

TISSUEs Implementation Conformance Statement (TICS)

For the IEC 61850 Edition 2 Amendment 1 Server interface in SEL-451-5, SEL-451-A, SEL-487B-1, SEL-487E-3, SEL-487E-4, SEL-421-4, SEL-421-5, SEL-487V-0 and SEL-487V-1

Version 1

July 8, 2026

Based Upon UCAlug TICS Template version 1.3 Revision

TICS TEMPLATE FOR EDITION 2 AMENDMENT 1 SERVER AND CLIENT

Introduction

This document provides a template for the Tissues conformance statement. According to the UCAlug QAP the Tissue conformance statement is required to perform a conformance test and is referenced on the certificate.

This document is applicable for SEL-451-5 with firmware R332,
SEL-451-A with firmware R332,
SEL-487B-1 with firmware R321,
SEL-487E-3 with firmware R325,
SEL-487E-4 with firmware R325,
SEL-421-4 with firmware R335,
SEL-421-5 with firmware R335,
SEL-487V-0 with firmware R112 and
SEL-487V-1 with firmware R112.

Mandatory Edition 2 Amendment 1 Tissues

Below tables give an overview of the applicable mandatory Tissues as specified in IEC 57/2445/INF and IEC 57/2673/INF.

The original TISSUE should be consulted for details of changes.

“Implemented by server”:

“Y”: means that the server has implemented the respective tissue.

“ni”: No impact on testing

“na”: not applicable if the server does not support the corresponding ACSI service(s)

“Supported by client”:

“Y”: means that the client supports servers that have implemented the respective tissue.

“ni”: No impact on testing

“na”: not applicable if the client does not support the corresponding ACSI service(s)

Part 7-1 Tissue	Description	Implemented by Server	Supported by Client
1752	Inconsistency in LPHD requirements	Y	na
1828	Clarification on GOOSE/SV supervision with simulated message	Y	na

Part 7-2 Tissue	Description	Implemented by Server	Supported by Client
1676	Multiple figures	ni	ni
1679	GoEna behavior at startup	na	na
1681	LActTm representation is not actual	Y	na

Part 7-2 Tissue	Description	Implemented by Server	Supported by Client
1696	Blocked/Test-blocked does not impact CSWI -> XCBR interface	na	na
1697	Status texts	ni	ni
1702	Limit LTRK to one instance on a server	Y	na
1703	Cancel for a select in SBOs	ni	ni
1707	Integrity will be buffered	Y	na
1719	Service ID in ACSI conformance statement	ni	ni
1735	Control cancel support is mandatory if SBO or SBOw is supported	ni	ni
1742	ACSI client abort and release requirements in conformance tables	ni	Ni
1782	Clarification of when to ignore the check bits	na	na
1822	Functional constraint object non-volatility ambiguous	Y	na

Part 7-3 Tissue	Description	Implemented by Server	Supported by Client
1699	dbRef should not be mandatory for APC and BAC	na	na
1713	SIUnitKind new values in AMD1 versus consolidated version	ni	ni
1714	Description of attribute 'general' in AMD1 versus consolidated version	ni	Ni
1730	Polarity of neutral in WYE is unclear	Y	na

Part 7-4 Tissue	Description	Implemented by Server	Supported by Client
1682	ITCI.Alm description text	ni	ni
1689	Attribute Namespace name wrong	ni	ni
1701	New DO required for routable GOOSE and SMV service tracking	na	na
1718	RFLO LN, extension	Y	na
1721	Power factor related data objects in LN MMXU	Y	na
1722	ClcNxtTmms common data class	na	na
1726	Enumeration ClockSyncKind of LTMSTmSynn is not correct	Y	na
1732	Missing Presence conditions 'MONamPlt' in amd 2.1 of 7-1	ni	ni
1766	RSYN mandatory?	Y	na
1769	When Beh=On, result with test=true not clear	Y	na

Part 7-4 Tissue	Description	Implemented by Server	Supported by Client
1770	Enumeration TransientPerformanceClassKind	na	na
1775	IREG-B should be IRIG-B	ni	ni
1819	Dependancy of LPHD.Sim to LLN0.Beh	Y	na
1836	Update of NxtStrTm for time-driven schedules	na	na
1846	The definition of LTMS.TmSrc is different in the actual AMD1 and Consolidated Version	Y	na
1856	Semantic of PMRI.StrInhTmm	na	na
1859	Description discrepancy LTMS between Source and Channels	na	na
1883	Added more precise qualifications to TmSrcTyp	Y	na
1819	Dependancy of LPHD.Sim to LLN0.Beh	Y	na
1836	Update of NxtStrTm for time-driven schedules	na	na
1846	The definition of LTMS.TmSrc is different in the actual AMD1 and Consolidated Version	Y	na
1856	Semantic of PMRI.StrInhTmm	na	na
1859	Description discrepancy LTMS between Source and Channels	na	na
1883	Added more precise qualifications to TmSrcTyp	Y	na

Part 8-1 Tissue	Description	Implemented by Server	Supported by Client
1753	Select.response+	na	na

Compare the TISSUE database for more details: <http://iec61850.tissue-db.com>