```xml
<?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 hidr\'aulica del regulador de velocidad</Text>
                <History>
                        <Hitem when="22/10/2010" revision="1" version="1.0">
                                Empez\'e a construir este ICD a partir del ICD del tanque principal.
                        </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="IEDRV" configVersion="1" desc="IED del regulador de velocidad" manufacturer="David">
                <Services>
                        <DynAssociation/>
                        <GetDataObjectDefinition/>
                        <DataObjectDirectory/>
                        <GetDataSetValue/>
                        <SetDataSetValue/>
                        <DataSetDirectory/>
                        <ConfDataSet max="50" maxAttributes="250"/>
                        <GetDirectory/>
                        <ReadWrite/>
                        <ConfReportControl max="7"/>
                        <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"/>
```

```xml
                                                    <LN lnType="FLIM_tipical" inst="1" lnClass="FLIM"
prefix="Drp_" desc="L\'imites del estatismo DROOP temporario de la m\'aquina"/>
                                                    <LN lnType="FLIM_tipical" inst="2" lnClass="FLIM"
prefix="Reg_" desc="L\'imites de la constante de tiempo derivada, Tn"/>
                                                    <LN lnType="FLIM_tipical" inst="3" lnClass="FLIM"
prefix="Reg_" desc="L\'imites de la constante de tiempo del dispositivo amortiguador, Td"/>
                                                    <LN lnType="FLIM_tipical" inst="4" lnClass="FLIM"
prefix="Drp_" desc="L\'imites del estatismo DROOP permanente de la m\'aquina"/>
                                                    <LN lnType="FLIM_tipical" inst="5" lnClass="FLIM"
prefix="Reg_" desc="L\'imites de la constante de tiempo de la prontitud, Tx"/>
                                            </LDevice>
                                            <LDevice inst="2" ldName="LD2" desc="L\'imites de valores de ajuste">
                                                    <LN0 lnType="LLN0_1" inst="" lnClass="LLN0"/>
                                                    <LN lnType="FLIM_tipical" inst="6" lnClass="FLIM"
prefix="Spd_" desc="L\'imites del selector de velocidad"/>
                                                    <LN lnType="FLIM_tipical" inst="7" lnClass="FLIM"
prefix="Gv_" desc="L\'imites del valor de ajuste de apertura"/>
                                                    <LN lnType="FLIM_tipical" inst="8" lnClass="FLIM"
prefix="Reg_" desc="L\'imites del valor de ajuste de la frecuencia"/>
                                                    <LN lnType="FLIM_tipical" inst="9" lnClass="FLIM"
prefix="Hz_" desc="L\'imites de la frecuencia de referencia"/>
                                                    <LN lnType="FLIM_tipical" inst="10" lnClass="FLIM"
prefix="Pos_" desc="L\'imites del control limitador de apertura"/>
                                            </LDevice>
                                            <LDevice inst="3" ldName="LD3" desc="Valores t\'ipicos de ajuste">
                                                    <LN0 lnType="LLN0_1" inst="" lnClass="LLN0"/>
                                                    <LN lnType="FSPT_1" inst="1" lnClass="FSPT" prefix="Drp_"
desc="Estatismo DROOP temporario de la m\'aquina"/>
                                                    <LN lnType="FSPT_1" inst="2" lnClass="FSPT" prefix="Reg_"
desc="Constante de tiempo derivada, Tn"/>
                                                    <LN lnType="FSPT_1" inst="3" lnClass="FSPT" prefix="Reg_"
desc="Constante de tiempo del dispositivo amortiguador, Td"/>
                                                    <LN lnType="FSPT_1" inst="4" lnClass="FSPT" prefix="Drp_"
desc="Estatismo DROOP permanente de la m\'aquina"/>
                                                    <LN lnType="FSPT_1" inst="5" lnClass="FSPT" prefix="Reg_"
desc="Constante de tiempo de la prontitud, Tx"/>
                                            </LDevice>
                                            <LDevice inst="4" ldName="LD4" desc="Par\'ametros configurables del
regulador de velocidad">
                                                    <LN0 lnType="LLN0_1" inst="" lnClass="LLN0"/>
                                                    <LN lnType="FSPT_1" inst="6" lnClass="FSPT" prefix="V_"
desc="Bias de tensi\'on de puesta en marcha"/>
                                                    <LN lnType="FSPT_1" inst="7" lnClass="FSPT" prefix="Hz_"
desc="Frecuencia de referencia"/>
                                                    <LN lnType="FSPT_1" inst="8" lnClass="FSPT" prefix="Spd_"
desc="Selector de velocidad"/>
                                                    <LN lnType="FSPT_1" inst="9" lnClass="FSPT" prefix="Gv_"
desc="Valor de ajuste de apertura"/>
                                                    <LN lnType="FSPT_1" inst="10" lnClass="FSPT" prefix="Hz_"
desc="Bias de velocidad sin carga"/>
                                                    <LN lnType="FSPT_1" inst="11" lnClass="FSPT" prefix="V_"
desc="Bias de tensi\'on de velocidad sin carga"/>
                                                    <LN lnType="FSPT_1" inst="12" lnClass="FSPT" prefix="Lim_"
desc="Limitador de apertura"/>
```

```xml
                                        <LN lnType="FSPT_1" inst="13" lnClass="FSPT" prefix="Hz_"
desc="Control frecuencia de carga"/>
                                        <LN lnType="FSPT_1" inst="14" lnClass="FSPT" prefix="Reg_"
desc="Valor de ajuste de la frecuencia"/>
                                </LDevice>
                                <LDevice inst="5" ldName="LD5" desc="Funci\'on PID">
                                        <LN0 lnType="LLN0_1" inst="" lnClass="LLN0"/>
                                        <LN lnType="FPID_reg" inst="1" lnClass="FPID"
desc="Funci\'on PID"/>
                                </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"/>
                </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="FPID_reg" lnClass="FPID" desc="PID 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 values-->
                        <DO type="Out_pid" name="Out"/>
```

```xml
                    <DO type="PAct_pid" name="PAct"/>
                    <DO type="IAct_pid" name="IAct"/>
                    <DO type="DAct_pid" name="DAct"/>
                    <DO type="P_pid" name="P"/>
                    <DO type="I_pid" name="I"/>
                    <DO type="D_pid" name="D"/>
                    <!--Settings-->
                    <!--DO type="PidAlg_pid" name="PidAlg"/>
                    <DO type="Kp_pid" name="Kp"/>
                    <DO type="Kl_pid" name="Kl"/-->
            </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="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"/>
            <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="SPS" id="HiLim_typical"/>
            <DOType cdc="SPS" id="LoLim_typical"/>
            <DOType cdc="SAV" id="Spd_1" desc="Rotational speed (Hz)"/>
        </DataTypeTemplates>
    </SCL>
```