**A4.11a Sampled Values Publish**

Original:

All sample rates & number of ASDUs, limited to those specified in the IEC 61869-9 standard sample rates table and as specified in LPHD.NamVariant shall be tested. The maximum number of voltages and the maximum number of currents, and the maximum sum of voltages and currents specified in the LPHD.NamVariant will be tested. If the sum of quantities exceeds the limits specified in 6.903.2, then half of channels will be allocated to voltages and half to currents. At least one of the backwards compatible configurations (F4000S1I4U4, F4800S1I4U4, F5760S1I4U4) and at least one of the preferred sample rates shall be supported.

Note: The derived quality bit is not specified in IEC 61850-7-3, IEC 61850-9-2 and IEC 61869-9. The derived quality bit will be ignored.

The following applicable test cases need to be executed for each applicable variant specified in LPHD.NamVariant.

Proposed change:

At least one of the backwards compatible configurations (F4000S1I4U4, F4800S1I4U4, F5760S1I4U4) and at least one of the preferred sample rates specified in the IEC 61869-9 shall be supported, i.e, exposed in the LPHD.NamVariant DataObject.

The communication tests are performed with one random configuration set {sample rate, number of ASDU, number of currents, number of voltages} chosen by the certification labs.

The maximum delay time test (sSvp1) shall be performed using the max configuration, i.e. with the biggest number of quantities that can be configured for a SV stream, without exceeding the sum of quantities limits specified in 6.903.2; if the that case, the max configuration will follow: half of channels will be allocated to voltages and half to currents.

The following applicable test cases need to be executed for one of the supported backward compatible configurations: sSvp3, sSvp5, sSvp10

Note: The derived quality bit is not specified in IEC 61850-7-3, IEC 61850-9-2 and IEC 61869-9. The derived quality bit will be ignored.

**A4.11b Sampled Values Subscribe**

Original:

All supported IEC 61869-9 configurations as specified in PIXIT:Svs2ab shall be tested. At least one of the backwards compatible configurations (F4000S1I4U4, F4800S1I4U4, F5760S1I4U4) and at least one of the preferred configurations shall be supported.

The starting point for the subscriber communication test is that the publishers do conform to the standard, taking into account backwards and forward compatibility. Negative testing is to verify the behaviour on a mismatching configuration and ethernet network issues (e.g. dropped packets).

The following applicable test cases need to be executed for each supported configuration with maximum number of currents (x) and voltages (y) as specified in PIXIT.

For the preferred configurations repeat the **sSvs1** test for: min x & min y (when both are zero use x=1, y=0 and x=0, y=1), min x & max y, max x & min y.

Proposed change:

One of the supported IEC 61869-9 configurations as specified in PIXIT:Svs2ab shall be tested; the configuration will be chosen by the certification labs.

At least one of the backwards compatible configurations (F4000S1I4U4, F4800S1I4U4, F5760S1I4U4) and at least one of the preferred configurations shall be supported.

The following applicable test cases need to be executed for each supported configuration with maximum number of currents (x) and voltages (y) as specified in PIXIT.

For the chosen configuration repeat the **sSvs1** test for x+y = max.