IEC 61850 Certificate Level A[1]

No. 30720381-Consulting 07-1267

Issued to:

NARI-Relays
99 Shengtai Road
Jiangning
Nanjing 211106, China

For the product:

RCS-9705C
Bay Control Unit
Firmware version R6.43.5

Issued by: **KEMA**

The product has not shown to be non-conforming to:

IEC 61850-6, 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 with product's protocol, model and technical issue implementation conformance statements: "RCS-9705C Bay Control Unit IEC 61850 - Protocol Implementation Conformance Statement (PICS), 2007-06-22", "RCS-9705C Bay Control Unit - IEC 61850 Model Implementation Conformance Statement (MICS), 2007-06-22" and "RCS-9705C Bay Control Unit - IEC 61850 Tissues Conformance Statement of the IEC 61850 communication interface, 2007-06-22" and product's extra information for testing: "RCS-9705C Bay Control Unit - Protocol implementation extra information for testing (PIXIT) of the IEC 61850 communication interface, 2007-06-22".

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 as defined in the UCA International Users Group Device Test procedures v1.1):

1	Basic Exchange (19/23)	6	Buffered Reporting (13/15)
2	Data Sets (2/5)	9ab	Generic Object Oriented Substation Event (16/20)
3	Substitution (3/3)	12d	Enhanced SBO Control (9/17)
4	Setting Group Selection (2/3)	13	Time Synchronization (3/4)
5	Unbuffered Reporting (10/13)	14	File Transfer (3/6)

This Certificate includes a summary of the test results as carried out at in with UniCAsim 61850 version 3.16.00 with test suite 3.16.01 and UniCA 61850 analyzer 4.15. The test is based on the UCA International Users Group Device Test Procedures version 1.1. This document has been issued for information purposes only, and the original paper copy of the KEMA report: No. 30720381-Consulting 07-1266 will prevail.

The test have been carried out on one single specimen of the products as referred above and submitted to KEMA by NARI-Relays. The manufacturer's production process has not been assessed. This Certificate does not imply that KEMA has certified or approved any product other than the specimen tested.

Arnhem, June 25, 2007

S.J.L.M. Janssen
Managing Director KEMA Consulting

R. Schimmel
Certification Manager

Applicable Test Procedures from the UCA International Users Group Device Test Procedures version 1.1

Conformance Block	Mandatory	Conditional
1: Basic Exchange	Ass1, Ass2, Ass3, AssN2, AssN3, AssN4, AssN5 Srv1, Srv2, Srv3, Srv4, Srv5, SrvN1abcd, SrvN4	Srv6, Srv8, SrvN1e, SrvN2, SrvN3
2: Data Sets	Dset1, DsetN1ae	
3: Substitution	Sub1, Sub2, SubN1	
4: Setting Group Selection	Sg1, SgN1	
5: Unbuffered Reporting	Rp1, Rp2, Rp3, Rp4, (Rp7) RpN1, RpN2, RpN3, RpN4	Rp5, RpN6
6: Buffered Reporting	Br1, Br2, Br3, Br4, (Br7), Br8, Br9 BrN1, BrN2, BrN3, BrN4, BrN5	Br5, BrN6
9a: GOOSE publish	Gop2, Gop3, Gop4, Gop7	Gop1, Gop6, GopN1
9b: GOOSE subscribe	Gos1, Gos2, Gos3, GosN1, GosN2, GosN3, GosN4, GosN5, GosN6	
12d: Enhanced SBO control	Ctl3, CtlN1, CtlN2, CtlN3, CtlN4 CtlN9, SBOes1, SBOes2, SBOes3	
13: Time sync	Tm1, Tm2, TmN1	
14: File transfer	Ft1, Ft2ab, FtN1ab	

Note: Rp7 and Br7 are not applicable because buffer time is not supported