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| **sCtl5** | **Operate with test flag and mode test, test/blocked and blocked** | Passed  Failed  Inconclusive |
| IEC 61850-7-2 Subclause 20.2 and 20.3  IEC 61850-7-4 Annex A  IEC 61850-8-1 Subclause 20 | | |
| Expected result   1. Commands are not accepted with AddCause = blocked-by-mode 2. Commands are accepted and executed 3. Commands are accepted and executed 4. Commands are not accepted with AddCause = blocked-by-mode 5. Commands are accepted and executed 6. Commands are accepted, but the command is not executed at the electrical interface to the process (output is blocked), DUT sends CommandTermination with AddCause = blocked-by-mode 7. Commands are not accepted with AddCause = blocked-by-mode 8. Commands are accepted and executed 9. Commands are not accepted with AddCause = blocked-by-mode 10. Commands are accepted, but the command is not executed at the electrical interface to the process (output is blocked), DUT sends CommandTermination with AddCause = blocked-by-mode 11. Control commands are accepted and executed   For normal security, the AddCause is optional | | |
| Test description  a) DOns   1. LN.Beh = on and client sends correct control command with test flag set 2. LN.Beh = on and client sends correct Mod control command with test flag set (when supported)   If Beh = test is supported perform steps 3, 4 and 5   1. LN.Beh = test and client sends correct control command with test flag set 2. LN.Beh = test and client sends correct control command without test flag set 3. LN.Beh = test and client sends correct Mod control command without test flag set (when supported)   If Beh = test/blocked is supported perform step 6, 7 and 8   1. LN.Beh = test/blocked and client sends correct control command with test flag set 2. LN.Beh = test/blocked and client sends correct control command without test flag set 3. LN.Beh = test/blocked and client sends correct Mod control command without test flag set (when supported)   If Beh = blocked is supported perform step 9, 10 and 11   1. LN.Beh = blocked and client sends correct control command with test flag set 2. LN.Beh = blocked and client sends correct control command without test flag set 3. LN.Beh = blocked and client sends correct Mod control command without test flag set (when supported)   b) Repeat steps 1 to 11 for SBOns  c) Repeat steps 1 to 11 for DOes  d) Repeat steps 1 to 11 for SBOes | | |
| Comment  Note 1: Step 1 is mandatory  Note 2: To change the Beh the client can operate the Mod.  Note 3: The Mod.Operate.Test attribute value shall be ignored by the DUT see step 2, 5, 8 and 11  Note 4: For the test steps 6 to 8 (test/blocked), resp. 9 to 11 (blocked) :  CSWI.Pos can be the selected DataObject for the control command (LN = CSWI) if   1. there is a logical node XCBR associated to CSWI, 2. during the test execution both CSWI.Beh and XCBR.Beh are set to matching values.   If the selected DataObject for the control command is NOT CSWI.Pos, then the selected controllable DataObject (LN.DO) needs   1. to execute the command at the electrical interface to the process – i.e. an DataObject with Wired Output to the process; 2. the success of the command needs to be acknowledged by the process to the DataObject via a wired input   The test steps 6,7 and 9,10 can not be performed with internal (no wired output) controllable objects. | | |