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<?xml version="1.0" encoding="UTF-8"?>
<SCL xmlns="http://www.iec.ch/61850/2006/SCL" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://www.iec.ch/61850/2006/SCL SCL.xsd">
	<Header id="1">
		<Text>DataTypeTemplate de la parte hidráulica del regulador de velocidad</Text>
		<History>
			<Hitem when="22/10/2010" revision="1" version="1.0">
				Empezé a construir este ICD a partir del ICD del regulador de velocidad.
			</Hitem>
			<Hitem when="01/11/2011" revision="3" version="1.0">
				Este es el SCL candidato para la versión final.
			</Hitem>
		</History>
	</Header>
	<Communication>
		<SubNetwork name="SN1">
			<ConnectedAP iedName="IED_MAIN_TNK" apName="AP1">
				<Address>
					<P type="IP">192.168.10.1</P>
					<P type="IP-SUBNET">0.0.0.0</P>
					<P type="IP-GATEWAY">0.0.0.0</P>
				</Address>
			</ConnectedAP>
		</SubNetwork>
	</Communication>
	<IED name="IEDsensRot" configVersion="1" desc="IED sensor de rotación" manufacturer="David">
		<Services>
			<GetDataObjectDefinition/>
			<DataObjectDirectory/>
			<ConfDataSet max="5" maxAttributes="50"/>
			<GetDirectory/>
			<ConfReportControl max="5"/>
			<GetCBValues/>
			<ReportSettings intgPd="Dyn" trgOps="Dyn" bufTime="Dyn" optFields="Dyn"
rptID="Dyn" datSet="Fix" cbName="Fix"/>
			<GSESettings appID="Fix" cbName="Fix" dataLabel="Dyn" datSet="Fix"/>
			<GOOSE max="5"/>
			<FileHandling/>
			<ConfLNs fixLnInst="true" fixPrefix="false"/>
			<SMVSettings smpRate="Conf">
				<SmpRate>256</SmpRate>
				<SmpRate>80</SmpRate>
			</SMVSettings>
		</Services>
		<AccessPoint name="AP1">
			<Server>
				<Authentication/>
				<LDevice inst="1" ldName="LD1" desc="L\'imites de los valores t\'ipicos de
ajuste">
					<LN0 lnType="LLN0_1" inst="" lnClass="LLN0"/>
					<LN inst="1" lnType="FLIM_tipical" lnClass="FLIM"
prefix="Spd_" desc="L\'imite de la velocidad"/>
					<LN inst="1" lnType="FSPT_1" lnClass="FSPT" prefix="Spd_"
desc="Punto configurable de la velocidad"/>
					<LN inst="2" lnType="FLIM_tipical" lnClass="FLIM"
prefix="Spd_" desc="L\'imite de la velocidad"/>
					<LN inst="2" lnType="FSPT_1" lnClass="FSPT" prefix="Spd_"
desc="Punto configurable de la velocidad"/>
					<LN inst="3" lnType="FLIM_tipical" lnClass="FLIM"
prefix="Spd_" desc="L\'imite de la velocidad"/>
					<LN inst="3" lnType="FSPT_1" lnClass="FSPT" prefix="Spd_"
desc="Punto configurable de la velocidad"/>
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                                        <LN inst="4" lnType="FLIM_tipical" lnClass="FLIM"
prefix="Spd_" desc="L\'imite de la velocidad"/>
                                        <LN inst="4" lnType="FSPT_1" lnClass="FSPT" prefix="Spd_"
desc="Punto configurable de la velocidad"/>
                                        <LN inst="5" lnType="FLIM_tipical" lnClass="FLIM"
prefix="Spd_" desc="L\'imite de la velocidad"/>
                                        <LN inst="5" lnType="FSPT_1" lnClass="FSPT" prefix="Spd_"
desc="Punto configurable de la velocidad"/>
                                        <LN inst="6" lnType="FLIM_tipical" lnClass="FLIM"
prefix="Spd_" desc="L\'imite de la velocidad"/>
                                        <LN inst="6" lnType="FSPT_1" lnClass="FSPT" prefix="Spd_"
desc="Punto configurable de la velocidad"/>
                                        <LN inst="7" lnType="FLIM_tipical" lnClass="FLIM"
prefix="Spd_" desc="L\'imite de la velocidad"/>
                                        <LN inst="7" lnType="FSPT_1" lnClass="FSPT" prefix="Spd_"
desc="Punto configurable de la velocidad"/>
                                        <LN inst="8" lnType="FLIM_tipical" lnClass="FLIM"
prefix="Spd_" desc="L\'imite de la velocidad"/>
                                        <LN inst="8" lnType="FSPT_1" lnClass="FSPT" prefix="Spd_"
desc="Punto configurable de la velocidad"/>
                                        <LN inst="9" lnType="FLIM_tipical" lnClass="FLIM"
prefix="Spd_" desc="L\'imite de la velocidad"/>
                                        <LN inst="9" lnType="FSPT_1" lnClass="FSPT" prefix="Spd_"
desc="Punto configurable de la velocidad"/>
                                        <LN inst="10" lnType="FLIM_tipical" lnClass="FLIM"
prefix="Spd_" desc="L\'imite de la velocidad"/>
                                        <LN inst="10" lnType="FSPT_1" lnClass="FSPT" prefix="Spd_"
desc="Punto configurable de la velocidad"/>
                                </LDevice>
                                <LDevice inst="2" ldName="LD2" desc="L\'imites de valores de ajuste">
                                        <LN0 lnType="LLN0_1" inst="" lnClass="LLN0"/>
                                        <LN lnType="HSPD_1" inst="1" lnClass="HSPD" prefix="Spd_"
desc="Speed monitoring" />
                                        <LN lnType="TRTN_1" inst="1" lnClass="TRTN" prefix="Spd_"
desc="Tacometer" />
                                </LDevice>
                        </Server>
                </AccessPoint>
        </IED>
        <DataTypeTemplates>
                <LNodeType id="LLN0_1" lnClass="LLN0">
                        <!--Common logical node information -->
                        <DO name="Mod" type="Mod_1"/>
                        <DO name="Beh" type="Beh_1"/>
                        <DO name="Health" type="Health_1"/>
                        <DO name="NamPlt" type="NamPlt_1"/>
                </LNodeType>
                <LNodeType id="FLIM_tipical" lnClass="FLIM" desc="Limits of typical values">
                        <!--Common logical node information -->
                        <DO name="Mod" type="Mod_1"/>
                        <DO name="Beh" type="Beh_1"/>
                        <DO name="Health" type="Health_1"/>
                        <DO name="NamPlt" type="NamPlt_1"/>
                        <!--Status information-->
                        <DO type="HiLim_typical" name="HiLim" desc="High limit reached (input signal
above limit)"/>
                        <DO type="LoLim_typical" name="LoLim" desc="Low limit reached (input signal
below limit)"/>
                        <!--Measured values-->
                        <DO type="Out_typical" name="Out" desc="Output signal"/>
                        <!--Settings-->
                        <DO type="HiLimSpt_typical" name="HiLimSpt" desc="High limit set point"/>
                        <DO type="LoLimSpt_typical" name="LoLimSpt" desc="Minimum limit set point"/>
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</LNodeType>
<LNodeType id="FSPT_1" lnClass="FSPT" desc="Set point control function">
        <!--Common logical node information -->
        <DO name="Mod" type="Mod_1"/>
        <DO name="Beh" type="Beh_1"/>
        <DO name="Health" type="Health_1"/>
        <DO name="NamPlt" type="NamPlt_1"/>
        <!--Measured value-->
        <DO type="SptMem_1" name="SptMem"/>
</LNodeType>
<LNodeType id="TRTN_1" lnClass="TRTN" desc="Tacometer">
        <!--Common logical node information -->
        <DO name="Mod" type="Mod_1"/>
        <DO name="Beh" type="Beh_1"/>
        <DO name="Health" type="Health_1"/>
        <DO name="NamPlt" type="NamPlt_1"/>
        <DO type="SmpRteRng_1" name="SmpRteRng"/>
        <!--Measured values-->
        <DO type="Spd_1" name="Hz"/>
        <!--Settings-->
        <DO type="StndStl" name="StndStl"/>
</LNodeType>
<LNodeType id="HSPD_1" lnClass="HSPD">
        <!--Common logical node information -->
        <DO name="Mod" type="Mod_1"/>
        <DO name="Beh" type="Beh_1"/>
        <DO name="Health" type="Health_1"/>
        <DO name="NamPlt" type="NamPlt_1"/>
        <DO type="SmpRteRng_1" name="SmpRteRng"/>
        <!-- Status information -->
        <DO type="status_HSPD" name="StndStl"/>
        <DO type="status_HSPD" name="SpdCrp"/>
        <DO type="status_HSPD" name="SpdBrk"/>
        <DO type="status_HSPD" name="SpdLub"/>
        <DO type="status_HSPD" name="SpdLft"/>
        <DO type="status_HSPD" name="SpdRB"/>
        <DO type="status_HSPD" name="SpdExt"/>
        <DO type="status_HSPD" name="SpdSyn"/>
        <DO type="status_HSPD" name="SpdOvr"/>
        <DO type="status_HSPD" name="DirRot"/>
        <DO type="settings_HSPD" name="SetSpdCrp"/>
        <DO type="settings_HSPD" name="SetSpdBrk"/>
        <DO type="settings_HSPD" name="SetSpdLub"/>
        <DO type="settings_HSPD" name="SetSpdLft"/>
        <DO type="settings_HSPD" name="SetSpdRb"/>
        <DO type="settings_HSPD" name="SetSpdExt"/>
        <DO type="settings_HSPD" name="SetSpdSyn"/>
        <DO type="settings_HSPD" name="SetSpdOv"/>
        <DO type="meas_spd" name="Spd"/>
</LNodeType>
<!--  Data Objects - IEC 61850-7-3 -->
<DOType cdc="ASG" id="HiLimSpt_typical"/>
<DOType cdc="ASG" id="LoLimSpt_typical"/>
<DOType cdc="ASG" id="Kp_pid" desc="Proportional gain"/>
<DOType cdc="ASG" id="Kl_pid" desc="Integral gain"/>
<DOType cdc="ASG" id="settings_HSPD" desc="HSPD settings"/>
<DOType cdc="ING" id="PidAlg_pid" desc="PID"/>
<DOType cdc="ING" id="SmpRte_1" desc="Sampling rate setting"/>
<DOType cdc="ING" id="SmpRteRng_1" desc="Available sampling rate range"/>
<DOType cdc="INC" id="Mod_1" desc="Mode"/>
<DOType cdc="INS" id="Beh_1" desc="Behaviour"/>
<DOType cdc="INS" id="Health_1" desc="Health"/>
<DOType cdc="LPL" id="NamPlt_1" desc="Name plate"/>
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            <DOType cdc="MV" id="Out_typical"/>
            <DOType cdc="MV" id="SptMem_1" desc="Set point in memory"/>
            <DOType cdc="MV" id="Out_pid" desc="PID output"/>
            <DOType cdc="MV" id="PAct_pid" desc="Proportional action"/>
            <DOType cdc="MV" id="IAct_pid" desc="Integral action"/>
            <DOType cdc="MV" id="DAct_pid" desc="Derivative action"/>
            <DOType cdc="MV" id="P_pid" desc="P output"/>
            <DOType cdc="MV" id="I_pid" desc="I output"/>
            <DOType cdc="MV" id="D_pid" desc="D output"/>
            <DOType cdc="MV" id="meas_spd" desc="Rotational speed of the shaft (r/s)"/>
            <DOType cdc="SPS" id="HiLim_typical"/>
            <DOType cdc="SPS" id="LoLim_typical"/>
            <DOType cdc="SPS" id="status_HSPD" desc="HSPD status information"/>
            <DOType cdc="SAV" id="Spd_1" desc="Rotational speed (Hz)"/>
        </DataTypeTemplates>
</SCL>
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