund combination	As above plus the receiver checks that the received message has PayloadInfo part properties correctly configured for a target fund that their application knows about. This is just a manual check as the MSH is not required to perform this	Parties must communicate to each other the desired target ABN and target USI that they would like in the payload info part properties. Proper values are not strictly required for this test but setting them correctly during this test means that they will not need to be	As above with manual verification that the target/source ABN/USI values in the partinfo properties are as requested

Test number	V3	Test	Action	Description	Expected Results
			type of validation of application layer entities	changed in subsequent tests where they are required to match particular entities in application layer	
INTERG1.4	✓	Test message signing and signature validation	As above plus configure MSH to sign messages targeted at the partner you are testing with and validate the signature of messages received from that partner	Tests that message signing and validation works for positive scenarios	Messages should be signed and be successfully validated
			As above plus configure an incorrect certificate for outgoing messages. Send a message and confirm that receiver responds with a SOAP fault	Tests that message validation fails for negative scenarios	Messages should be signed and fail validation
INTERG1.5	✓	Test message compression	As above plus message compression turned on	Tests the sender/receiver MSH's message compression/decompression functionality	Payload should be compressed across the wire but be uncompressed by the receiving MSH and make an uncompressed payload available to the application
INTERG1.6	✓	Multiple payloads - non compressed	As above, no compression but with more than one payload.	Tests support for multiple signed, uncompressed payloads.	Multiple payloads should be received without any ebms errors. Any application layer on the receiving end should receive uncompressed payloads.
INTERG1.7	✓	Multiple payloads – compressed	As above but with compressed payloads.	Tests support for multiple signed, compressed payloads.	Both parties have configured their infrastructure to allow the flow of ebbs messages from the internet to their MSH. It is not required that any signal message returned to

Test number	V3	Test	Action	Description	Expected Results
					the sender is a success message
INTERG1.8	✓	Send a USM Rollover message with correct data	ATO generates a USM payload that is sent as an AS4/ebMS3 message via the MSH to the receiver MSH which passes it onto the receiver application for processing.	Tests the chain of communications links between ATO and receiver application layers. Also tests the formatting and validation code of each application layer (if applicable to that gateway)	Receiver application should have received and processed a USM message
INTERG1.9	✓	Send a USM Rollover Outcome Response message with correct data	As above plus the Receiver replies with a USMOR message which the ATO processes	Tests the generation, sending, receiving, routing, validation (if provided by the gateway) of USM and USMOR	ATO should receive appropriate USMOR message
INTERG1.10	✓	Send an Electronic Portability Form message with correct data	ATO generates a RTR payload that is sent as an AS4/ebMS3 message via the MSH to the receiver MSH which passes it onto the receiver application for processing.		
INTERG1.11	✓	BIP4 - check routing is consistent with BIP4	Check To and From values	Values are ABN of message sending and receiving parties	To and From values are correctly set
INTERG1.12	✓	ATO sends EPF v2 and Fund B is v2	Check gateway is correctly filtering messages according to sender and receiver version.	Sender and receiver implementation versions are compatible so message should be sent.	Message is transmitted.
INTERG1.13	✓	ATO sends EPF v2 and Fund B is v3 (INCORRECT)	Check gateway is correctly filtering messages according to sender and receiver version.	Sender and receiver implementation versions are not compatible so message should not be sent.	Message is not sent.
INTERG1.14	✓	ATO sends EPF v3 and Fund B is v3	Check gateway is correctly filtering messages	Sender and receiver implementation versions	Message is transmitted.

Test number	V3	Test	Action	Description	Expected Results
			according to sender and receiver version.	are compatible so message should be sent.	
INTERG1.15	✓	ATO sends EPF v3 and Fund B is v2 (INCORRECT)	Check gateway is correctly filtering messages according to sender and receiver version.	Sender and receiver implementation versions are not compatible so message should not be sent.	Message is not sent.
INTERG1.16	✓	ATO sends RA message with correct data	ATO generates a RA payload that is sent as an AS4/ebMS3 message via the MSH to the receiver MSH which passes it onto the receiver application for processing.	Tests the chain of communications links between ATO and receiver application layers. Also tests the formatting and validation code of each application layer (if applicable to that gateway)	Message is transmitted.
INTERG1.17	✓	Send a RAS with correct data	Gateway generates a RAS payload that is sent as an AS4/ebMS3 message via the MSH to the receiver MSH which passes it onto the receiver application for processing.	Tests the chain of communications links between ATO and receiver application layers. Also tests the formatting and validation code of each application layer (if applicable to that gateway)	Message is transmitted.
INTERG1.18	✓	ATO sends RASOR with correct data	ATO generates a RASOR payload that is sent as an AS4/ebMS3 message via the MSH to the receiver MSH which passes it onto the receiver application for processing.	Tests the chain of communications links between ATO and receiver application layers. Also tests the formatting and validation code of each application layer (if applicable to that gateway)	Message is transmitted.