



# High**PROTEC**

IEC 61850 | TICS

**MRM4**

Software-Version: 3.4.a

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 MRM4 Version 3.4.a (Firmware-Build 35599).

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

Part	Tissue Description Nr	Implemented Y/na
	<b>49</b> BRCB TimeOfEntry (part of #453)	Y
	<b>50</b> LNName start with number?	Y
	<b>51</b> ARRAY [0..num] missing	na
	<b>52</b> Ambiguity GOOSE SqNum	Y
	<b>53</b> Add DstAddr to GsCB, SV	Y
	<b>151</b> Name constraint for control blocks etc.	Y
	<b>166</b> DataRef attribute in Log	na
	<b>185</b> Logging - Integrity periode	na
	<b>189</b> SV Format	na
	<b>190</b> BRCB: EntryId and TimeOfEntry (part of #453)	Y
	<b>191</b> BRCB: Integrity and buffering reports (part of #453)	Y
	<b>234</b> New type CtxInt (Enums are mapped to 8 bit integer)	Y
	<b>275</b> Confusing statement on GI usage (part of #453)	Y
	<b>278</b> EntryId not valid for a server (part of #453)	Y
Part 6	<b>1</b> Syntax	Y
	<b>5</b> tExtensionAttributeNameEnum is restricted	Y
	<b>8</b> SIUnit enumeration for W	Y
	<b>10</b> Base type for bitstring usage	na
	<b>17</b> DAI/SDI elements syntax	Y
	<b>169</b> 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.

<b>Part</b>	<b>Tissue Nr</b>	<b>Description</b>	<b>Implemented Y/N/na</b>
8-1	<b>235</b>	Extension of Name length	Y
8-1	<b>246</b>	Control negative response (SBOs) with LastAppLError	na
8-1	<b>545</b>	Skip file directories with no files	na
7-2	<b>333</b>	Enabling of an incomplete GoCB	na
7-2	<b>453</b>	Combination of all reporting and logging tissues	Y
6	<b>245</b>	Attribute RptId in SCL	N
6	<b>529</b>	Replace sev - Unknown by unknown	na