IEC 61850 Certificate Level A[1]

No. 74104603-OPE/INC 14-1540

Issued to:
ALSTOM GRID
1 Rue Paul Doumer
73106 Aix les Bains
France

For the server product:
GISWatch Proxy: IEC61850 Proxy for GIS monitoring
Software version: V1.6
Hardware version: D22U

Issued by: **KEMA / DNV**

The server product has not shown to be non-conforming to:
IEC 61850 First Edition Parts 6, 7-1, 7-2, 7-3, 7-4 and 8-1
Communication networks and systems in substations

The conformance test has been performed according to IEC 61850-10, the UCA International Users Group Device Test Procedures version 2.3 with TPCL[2] version 1.7, the product's protocol, model and technical issue implementation conformance statements: "Protocol Implementation Conformance Statement For the IEC 61850 interface in GISWatch - DLL61850 – Proxy, version 1.1", "Conformance statement MICS Model Implementation Conformance Statement IEC61850 Proxy server GISWATCH, version 1.1" and "TICS Technical Issues Conformance Statement For IEC61850 GISWATCH Proxy, version 1.0" and the extra information for testing: "Protocol Implementation eXtra Information for Testing (PIXIT) For the IEC 61850 interface in GISWATCH, version 1.1".
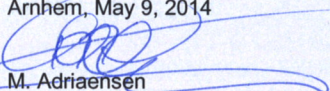
The following IEC 61850 conformance blocks have been tested with a positive result (number of relevant and executed test cases / total number of test cases):
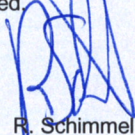
1	Basic Exchange (21/24)		13	Time Synchronization (4/5)
2	Data Sets (3/6)			
2+	Data Set Definition (23/23)			
5	Unbuffered Reporting (15/19)			
6	Buffered Reporting (17/21)			

This certificate includes a summary of the test results as carried out at DNV KEMA in the Netherlands with UniCA 61850 Client Simulator 4.28.03 with test suite 3.28.00 and UniCA 61850 Analyzer 5.27.07. This document has been issued for information purposes only, and the original paper copy of the DNV KEMA report No. 74104603-OPE/INC 14-1541 will prevail.

The test has been carried out on one single specimen of the product as referred above and submitted to DNV KEMA by ALSTOM GRID. The manufacturer's production process has not been assessed. This attestation does not imply that DNV KEMA has approved any product other than the specimen tested.

Arnhem, May 9, 2014

M. Adriaensen
Head of Department Operational Excellence

R. Schimmel
Certification Manager

[1] Level A - Independent test lab with certified ISO 9001 Quality System
[2] TPCL   - Test procedures change list

Applicable Test Procedures from the UCA International Users Group Device Test Procedures version 2.3 with TPCL version 1.7

Conformance Block	Mandatory	Conditional
1: Basic Exchange	Ass1, Ass2, Ass3, AssN2, AssN3, AssN4, AssN5 Srv1, Srv2, Srv3, Srv4, Srv5, SrvN1abcd, SrvN4	Srv6, Srv7, Srv8, SrvN1e, SrvN1f, SrvN2, SrvN3
2: Data Sets	Dset1, Dset10a, DsetN1ae	
2+: Data Set Definition	Dset2, Dset3, Dset4, Dset5, Dset6, Dset7, Dset8, Dset9 DsetN1cd, DsetN2, DsetN3, DsetN4, DsetN5, DsetN6, DsetN7, DsetN8, DsetN9, DsetN10, DsetN11, DsetN12, DsetN13, DsetN14, DsetN15	
5: Unbuffered Reporting	Rp1, Rp2, Rp3, Rp4, Rp7, Rp10, Rp12 RpN1, RpN2, RpN3, RpN4	Rp5, Rp6, Rp8, RpN5
6: Buffered Reporting	Br1, Br2, Br3, Br4, Br7, Br8, Br9, Br12, Br14 BrN1, BrN2, BrN3, BrN4, BrN5	Br5, Br6, Br10
13: Time Sync	Tm1, Tm2, TmN1	Tm3