Clarification Request

References: "e.g" Specified Tests 20 7.3.2.15.X8

Date of BTL-WG Response: 2022-March-24

Background: "e.g"

From BTL Specified Tests:

7.3.2.15.X8 Support Writable Member_Of Property

BACnet Reference Clauses: 12.15.29, and 12.16.29

Purpose: To verify that the Member_Of property takes only supported values of the life safety objects within the IUT.

Test Concept: If the property is writable and is restricted to referencing objects within the containing device, an attempt to write a reference to an object outside the containing device into this property shall cause a Result (-), if the property is not writable and if the value of the property cannot be changed by other means, then this test shall be omitted. The IUT will select one instance of each appropriate object type, O1 and test it as described.

Test Steps:

1. TRANSMIT WriteProperty-Request, 'Object Identifier' = (O1),
     'Property Identifier' = Member_Of
     'Property Value' = (X: any valid life safety zone object reference)

  2. RECEIVE Simple-ACK-PDU,
  3. TRANSMIT ReadProperty-Request,
       'Object Identifier' = (O1),
       'Property Identifier' = Member_Of
  4. RECEIVE ReadProperty-ACK,
       'Object Identifier' = (the object being tested), 'Property Identifier' = Member_Of
       'Property Value' = X

From BTL Test Plan 20.0:

3.39.3 Supports Writable Member_Of Property

BTL - 7.3.2.15.X8 - Support Writable Member_Of Property	
Test Conditionality	Must be executed.
Test Directives	
Testing Hints	

Problem:

The Purpose and Test Concept are not reflected in the Test Steps and would be inappropriate given the Test Conditionality in the test plan entry.

The Purpose and Test Concept make note of verifying that the IUT does not accept references to objects outside the IUT. References to objects outside the IUT are allowed, so if this test is meant to verify the error returned when the IUT does not support external references, then the Test Conditionality should be changed,

The Test steps do not attempt to check the above noted condition; they just check to ensure that the property is writable which is already validated by 7.2.2.

And in verifying writability there is no delay between step 2 and step 3. Normally one would expect that the test waits Internal Processing Fail Time.

The Member_Of property is also restricted by the standard to only reference Life Safety Zone objects yet this is not considered by this test.

Question:

1: Should the test be changed to reflect the purpose / test concept?

2: Should the test include verification that only references to Life Safety Zone objects are accepted?

3: Should the test steps include a wait of Internal Processing Fail Time as would be accomplished if the VERIFY statement were used?

Response:
1. **Yes**
2. **Yes**
3. **Yes**