Solution to redmine 656 and 657

### Publish/subscribe enum with value > 127 and negative

February 21, 2023

Create new sGos16, use Boolean when ENS is not supported.

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| **sGos16** | **Subscribe GOOSE message with enum value >127 and negative** | Passed  Failed  Inconclusive |
| IEC 61850-7-2 Subclause 18.2.3  IEC 61850-8-1 Subclause A.3  PIXIT Gs8 | | |
| Expected result  1-2-3. DUT updates the value and sends a GOOSE message with changed ENUM value (when ENS is supported) or Boolean value (when ENS is not supported) | | |
| Test description  Test engineer configures the DUT with subscribed GOOSE (ping-pong mechanism) containing a private ENUM structure with a negative ord value and a >127 ord value and a Boolean. The pong dataset may copy the ENUM value in an INS. When ENS subscription is not supported the pong dataset copies the Boolean value   1. Publisher sends GOOSE with ENUM value 1 followed by a Boolean value True 2. Publisher sends GOOSE with ENUM value >127 1 followed by a Boolean value False 3. Publisher sends GOOSE with ENUM value -2 1 followed by a Boolean value True | | |
| Comment  Note: The BER encoding requires 2 bytes for value >127 and <255 | | |

Add sGos16 to table A.4.2 and certificate template as **mandatory**.