Superannuation Transaction Network
Binding Implementation Practice (BIP) Note

BIP Note 11

Title:	Additional Action Indicators Prohibited	**Date:**	15 August 2014
		Version:	1
Scope:	[x] transport layer [x] message header [ ] message payload [ ] security	**Status:**	[ ] Draft [x] Ratified
		Live Date:	25 Sept 14 *On this date this BIP note will be binding on all participants*

1. Change

This document prohibits the use of two alternate mechanisms available in the Web Services standards to indicate the business intent of a SOAP message:-

- the SOAP "action" parameter in the Content-Type HTTP or MIME part header
- the Web Services Addressing "Action" element.

This change is at the Transport Layer (HTTP) and the Message Header and as such impacts all message types including Contributions, Registrations and Rollovers.

2. Reason for Change

ebMS3 provides the "Action" element in the ebMS3 Messaging SOAP header, in conjunction with the Service element, to indicate the business intent of a message to the receiver. If the more general optional mechanisms offered by the Web Service standards to provide this intent are also included in an ebMS3 SOAP envelope, unexpected behaviours of the receiver Web Services framework may be triggered.

As an example, the IBM MEIG product used by SunSuper was setting the SOAP Action parameter value to the same value as the Action specified in the CollaborationInfo section of the ebMS Header. The SuperChoice gateway could not process the messages as it expected the parameter to be either not present or set to a value of "responseMessage".

An example of the Content-Type header being produced was as follows;

```
     Content-Type: application/soap+xml; charset=utf-8;
action="MemberRegistration"
```

As per RFC 3902 on the "Application/soap+xml" media type; the Action parameter in SOAP 1.2 serves the same purpose as the SOAPAction HTTP Header. "The use of the action parameter is OPTIONAL. SOAP Receivers MAY use it as a hint to optimize processing, but SHOULD NOT require its presence in order to operation".

Similarly, the MEIG product was also including a wsa:Action element which triggered unexpected behaviour in the GBST gateway.

3. Standards Affected

RFC3902 – application/soap+xml media type
Web Services Addressing 1.0 – Core (http://www.w3.org/TR/ws-addr-core/)

4. Description of Change

It has been agreed as a general principle that optional facilities MUST NOT be used unless there is specific discussion and agreement with all parties that are members of the STN.

Thus the SOAP Action parameter MUST be absent on the Content-Type header of SuperStream SOAP messages.

The Content Type header from the previous example would thus be as follows;

```
Content-Type: application/soap+xml; charset=utf-8
```

The ebMS3 specifications do specify the use of the Web Services Addressing elements in specific circumstances, namely in the description of the multi-hop feature. However, because connections in SuperStream are currently point to point, no Web Service Addressing elements are explicitly required by the ebMS3 specifications and thus they MUST NOT be present in SuperStream SOAP messages.

Gateways MUST NOT expect to receive either of these action indicators and MUST NOT require other gateways to include them in generated messages. In addition, gateways cannot enter into bilateral agreements on the use of these alternate mechanisms.

5. Technical Impact of Change

None. Implementation of the change will still be in compliance with the MIG.

6. Operational Impact of Change

None.

7. Version History

Version	Date	Changes	Date Ratified	Live Date
0.1	15/08/2014	Initial Version		
0.2	21/08/2014	Updated based on feedback		
0.3	10/09/2014	Added exclusion of Web Service Addressing elements unless explicitly required by the ebMS3 specifications		
1.0	25/09/14	Change status to Ratified	25/09/14	25/09/14