

### Clarification Request

**References:** Interim Test Specification Version 10 for TP 16.1; BACnet Standard 135-2016

**Date of BTL-WG Response:** July 9, 2020

All Actions Necessitated have been Completed

#### Background:

#### 7.3.2.X43.3 Out\_Of\_Service, Status\_Flags, and Reliability test for an Object that does not contain Present\_Value

Purpose: This test verifies the interrelationship between the Out\_Of\_Service, Status\_Flags, and Reliability properties. If the PICS indicates that the Out\_Of\_Service property of the object under test is not writable, and if the value of the property cannot be changed by other means, then this test shall be omitted. This test applies to objects that do not contain Present\_Value.

Test Concept: Write to and verify the interrelationship between the Out\_Of\_Service, Status\_Flags, and Reliability properties of an object which does not contain Present\_Value.

Configuration Requirements: The selected object is configured such that its Reliability is NO\_FAULT\_DETECTED before execution of this test.

#### Test Steps:

1. IF (Out\_Of\_Service is writable) THEN  
    WRITE Out\_Of\_Service = TRUE  
    ELSE  
        MAKE (Out\_Of\_Service = TRUE)
2. VERIFY Out\_Of\_Service = TRUE
3. VERIFY Status\_Flags = (? , FALSE, ? , TRUE)
4. IF (Reliability is present and writable) THEN  
    REPEAT X = (all values of the Reliability enumeration appropriate to the object type except NO\_FAULT\_DETECTED) DO {  
        WRITE Reliability = X  
        VERIFY Reliability = X  
        VERIFY Status\_Flags = (~~TRUE, TRUE, ?, TRUE~~) (? , TRUE, ? , TRUE)  
        WRITE Reliability = NO\_FAULT\_DETECTED  
        VERIFY Reliability = NO\_FAULT\_DETECTED  
        VERIFY Status\_Flags = (? FALSE, ? , TRUE)  
    }
5. CHECK (all communication of the protocol modeled by the object, through that port is disabled)
6. IF (Out\_Of\_Service is writable) THEN  
    WRITE Out\_Of\_Service = FALSE  
    ELSE  
        MAKE (Out\_Of\_Service = FALSE)
7. VERIFY Out\_Of\_Service = FALSE
8. VERIFY Status\_Flags = ( ? , ? , ? , FALSE)

#### Problem:

**If an Object (like Network Port) does not support intrinsic reporting, the standard says:**

**12.56.5 Status\_Flags**

...

IN\_ALARM Logical TRUE (1) if the Event\_State property is present and does not have a value of NORMAL, otherwise logical FALSE (0).

...

**12.56.67 Event\_State**

...

If the object does not support event reporting, then the value of this property shall be NORMAL.

**But if the Event\_State remains NORMAL (or the optional property does not exist), the alarm flag will not be set in the Status\_Flags and the test would fail.**

There already has been an equal CR for the Accumulator Object (BTL-CR-0449\_7.3.2.X37.1.6\_OutOfService\_AccumulatorTest).

**Question:**

Should the test be changed as outlined above?

**Response:**

**YES.**