



**High PROTEC**

IEC 61850 | TICS

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**MRI4**

Software-Version: 2.2.c

IEC 61850 TICS

Tissue Implementation Conformance Statement (TICS)

UCA International Users Group Testing Sub Committee

English

## 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 MRI4 Version 2.2.c (Firmware-Build 19707).

## 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 Description Implemented Nr	Y/na
8-1	116 GetNameList with empty response? 165 Improper Error Response for GetDataSetValues 183 GetNameList error handling	Y Y Y
7-4	None	
7-3	28 Definition of APC 54 Point def xVal, not cVal 55 Ineut = Ires ? 60 Services missing in tables 63 mag in CDC CMV 65 Deadband calculation of a Vector and trigger option 219 operTm in ACT 270 WYE and DEL rms values	na na Y na Y na na na
7-2	30 control parameter T 31 Typo 32 Typo in syntax 35 Typo Syntax Control time 36 Syntax parameter DSet-Ref missing 37 Syntax GOOSE "T" type  39 Add DstAddr to GoCB 40 GOOSE Message "AppID" to "GoID" 41 GsCB "AppID" to "GsID" 42 SV timestamp: "EntryTime" to "TimeStamp" 43 Control "T" semantic 44 AddCause - Object not sel 45 Missing AddCauses (neg range) 46 Synchro check cancel 47 "." in LD Name? 49 BRCB TimeOfEntry (part of #453) 50 LNName start with number? 51 ARRAY [0..num] missing 52 Ambiguity GOOSE SqNum 53 Add DstAddr to GsCB, SV	Y Y Y Y Y Y  Y Y Y na Y Y Y Y Y Y Y Y Y Y Y Y Y

Part	Tissue Description Implemented Nr	Y/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)	Y
	191 BRCB: Integrity and buffering reports (part of #453)	Y
	234 New type CtxInt (Enums are mapped to 8 bit integer)	Y
	275 Confusing statement on GI usage (part of #453)	Y
	278 EntryId not valid for a server (part of #453)	Y
Part 6	1 Syntax	Y
	5 tExtensionAttributeNameEnum is restricted	Y
	8 SIUnit enumeration for W	Y
	10 Base type for bitstring usage	na
	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: Final proposal on tissue 45 is not defined yet

## 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	235	Extension of Name length	Y
8-1	246	Control negative response (SBOns) with LastApplError	na
8-1	545	Skip file directories with no files	na
7-2	333	Enabling of an incomplete GoCB	na
7-2	453	Combination of all reporting and logging tissues	Y
6	245	Attribute RptId in SCL	N
6	529	Replace sev - Unknown by unknown	na

## Revision history

Revision	Remarks
1.0	First version
1.1	Added corporate design