TISSUES Implementation Conformance Statement
for the IEC 61850 interface in ENIP-2

UCA International Users Group
Testing Sub Committee

Date: July 8, 2015

Introduction

This document provides a template for the tissues conformance statement. According to the UCA IUG QAP the tissue conformance statement is required to perform a conformance test and is referenced on the certificate.

This document is applicable for ENIP-2 with firmware version 2.0.0.6.

Mandatory Intop Tissues

During the October 2006 meeting IEC TC57 working group 10 decided that:
- green Tissues with the category "IntOp" are mandatory for IEC 61850 edition 1
- Tissues with the category "Ed.2" Tissues should not be implemented.

Below table gives an overview of the implemented IntOp Tissues.

Part	Tissue Nr	Description	Implemented Y/na
8-1	116	GetNameList with empty response?	Y
	165	Improper Error Response for GetDataSetValues	Y
	183	GetNameList error handling	Y
7-4	None		
7-3	28	Definition of APC	na
	54	Point def xVal, not cVal	na
	~~55~~	~~Ineut = Ires ?~~	Y/na
	60	Services missing in tables	na
	63	mag in CDC CMV	Y
	219	operTm in ACT	na
	270	WYE and DEL rms values	Y
7-2	30	control parameter T	Y
	31	Typo	na
	32	Typo in syntax	na
	35	Typo Syntax Control time	na
	36	Syntax parameter DSet-Ref missing	na
	37	Syntax GOOSE "T" type	Y
	39	Add DstAddr to GoCB	Y
	40	GOOSE Message "AppID" to "GoID"	Y
	41	GsCB "AppID" to "GsID"	na
	42	SV timestamp: "EntryTime" to "TimeStamp"	na
	43	Control "T" semantic	na
	44	AddCause - Object not sel	Y
	45	Missing AddCauses (neg range)	Y
	46	Synchro check cancel	Y
	47	"." in LD Name?	Y
	49	BRCB TimeOfEntry (part of #453)	-
	50	LNName start with number?	Y
	51	ARRAY [0..num] missing	na
	52	Ambiguity GOOSE SqNum	Y
	53	Add DstAddr to GsCB, SV	na
	151	Name constraint for control blocks etc.	Y
	166	DataRef attribute in Log	na
	185	Logging - Integrity periode	na
	189	SV Format	na
	190	BRCB: EntryId and TimeOfEntry (part of #453)	-
	191	BRCB: Integrity and buffering reports (part of #453)	-
	~~234~~	~~New type CtxInt (Enums are mapped to 8 bit integer)~~	~~Y/ na~~
	275	Confusing statement on GI usage (part of #453)	-
	278	EntryId not valid for a server (part of #453)	-
Part 6	1	Syntax	Y
	5	tExtensionAttributeNameEnum is restricted	Y

Part	Tissue Nr	Description	Implemented Y/na
	8	SIUnit enumeration for W	na
	10	Base type for bitstring usage	Y
	17	DAI/SDI elements syntax	Y
	169	Ordering of enum differs from 7-3	na

NOTE: Tissue 49, 190, 191, 275 and 278 are part of the optional tissue #453, all other technical tissues in the table are mandatory if applicable.

NOTE: Editorial tissues are marked as "na".

NOTE: Tissue 17 and 45 are not green anymore

Optional IntOp Tissues

After the approval of the server conformance test procedures version 2.2 the following IntOp tissues were added or changed. It is optional to implement these tissues.

Part	Tissue Nr	Description	Implemented Y/N/na
8-1	177	Ignoring OptFlds bits for URCB	Y
8-1	246	Control negative response (SBOns) with LastApplError	na
8-1	545	Skip file directories with no files	na
7-2	322	Write Configuration attribute of BRCBs	Y
7-2	333	Enabling of an incomplete GoCB	Y
7-2	453	Combination of all reporting and logging tissues	Y
6	245	Attribute RptId in SCL is optional	Y
6	529	Replace sev - Unknown by unknown	Y

Other Implemented Tissues

<Complete below table of other implemented tissues, these tissues should have no impact on interoperability>

Part	Tissue Nr	Description