Tissue Conformance Statement (TICS)

for the IEC 61850 Client interface in EKRASCADA

UCA International Users Group

Testing Sub Committee

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Introduction

This document specifies the tissues conformance statement (TICS). 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 EKRASCADA with product version 2.7.1.11801 and IEC 61850 client interface version 1.3.

Mandatory Edition 2 Tissues

Below tables give an overview of the applicable mandatory Tissues.

“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 6 Tissue	Description	Implemented by server	Supported by client
658	Tracking related features	-	Y
663	FCDA element cannot be a "functionally constrained logical node"	-	ni
668	Autotransformer modeling	-	ni
719	ConfDataSet - maxAttributes definition is confusing	-	ni
721	Log element name	-	na
768	bType VisString65 is missing	-	Y
779	object references	-	ni
788	SICS S56 from optional to mandatory	-	na
789	ConfLdName as services applies to both server and client (supportsLdname)	-	na
804	valKind and IED versus System configuration (valimport)	-	na
806	Max length of log name inconsistent between -6 and -7-2	-	ni
807	Need a way to indicate if "Owner" present in RCB	-	Y
822	Extension of IED capabilities	-	ni
823	ValKind for structured data attributes	-	na
824	Short addresses on structured data attributes	-	na
825	Floating point value	-	Y
845	SGCB ResvTms	-	na

853	SBO and ProtNs	-	Y
855	Recursive SubFunction	-	na
856	VoltageLevel frequency and phases	-	ni
857	Function/SubFunction for ConductingEquipment	-	na
886	Missing 8-1 P-types	-	ni
901	tServices as AP or as IED element	-	ni
936	SupSubscription parameter usage is difficult	-	Y
1175	IPv6 address lowercase only	-	ni

Part 7-1 Tissue	Description	Implemented by server	Supported by client
828	Data model namespace revision IEC 61850-7-4:2007[A]	-	na
1151	simulated GOOSE disappears after 1st appearance when LPHD.Sim = TRUE	-	na
1196	Extensions to standardized LN classes made by third parties Note: this tissue is not final yet	-	na

Part 7-2 Tissue	Description	Implemented by server	Supported by client
778	AddCause values – add value not-supported	-	Y
780	What are unsupported trigger option at a control block?	-	na
783	TimOper Resp- ; add Authorization check	-	na
786	AddCause values 26 and 27 are switched	-	Y
820	Mandatory ACSI services (use for PICS template)	-	Y
858	typo in enumeration ServiceType	-	ni
861	dchg of ConfRev attribute	-	Y
876	GenLogiclNodeClass and SGCB, GoCB, MsvCB, UsvCB	-	ni
1038	Loss of Info Detection After Resynch	-	Y
1062	Entrytime not used in CDC	-	ni
1071	Length of DO name	-	ni
1091	The sentence "The initial value of EditSG shall be 0", has to be stated in part 7.2 not in 8.1	-	ni
1127	Missing owner attribute in BTS and UTS	-	ni
1163	Old report in URCB	-	ni
1202	GI not optional	-	ni

Part 7-3 Tissue	Description	Implemented by server	Supported by client
697	persistent command / PulseConfig	-	ni
698	Wrong case is BAC.dB attribute	-	Y
722	Units for 'h' and 'min' not in UnitKind enumeration.	-	Y
919	Presence Condition for sVC	-	ni
925	Presence of i or f attribute - Problem with writing	-	Y
926	Presence Conditions within RangeConfig	-	Y

Part 7-4 Tissue	Description	Implemented by server	Supported by client
671	mistake in definition of Mod & Beh	-	Y

674	CDC of ZRRC.LocSta is wrong	-	Y
675	SIML LN	-	ni
676	Same data object name used with different CDC	-	Y
677	MotStr is used with different CDC in PMMS and SOPM LN classes	-	Y
679	Remove CycTrMod Enum	-	Y
680	SI unit for MHYD.Cndct	-	ni
681	Enum PIDAlg	-	ni
682	ANCR.ParColMod	-	ni
683	Enum QVVR.IntrDetMth	-	Y
685	Enum ParTraMod	-	Y
686	New annex H - enums types in XML	-	Y
694	Data object CmdBlk	-	ni
696	LSVS.St (Status of subscription)	-	ni
712	interpretation of quality operatorBlocked	-	ni
713	DO Naming of time constants in FFIL	-	Y
724	ANCR.Auto	-	Y
725	Loc in LN A-group	-	Y
734	LLN0.OpTmh vs. LPHD.OpTmh	-	Y
735	ISAF.Alm and ISAF.AlmReset	-	ni
736	PFSign	-	Y
742	GAPC.Str, GAPC.Op and GAPC.StrVal	-	Y
743	CCGR.PmpCtl and CCGR.FanCtl	-	Y
744	LN STMP, EEHealth and EEName	-	Y
772	LPHD.PwrUp/PwrDn shall be transient	-	ni
773	Loc, LocKey and LocSta YPSH and YLTC	-	Y
774	ITCI.LocKey	-	Y
775	KVLV.ClsLim and OpnLim	-	ni
776	LPHD.OutOv/InOv and LCCH.OutOv/InOv	-	ni
800	Misspelling in CSYN	-	Y
802	CCGR and Harmonized control authority	-	Y
808	Presence condition of ZMOT.DExt and new DOs	-	ni
831	Setting of ConfRevNum in LGOS	-	Y
838	Testing in Beh=Blocked	-	Y
844	MFLK.PhPiMax, MFLK.PhPiLoFil, MFLK.PhPiRoot DEL->WYE	-	Y
849	Presence conditions re-assessing in case of derived statistical calculation	-	ni
877	QVUB -settings should be optional	-	Y
909	Remove ANCR.ColOpR and ColOpL	-	Y
920	Resetable Counter is NOT resetable	-	Y
932	Rename AVCO.SptVol to AVCO.VolSpt	-	Y
939	Change CDC for ANCR.FixCol	-	Y
991	LGOS: GoCBRef (as well as LSVS.SvCBRef) should be mandatory	-	ni
1007	PTRC as fault indicator - Update of description required	-	ni
1044	TapChg in AVCO	-	Y
1077	Rename DOnames within LTIM	-	Y

Note: Tissues 675, 735, 772, 775, 776, 878 are not relevant for conformance testing

Part 8-1 Tissue	Description	Implemented by server	Supported by client
784	Tracking of control (CTS)	-	Y
817	Fixed-length GOOSE float encoding	-	ni
834	File dir name length 64	-	Y
951	Encoding of Owner attribute	-	Y
1040	More associate error codes	-	Y
1178	Select Response+ is non-null value	-	Y

Compare the TISSUE database for more details: https://iec61850.tissue-db.com/tissue/