EXTERNAL DATA PLATFORM

PDE APPLICATION

Implementation Guide

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1   INTRODUCTION

1.1 Purpose of the document

The PDE application interacts with the various users through specific transactions..

This document describes the transactions supported by the application to exchange input and output data with users.

1.2 Applicability

This document contains the Excel file describing the XML transactions of data exchange that the PDE application supports.

1.3 Glossary

PDE: External Data Platform

2 SCHEMA FORMAT

This Implementation Guide presents the XSDs for each transaction.

By appropriately using the "include" instruction, you may obtain the *TImmMessage.xsd* schema *(in the TimmBaseMessage container schema)* which calls the specific XSDs of each transaction involved in the application.

Consequently, the examples given in the following chapters show the XSD of each transaction and a complete example of XML file ready to be entered into the platform.

2.1 TimmBaseMessage.xsd

```xml
<?xml version="1.0" encoding="iso-8859-1"?>
<schema xmlns="http://www.w3.org/2001/XMLSchema"
    targetNamespace="urn:XML-TIMM" xmlns:pd="urn:XML-TIMM"
    elementFormDefault="qualified">
        <include schemaLocation="BaseMessageTypes.xsd" />
        <element name="Message">
                <complexType>
                        <sequence>
                                <element ref="pd:tyVersion"  minOccurs="0" maxOccurs="1"/>
                                <element name="Header" type="pd:tyHeader" minOccurs="1" maxOccurs="1" />
                                <choice>
                                        <element ref="pd:Transaction" minOccurs="1" maxOccurs="unbounded"/>
                                        <element name="Error" type="pd:tyError" minOccurs="1" maxOccurs="unbounded" />
                                </choice>
                        </sequence>
                        <attribute name="MessageCode" type="pd:tyCeMessageCode" use="optional" />
                        <attribute name="MessageType" type="pd:tyMessageType" use="optional" />
                        <attribute name="MessageDate" type="date" use="required" />
                        <attribute name="MessageTime" type="time" use="optional" />
                        <attribute name="MessageSubject" type="pd:tyMessageSubject" use="optional" />
                        <!-- Response -->
                        <attribute name="ResponseReferenceMessageCode" type="pd:tyMessageCode" use="optional" />
                        <attribute name="ResponseMessageStatus" type="pd:tyMessageStatus" use="optional" />
                </complexType>
        </element>
        <element name="TransactionDetail" abstract="true" />
        <element name="Transaction">
                <complexType>
    <choice>
                                <element ref="pd:TransactionDetail" minOccurs="1" maxOccurs="1" />
                        </choice>
                        <attribute name="MPN" type="pd:tyExternalReferenceNumber" use="optional" />
                        <!-- Response -->
                        <attribute name="ResponseTransactionStatus" type="pd:tyTransactionStatus" use="optional" />
                        <attribute name="ResponseProcessingTime" type="dateTime" use="optional" />
                        <attribute name="ResponseReferenceTransactionCode" type="pd:tyTransactionCode" use="optional" />
                </complexType>
        </element>
        <element name="tyVersion" abstract="true" type="string" />
</schema>
```

2.2 TimmMessage.xsd

```xml
<?xml version="1.0" encoding="iso-8859-1"?>
<schema xmlns="http://www.w3.org/2001/XMLSchema"
        targetNamespace="urn:XML-TIMM"
        xmlns:pd="urn:XML-TIMM"
        xmlns:NameSpace1="http://www.w3.org/2001/XMLSchema"
        elementFormDefault="qualified">
            <include schemaLocation="TimmBaseMessage.xsd" />
            <include schemaLocation="FunctionalAcknowledgement.xsd" />
            <include schemaLocation="Contratto.xsd" />
            <include schemaLocation="ItemContratto.xsd" />
            <include schemaLocation="QuoteCapacita.xsd" />
            <element name="Version" substitutionGroup="pd:tyVersion" type="string" />
            <element name="TimmFA" substitutionGroup="pd:TransactionDetail">
                    <complexType>
                            <sequence>
                                    <element name="FunctionalAcknowledgement" type="pd:tyFunctionalAcknowledgement" />
                            </sequence>
                    </complexType>
            </element>
 <element name="Contratto" substitutionGroup="pd:TransactionDetail">
  <complexType>
   <sequence>
    <element name="ContrattoCommon" type="pd:tyContrattoCommon" />
   </sequence>
  </complexType>
 </element>
 <element name="ItemContratto" substitutionGroup="pd:TransactionDetail">
  <complexType>
   <sequence>
    <element name="ItemContrattoCommon" type="pd:tyItemContrattoCommon" />
   </sequence>
  </complexType>
 </element>
 <element name="QuoteCapacita" substitutionGroup="pd:TransactionDetail">
  <complexType>
   <sequence>
    <element name="QuoteCapacitaCommon" type="pd:tyQuoteCapacitaCommon" />
   </sequence>
  </complexType>
 </element>
</schema>
```

2.3 BaseMessageTypes.xsd

```xml
<?xml version="1.0" encoding="iso-8859-1" ?>
<schema id="MessageTypes"
 xmlns="http://www.w3.org/2001/XMLSchema"
 targetNamespace="urn:XML-TIMM"
 xmlns:pd="urn:XML-TIMM"
 elementFormDefault="qualified">
 <complexType name ="tyError">
  <attribute name="Code"        type="string"   use="required" />
  <attribute name="Description" type="string"   use="required" />
 </complexType>
 <complexType name="tyHeader">
  <sequence>
   <element name="Sender"   type="pd:tyAddress"/>
   <element name="Receiver" type="pd:tyAddress"/>
  </sequence>
 </complexType>
 <complexType name="tyAddress">
  <sequence>
   <element name="OperatorMsgCode" type="pd:tyOperatorMsgCode"/>
   <element name="CompanyName" type="pd:tyCompanyName" minOccurs="0"/>
   <element name="UserMsgCode"   type="pd:tyUserMsgCode" minOccurs="0"/>
  </sequence>
 </complexType>
 <simpleType name="tyOperatorMsgCode">
  <restriction base="string">
   <minLength value="1" />
   <maxLength value="16" />
  </restriction>
 </simpleType>
 <simpleType name="tyUserMsgCode">
  <restriction base="string">
   <minLength value="1" />
   <maxLength value="16" />
  </restriction>
 </simpleType>
 <simpleType name="tyMessageCode">
  <restriction base="string">
   <minLength value="32" />
   <maxLength value="32" />
  </restriction>
 </simpleType>
```

```xml
<simpleType name="tyCeMessageCode">
 <restriction base="string">
  <minLength value="1" />
<maxLength value="32" />
 </restriction>
</simpleType>
<simpleType name="tyTransactionCode">
 <restriction base="string">
  <minLength value="32" />
  <maxLength value="32" />
 </restriction>
</simpleType>
<simpleType name="tyFreeTransactionCode">
 <restriction base="string">
  <minLength value="1" />
  <maxLength value="32" />
 </restriction>
</simpleType>
<simpleType name="tyTransactionStatus">
 <restriction base="string">
  <enumeration value="Accepted" />
  <enumeration value="Rejected" />
 </restriction>
</simpleType>
<simpleType name="tyMessageType">
 <restriction base="string">
  <enumeration value="Request" />
  <enumeration value="Response" />
  <enumeration value="Notify" />
 </restriction>
</simpleType>
<simpleType name="tyMessageSubject">
 <restriction base="string">
  <enumeration value="TransactionTIMMCmd" />
  <enumeration value="TransactionTIMMFA" />
  <enumeration value="TransactionOperator" />
  <enumeration value="TransactionUser" />
  <enumeration value="TransactionUserRelate" />
 </restriction>
</simpleType>
<simpleType name="tyMessageStatus">
 <restriction base="string">
  <enumeration value="Accepted" />
  <enumeration value="Rejected" />
  <enumeration value="PartiallyAccepted" />
 </restriction>
</simpleType>
<simpleType name="tyCompanyName">
```

```xml
      <restriction base="string">
       <minLength value="1"/>
       <maxLength value="60"/>
      </restriction>

    </simpleType>
    <simpleType name="tyExternalReferenceNumber">
      <restriction base="string">
       <minLength value="1" />
       <maxLength value="32" />
      </restriction>
    </simpleType>
   </schema>
```

2.4 RegistrationTypes.xsd

```xml
<?xml version="1.0" encoding="iso-8859-1" ?>
<schema id="MessageTypes"
 xmlns="http://www.w3.org/2001/XMLSchema"
 targetNamespace="urn:XML-TIMM"
 xmlns:pd="urn:XML-TIMM"
 elementFormDefault="qualified">

<simpleType name="tyFrequenza">
 <restriction base="int">
  <minInclusive value="1" />
  <maxInclusive value="36" />
 </restriction>
</simpleType>

<simpleType name="tyRagioneSociale">
 <restriction base="string">
  <minLength value="0" />
  <maxLength value="256" />
 </restriction>
</simpleType>

<simpleType name="tyPartitaIVA">
 <restriction base="string">
  <minLength value="1" />
  <maxLength value="50" />
 </restriction>
</simpleType>

<simpleType name="tyCodiceFiscale">
 <restriction base="string">
  <minLength value="0" />
  <maxLength value="50" />
 </restriction>
</simpleType>

<simpleType name="tyIndirizzo">
 <restriction base="string">
  <minLength value="1" />
  <maxLength value="256" />
 </restriction>
</simpleType>

<simpleType name="tyCAP">
```

```xml
    <restriction base="string">
       <minLength value="1" />
       <maxLength value="50" />
     </restriction>
    </simpleType>

    <simpleType name="tyCitta">
     <restriction base="string">
      <minLength value="1" />
      <maxLength value="120" />
     </restriction>
    </simpleType>

    <simpleType name="tyProvincia">
     <restriction base="string">
      <minLength value="1" />
      <maxLength value="2" />
     </restriction>
    </simpleType>

    <simpleType name="tyNazione">
     <restriction base="string">
      <minLength value="1" />
      <maxLength value="256" />
     </restriction>
    </simpleType>

    <simpleType name="tyEmail">
     <restriction base="string">
      <minLength value="0" />
      <maxLength value="60" />
     </restriction>
    </simpleType>

    <simpleType name="tyTelefono">
     <restriction base="string">
      <minLength value="1" />
      <maxLength value="60" />
     </restriction>
    </simpleType>


  <simpleType name="tyFax">
    <restriction base="string">
     <minLength value="0" />
     <maxLength value="60" />
    </restriction>
   </simpleType>
```

```xml
<simpleType name="tyTitolo">
 <restriction base="string">
  <minLength value="0" />
  <maxLength value="50" />
 </restriction>
</simpleType>

<simpleType name="tyCognome">
 <restriction base="string">
  <minLength value="1" />
  <maxLength value="60" />
 </restriction>
</simpleType>

<simpleType name="tyNome">
 <restriction base="string">
  <minLength value="1" />
  <maxLength value="60" />
 </restriction>
</simpleType>

<simpleType name="tyUserName">
 <restriction base="string">
  <minLength value="1" />
  <maxLength value="128" />
 </restriction>
</simpleType>

<simpleType name="tyPassword">
 <restriction base="string">
  <minLength value="1" />
  <maxLength value="128" />
 </restriction>
</simpleType>

<simpleType name="tyIssuer">
 <restriction base="string">
  <minLength value="0" />
  <maxLength value="16" />
 </restriction>
</simpleType>

<simpleType name="tySerialNumber">
 <restriction base="string">
  <minLength value="0" />
  <maxLength value="16" />
 </restriction>
</simpleType>
```

```xml
<simpleType name="tyReferenteAmministrativo">
 <restriction base="string">
  <minLength value="1" />
  <maxLength value="256" />
 </restriction>
</simpleType>

<simpleType name="tySedeAmministrativa">
 <restriction base="string">
  <minLength value="1" />
  <maxLength value="256" />
 </restriction>
</simpleType>

<simpleType name="tyResponsabileAggiornamento">
 <restriction base="string">
  <minLength value="1" />
  <maxLength value="255" />
 </restriction>
</simpleType>

<simpleType name="tyLingua">
 <restriction base="string">
  <minLength value="5" />
  <maxLength value="5" />
 </restriction>
</simpleType>

<simpleType name="tyCIN">
 <restriction base="string">
  <minLength value="1" />
  <maxLength value="1" />
 </restriction>
</simpleType>

<simpleType name="tyABI">
 <restriction base="string">
  <minLength value="5" />
  <maxLength value="5" />
 </restriction>
</simpleType>

<simpleType name="tyCAB">
 <restriction base="string">
  <minLength value="5" />
  <maxLength value="5" />
 </restriction>
</simpleType>
```

```xml
<simpleType name="tyCC">
 <restriction base="string">
  <minLength value="12" />
  <maxLength value="12" />
 </restriction>
</simpleType>

<simpleType name="tyIBAN">
 <restriction base="string">
  <minLength value="34" />
  <maxLength value="34" />
 </restriction>
</simpleType>

<simpleType name="tyAliquotaIVA">
 <restriction base="int">
  <minInclusive value="0" />
  <maxInclusive value="100" />
 </restriction>
</simpleType>

<simpleType name="tyCodiceRuolo">
 <restriction base="string">
  <minLength value="1" />
  <maxLength value="16" />
 </restriction>
</simpleType>

<simpleType name="tyCodiceUtente">
 <restriction base="string">
  <minLength value="1" />
  <maxLength value="16" />
 </restriction>
</simpleType>

<simpleType name="tyCodicePuntoDiScambioRilevante">
 <restriction base="string">
  <minLength value="1" />
  <maxLength value="16" />
 </restriction>
</simpleType>

<simpleType name="tyDescrizionePuntoDiScambioRilevante">
 <restriction base="string">
  <minLength value="1" />
  <maxLength value="256" />
 </restriction>
</simpleType>
```

```xml
<simpleType name="tyCoefficienteDiPerdita">
 <restriction base="float">
  <minInclusive value="0.0" />
  <maxInclusive value="1.0" />
 </restriction>
</simpleType>

<simpleType name="tyCodiceZona">
 <restriction base="string">
  <minLength value="1" />
  <maxLength value="4" />
 </restriction>
</simpleType>

<simpleType name="tyTipoZona">
 <restriction base="string">
  <enumeration value="PPL" />
  <enumeration value="PHYS" />
  <enumeration value="VIRT" />
 </restriction>
</simpleType>

<simpleType name="tyDescrizioneZona">
 <restriction base="string">
  <minLength value="1" />
  <maxLength value="256" />
 </restriction>
</simpleType>

<simpleType name="tyCodiceUnita">
 <restriction base="string">
  <minLength value="1" />
  <maxLength value="16" />
 </restriction>
</simpleType>

        <simpleType name="tyNomeUnita">
                <restriction base="string">
                        <minLength value="1" />
                        <maxLength value="100" />
                </restriction>
        </simpleType>
<simpleType name="tyCodiceImpianto">
                <restriction base="string">
                        <minLength value="1" />
                        <maxLength value="20" />
                </restriction>
</simpleType>
```

```xml
<simpleType name="tyCodiceTipoTecnologia">
        <restriction base="string">
                <minLength value="1" />
                <maxLength value="1" />
        </restriction>

</simpleType>

<simpleType name="tyCodiceSottoTipoTecnologia">
        <restriction base="string">
                <minLength value="1" />
                <maxLength value="20" />
        </restriction>
</simpleType>


<simpleType name="tyCodiceUdd">
        <restriction base="string">
                <minLength value="1" />
                <maxLength value="20" />
        </restriction>
</simpleType>

<simpleType name="tyP_IVA">
        <restriction base="string">
                <minLength value="1" />
                <maxLength value="16" />
        </restriction>
</simpleType>

<simpleType name="tyCombustibile">
        <restriction base="string">
                <minLength value="1" />
                <maxLength value="8" />
        </restriction>
</simpleType>
```

```xml
<simpleType name="tyCodiceProprietario">
    <restriction base="string">
        <minLength value="1" />
        <maxLength value="256" />
    </restriction>
</simpleType>

<simpleType name="tyCodiceMotivazione">
    <restriction base="string">
        <minLength value="1" />
        <maxLength value="256" />
    </restriction>
</simpleType>

<simpleType name="tyDate">
    <restriction base="integer">
        <minInclusive value="19000101"/>
        <maxInclusive value="29001231"/>
    </restriction>
</simpleType>

<simpleType name="tyHourIntervalType">
    <restriction base="integer">
        <minInclusive value="1"/>
        <maxInclusive value="25"/>
    </restriction>
</simpleType>

<simpleType name="tyTipoUnita">
    <restriction base="string">
        <enumeration value="C" />
        <enumeration value="M" />
        <enumeration value="P" />
    </restriction>
</simpleType>

<simpleType name="tySottoTipoUnita">
    <restriction base="string">
        <minLength value="1" />
        <maxLength value="100" />
    </restriction>
</simpleType>
```

```xml
<simpleType name="tyDescrizioneUnita">
 <restriction base="string">
  <minLength value="1" />
  <maxLength value="256" />
 </restriction>
</simpleType>

<simpleType name="tyCodiceContratto">
 <restriction base="string">
  <minLength value="1" />
  <maxLength value="32" />
 </restriction>
</simpleType>

<simpleType name="tyCodiceInvio">
 <restriction base="string">
  <minLength value="1" />
  <maxLength value="16" />
 </restriction>
</simpleType>

<simpleType name="tyCedenteAcquirente">
 <restriction base="string">
  <minLength value="1" />
  <maxLength value="150" />
 </restriction>
</simpleType>

<simpleType name="tyStrutturaContratto">
 <restriction base="string">
  <enumeration value="future"/>
  <enumeration value="swap"/>
  <enumeration value="opzione"/>
  <enumeration value="altro" />
 </restriction>
</simpleType>
```

```xml
<simpleType name="tyPrezzoRiferimento">
  <restriction base="string">
    <enumeration value="Pun"/>
    <enumeration value="Pnord"/>
    <enumeration value="Pmftv"/>
    <enumeration value="Pcnor"/>
    <enumeration value="Pcsud" />
    <enumeration value="Psud"/>
    <enumeration value="Pfogn"/>
    <enumeration value="Pbrnn"/>
    <enumeration value="Prosn"/>
    <enumeration value="Psici" />
    <enumeration value="Pprgp"/>
    <enumeration value="Psard"/>
    <enumeration value="Pfran"/>
    <enumeration value="Psviz"/>
    <enumeration value="Paust" />
    <enumeration value="Pslov"/>
    <enumeration value="Pcoac"/>
    <enumeration value="Pcors"/>
    <enumeration value="Pgrec"/>
    <enumeration value="Altro" />
  </restriction>
</simpleType>

<simpleType name="tyTipologiaContratto">
  <restriction base="string">
    <enumeration value="STD"/>
    <enumeration value="OTCO"/>
    <enumeration value="OTC"/>
  </restriction>
</simpleType>

<simpleType name="tyDescrizioneContratto">
  <restriction base="string">
    <minLength value="0" />
    <maxLength value="256" />
  </restriction>
</simpleType>

<simpleType name="tyIndicizzazioneContratto">
  <restriction base="string">
    <minLength value="0" />
    <maxLength value="256" />
  </restriction>
</simpleType>
```

```xml
<simpleType name="tyMercatoOrganizzato">
 <restriction base="string">
  <minLength value="0" />
  <maxLength value="256" />
 </restriction>
</simpleType>

<simpleType name="tyCodiceperatore">
 <restriction base="string">
  <minLength value="1" />
  <maxLength value="16" />
 </restriction>
</simpleType>

<simpleType name="tyOrdineDiMerito">
 <restriction base="integer">
  <minInclusive value="0" />
 </restriction>
</simpleType>

<simpleType name="tyUnbalancedPartecipantNumber">
 <restriction base="string">
  <minLength value="0" />
  <maxLength value="60" />
 </restriction>
</simpleType>

<simpleType name="tyInjectionOrWithdrawalPointNumber">
 <restriction base="string">
  <minLength value="0" />
  <maxLength value="16" />
 </restriction>
</simpleType>

<simpleType name="tyMustRun">
 <restriction base="string">
  <minLength value="0" />
  <maxLength value="256" />
 </restriction>
</simpleType>
```

```xml
<simpleType name="tyTipoOperatore">
    <restriction base="string">
    <enumeration value="STD"/>
    <enumeration value="OWN"/>
    <enumeration value="SPC"/>
     <enumeration value="TSO"/>
    <enumeration value="ANG"/>
    </restriction>
</simpleType>

<simpleType name="tySegno">
 <restriction base="string">
  <enumeration value="+"/>
  <enumeration value="-"/>
 </restriction>
</simpleType>
</schema>
```

2.5 Ce_Types.xsd

```xml
<?xml version="1.0" encoding="iso-8859-1" ?>
<schema id="MessageTypes"
 xmlns="http://www.w3.org/2001/XMLSchema"
 targetNamespace="urn:XML-TIMM"
 xmlns:pd="urn:XML-TIMM"
 elementFormDefault="qualified">

 <element name="RejectInformation">
  <complexType>
   <sequence>
    <element name="Reason" type="pd:tyReasonType"/>
    <element name="ReasonText" type="pd:tyReasonTextType" minOccurs="0" maxOccurs="1"/>
   </sequence>
  </complexType>
 </element>

 <simpleType name="tyCodiceOperatore">
  <restriction base="string">
   <minLength value="1" />
   <maxLength value="16" />
  </restriction>
 </simpleType>

 <simpleType name="tyAlpha">
  <restriction base="string">
   <pattern value="^?[0]|^?[0](,\d{1,2})|^?[1](,[0]{1,2})|^?[1]$"/>
  </restriction>
 </simpleType>

 <simpleType name="tyRendimentoMedio">
  <restriction base="string">
   <pattern value="^?\d{1,4}(,\d{1,4})|^?\d{1,4}(,\d{1,3})|^?\d{1,4}(,\d{1,2})|^?\d{1,4}(,\d{1,1})|^?\d{1,4}$"/>
  </restriction>
 </simpleType>

        <simpleType name="tyQtyCO2">
                <restriction base="string">
                        <pattern value="^?\d{1,12}(,\d{1,4})|^?\d{1,12}(,\d{1,3})|^?\d{1,12}(,\d{1,2})|^?\d{1,12}(,\d{1,1})|^?\d{1,12}$"/>
                </restriction>
        </simpleType>
```

```xml
<simpleType name="tyQtyCombustibile">
        <restriction base="string">
                <pattern value="^?\d{1,12}(,\d{1,4})|^?\d{1,12}(,\d{1,3})|^?\d{1,12}(,\d{1,2})|^?\d{1,12}(,\d{1,1})|^?\d{1,12}$"/>
        </restriction>
</simpleType>

<simpleType name="tyPotenzaMW">
        <restriction base="string">
                <pattern value="^?\d{1,12}(,\d{1,4})|^?\d{1,12}(,\d{1,3})|^?\d{1,12}(,\d{1,2})|^?\d{1,12}(,\d{1,1})|^?\d{1,12}$"/>
        </restriction>
</simpleType>

<simpleType name="tyQtyMWh">
 <restriction base="string">
  <pattern value="^?\d{1,12}(,\d{1,3})|^?\d{1,12}(,\d{1,2})|^?\d{1,12}(,\d{1,1})|^?\d{1,12}$"/>
 </restriction>
</simpleType>

<simpleType name="tyPrice">
 <restriction base="string">
  <pattern value="^?\d{1,12}(,\d{1,2})|^?\d{1,12}(,\d{1,1})|^?\d{1,12}$"/>
 </restriction>
</simpleType>

<simpleType name="tyQtyMWhxxx">
 <restriction base="string">
  <pattern value="^[-+]?\d{1,3}((.\d{3})*)|^[-+]?\d{1,9}|^[-+]?\d{1,3}((.\d{3})*)(,\d{1,3})|^[-+]?\d{1,9}(,\d{1,3})$"/>
 </restriction>
</simpleType>

<simpleType name="tyQtyMWhPos">
 <restriction base="string">
  <pattern value="^?\d{1,3}((.\d{3})*)|^?\d{1,3}((.\d{3})*)(,\d{1,3})|^\d{1,9}|^?\d{1,9}(,\d{1,3})$"/>
 </restriction>
</simpleType>

<simpleType name="tyQtyMWhNeg">
 <restriction base="string">
  <pattern value="^-?\d{1,3}((.\d{3})*)|^-?\d{1,3}((.\d{3})*)(,\d{1,3})|^-?\d{1,9}|^-?\d{1,9}(,\d{1,3})$"/>
 </restriction>
</simpleType>

<simpleType name="tyPriceMWh">
 <restriction base="string">
  <pattern value="^?\d{1,3}((.\d{3})*)|\d{1,3}((.\d{3})*)(,\d{1,2})|^?\d{1,9}|^?\d{1,9}(,\d{1,2})$"/>
 </restriction>
```

```xml
</simpleType>
<simpleType name="tyPGMPriceMWh">
 <restriction base="string">
  <pattern value="^?\d{1,3}((.\d{3})*)|\d{1,3}((.\d{3})*)(,\d{1,6})|^?\d{1,9}|^?\d{1,9}(,\d{1,6})$"/>
 </restriction>
</simpleType>

<simpleType name="tyControValore">
 <restriction base="string">
  <pattern value="^[-+]?\d{1,3}((.\d{3})*)|^[-+]?\d{1,3}((.\d{3})*)(,\d{1,2})|^[-+]?\d{1,9}|^[-+]?\d{1,9}(,\d{1,2})$"/>
 </restriction>
</simpleType>

<simpleType name="tyPUN">
 <restriction base="string">
  <pattern value="^?\d{1,3}((.\d{3})*)|\d{1,3}((.\d{3})*)(,\d{1,6})|^?\d{1,9}|^?\d{1,9}(,\d{1,6})$"/>
 </restriction>
</simpleType>

<simpleType name="tyUnitOfMeasure">
 <restriction base="string">
  <enumeration value="MWh"/>
 </restriction>
</simpleType>

<simpleType name="tyTransactionType">
 <restriction base="string">
  <enumeration value="TransactionTimmFA" />
  <enumeration value="tyError" />
  <enumeration value="TransactionContratto" />
  <enumeration value="TransactionItemContratto" />
  <enumeration value="TransactionQuoteCapacita" />
 </restriction>
</simpleType>

<simpleType name="tyReasonType">
 <restriction base="string">
  <minLength value="0" />
  <maxLength value="32" />
 </restriction>
</simpleType>
```

```xml
<simpleType name="tyReasonTextType">
 <restriction base="string">
  <minLength value="0" />
  <maxLength value="1024" />
 </restriction>
</simpleType>
<simpleType name="yesNoType">
 <restriction base="string">
  <enumeration value="Yes"/>
  <enumeration value="No"/>
 </restriction>
</simpleType>

<simpleType name="tyMPN">
 <restriction base="string">
  <minLength value="1" />
  <maxLength value="32" />
 </restriction>
</simpleType>

<simpleType name="marketType">
 <restriction base="string">
  <enumeration value="MGP"/>
  <enumeration value="MA1"/>
  <enumeration value="MB"/>
  <enumeration value="MSD"/>
 </restriction>
</simpleType>

<simpleType name="tyTipoOperazione">
 <restriction base="string">
  <enumeration value="AddNew"/>
  <enumeration value="Modify"/>
 </restriction>
</simpleType>

        <simpleType name="tyTipoOperazione2">
                <restriction base="string">
                        <enumeration value="AddNew"/>
                        <enumeration value="DeleteInsert"/>
                </restriction>
        </simpleType>
</schema>
```

3   XML TRANSACTIONS THAT USERS ENTER INTO THE PDE

3.1 Contract

```xml
<?xml version='1.0' encoding='ISO-8859-1'?>
<Message
    xmlns:xsd='http://www.w3.org/2001/XMLSchema'
    xmlns:xsi='http://www.w3.org/2001/XMLSchema-instance'
    MessageDate='2009-03-11'
    xmlns='urn:XML-TIMM'
    MessageType='Request'>
    <Header>
        <Sender>
            <OperatorMsgCode>OEXXXX</OperatorMsgCode>
        </Sender>
        <Receiver>
            <OperatorMsgCode>IDGME</OperatorMsgCode>
        </Receiver>
    </Header>
  <Transaction>
     <Contratto>
        <ContrattoCommon>
           <CodiceContratto>XX-XX-XXXXZ</CodiceContratto>
           <DataStipula>20090201</DataStipula>
           <Cedente>OEXXXX</Cedente>
           <RagioneSocialeCedente>Operatore elettrico1 SPA</RagioneSocialeCedente>
           <Acquirente>OEYYYY</Acquirente>
           <RagioneSocialeAcquirente>Operatore elettrico2 SPA</RagioneSocialeAcquirente>
           <ControparteElettrica>true</ControparteElettrica>
           <Tipologia>OTC</Tipologia>
           <MercatoOrganizzato>MKT1</MercatoOrganizzato>
           <Struttura>altro</Struttura>
           <Descrizione>campo descrizione</Descrizione>
           <Indicizzato>false</Indicizzato>
           <Indicizzazione>campo descrizione indicizzazione</Indicizzazione>
           <Flessibile>true</Flessibile>
```

```xml
<DescrizioneFlessibile>campo descrizione indicizzazione</DescrizioneFlessibile>
<PrezzoRiferimento>Pun</PrezzoRiferimento>
<Frequenza>3</Frequenza>

<ProfiloGiornaliero Data='20090401'>
        <ProfiloOrario Ora='1' Prezzo='12'>33,75</ProfiloOrario>
        <ProfiloOrario Ora='2' Prezzo='14'>33,76</ProfiloOrario>
        <ProfiloOrario Ora='3' Prezzo='16'>33,77</ProfiloOrario>
        <ProfiloOrario Ora='4' Prezzo='18'>33,78</ProfiloOrario>
        <ProfiloOrario Ora='5' Prezzo='20'>33,79</ProfiloOrario>
        <ProfiloOrario Ora='6' Prezzo='22'>33,8</ProfiloOrario>
        <ProfiloOrario Ora='7' Prezzo='24'>33,81</ProfiloOrario>
        <ProfiloOrario Ora='8' Prezzo='26'>33,82</ProfiloOrario>
        <ProfiloOrario Ora='9' Prezzo='28'>33,83</ProfiloOrario>
        <ProfiloOrario Ora='10' Prezzo='30'>33,84</ProfiloOrario>
        <ProfiloOrario Ora='11' Prezzo='32'>33,85</ProfiloOrario>
        <ProfiloOrario Ora='12' Prezzo='34'>33,86</ProfiloOrario>
        <ProfiloOrario Ora='13' Prezzo='36'>33,87</ProfiloOrario>
        <ProfiloOrario Ora='14' Prezzo='38'>33,88</ProfiloOrario>
        <ProfiloOrario Ora='15' Prezzo='40'>33,89</ProfiloOrario>
        <ProfiloOrario Ora='16' Prezzo='42'>33,9</ProfiloOrario>
        <ProfiloOrario Ora='17' Prezzo='44'>33,91</ProfiloOrario>
        <ProfiloOrario Ora='18' Prezzo='46'>33,92</ProfiloOrario>
        <ProfiloOrario Ora='19' Prezzo='48'>33,93</ProfiloOrario>
        <ProfiloOrario Ora='20' Prezzo='50'>33,94</ProfiloOrario>
        <ProfiloOrario Ora='21' Prezzo='52'>33,95</ProfiloOrario>
        <ProfiloOrario Ora='22' Prezzo='54'>33,96</ProfiloOrario>
        <ProfiloOrario Ora='23' Prezzo='56'>33,97</ProfiloOrario>
        <ProfiloOrario Ora='24' Prezzo='58'>33,98</ProfiloOrario>
</ProfiloGiornaliero>
<ProfiloGiornaliero Data='20090402'>
        <ProfiloOrario Ora='1' Prezzo='12'>57</ProfiloOrario>
        <ProfiloOrario Ora='2' Prezzo='14'>33,76</ProfiloOrario>
        <ProfiloOrario Ora='3' Prezzo='16'>33,77</ProfiloOrario>
        <ProfiloOrario Ora='4' Prezzo='18'>33,78</ProfiloOrario>
        <ProfiloOrario Ora='5' Prezzo='20'>33,79</ProfiloOrario>
        <ProfiloOrario Ora='6' Prezzo='22'>33,8</ProfiloOrario>
        <ProfiloOrario Ora='7' Prezzo='24'>33,81</ProfiloOrario>
        <ProfiloOrario Ora='8' Prezzo='26'>33,82</ProfiloOrario>
        <ProfiloOrario Ora='9' Prezzo='28'>33,83</ProfiloOrario>
        <ProfiloOrario Ora='10' Prezzo='30'>33,84</ProfiloOrario>
        <ProfiloOrario Ora='11' Prezzo='32'>33,85</ProfiloOrario>
```

```xml
                        <ProfiloOrario Ora='12' Prezzo='34'>33,86</ProfiloOrario>
                        <ProfiloOrario Ora='13' Prezzo='36'>33,87</ProfiloOrario>
                        <ProfiloOrario Ora='14' Prezzo='38'>33,88</ProfiloOrario>
                        <ProfiloOrario Ora='15' Prezzo='40'>33,89</ProfiloOrario>
                        <ProfiloOrario Ora='16' Prezzo='42'>33,9</ProfiloOrario>
                        <ProfiloOrario Ora='17' Prezzo='44'>33,91</ProfiloOrario>
                        <ProfiloOrario Ora='18' Prezzo='46'>33,92</ProfiloOrario>
                        <ProfiloOrario Ora='19' Prezzo='48'>33,93</ProfiloOrario>
                        <ProfiloOrario Ora='20' Prezzo='50'>33,94</ProfiloOrario>
                        <ProfiloOrario Ora='21' Prezzo='52'>33,95</ProfiloOrario>
                        <ProfiloOrario Ora='22' Prezzo='54'>33,96</ProfiloOrario>
                        <ProfiloOrario Ora='23' Prezzo='56'>33,97</ProfiloOrario>
                        <ProfiloOrario Ora='24' Prezzo='58'>33,98</ProfiloOrario>
                </ProfiloGiornaliero>
            </ContrattoCommon>
        </Contratto>
    </Transaction>
</Message>
```

3.1.1 Contratto.xsd

```xml
<?xml version="1.0" encoding="ISO-8859-1"?>
<schema xmlns="http://www.w3.org/2001/XMLSchema" targetNamespace="urn:XML-TIMM" xmlns:pd="urn:XML-TIMM" elementFormDefault="qualified">
        <include schemaLocation="RegistrationTypes.xsd" />
        <include schemaLocation="Types.xsd" />
        <complexType name="tyContrattoCommon">
                <sequence>
                        <element name="CodiceContratto" type="pd:tyCodiceContratto" minOccurs="1" maxOccurs="1" />
                        <element name="DataStipula" type="pd:tyDate" minOccurs="0" maxOccurs="1" />
                        <element name="Cedente" type="pd:tyCedenteAcquirente" minOccurs="1" maxOccurs="1" />
                        <element name="RagioneSocialeCedente" type="pd:tyRagioneSociale" minOccurs="0" maxOccurs="1" />
                        <element name="Acquirente" type="pd:tyCedenteAcquirente" minOccurs="1" maxOccurs="1" />
                        <element name="RagioneSocialeAcquirente" type="pd:tyRagioneSociale" minOccurs="0" maxOccurs="1" />
                        <element name="ControparteElettrica" type="boolean" minOccurs="1" maxOccurs="1" />
                        <element name="Tipologia" type="pd:tyTipologiaContratto" minOccurs="1" maxOccurs="1" />
                        <element name="MercatoOrganizzato" type="pd:tyMercatoOrganizzato" minOccurs="0" maxOccurs="1" />
                        <element name="Struttura" type="pd:tyStrutturaContratto" minOccurs="1" maxOccurs="1" />
                        <element name="Descrizione" type="pd:tyDescrizioneContratto" minOccurs="0" maxOccurs="1" />
                        <element name="Indicizzato" type="boolean" minOccurs="1" maxOccurs="1" />
                        <element name="Indicizzazione" type="pd:tyIndicizzazioneContratto" minOccurs="0" maxOccurs="1" />
                        <element name="Flessibile" type="boolean" minOccurs="1" maxOccurs="1" />
                        <element name="DescrizioneFlessibile" type="pd:tyIndicizzazioneContratto" minOccurs="0" maxOccurs="1" />
                        <element name="Premio" type="pd:tyPrice" minOccurs="0" maxOccurs="1" />
                        <element name="ProfiloGiornaliero" type="pd:ProfiloGiornaliero" minOccurs="1" maxOccurs="unbounded" />
                        <element name="PrezzoRiferimento" type="pd:tyPrezzoRiferimento" minOccurs="1" maxOccurs="1" />
                        <element name="DescrizionePrezzoRiferimento" type="pd:tyDescrizioneContratto" minOccurs="0" maxOccurs="1" />
                        <element name="Frequenza" type="pd:tyFrequenza" minOccurs="0" maxOccurs="1" />
                </sequence>
        </complexType>
        <complexType name="ProfiloGiornaliero">
  <sequence>
   <element name="ProfiloOrario" type="pd:ProfiloOrario" minOccurs="1" maxOccurs="25" />
  </sequence>
  <attribute name="Data" type="pd:tyDate" use="required" />
        </complexType>
 <complexType name="ProfiloOrario">
  <simpleContent>
   <extension base="pd:tyQtyMWh">
    <attribute name="Ora" type="pd:tyHourIntervalType" use="required" />
    <attribute name="Prezzo" type="pd:tyPrice" use="optional" />
   </extension>
  </simpleContent>
 </complexType>
</schema>
```

3.2 ItemContratto

```xml
<?xml version='1.0' encoding='ISO-8859-1'?>
<Message
    xmlns:xsd='http://www.w3.org/2001/XMLSchema'
    xmlns:xsi='http://www.w3.org/2001/XMLSchema-instance'
    MessageDate='2009-03-26'
    xmlns='urn:XML-TIMM'
    MessageType='Request'>
    <Header>
        <Sender>
            <OperatorMsgCode>OEXXXX</OperatorMsgCode>
        </Sender>
        <Receiver>
            <OperatorMsgCode>IDGME</OperatorMsgCode>
        </Receiver>
    </Header>
  <Transaction>
    <ItemContratto>
      <ItemContrattoCommon>
        <CodiceContratto>XX-XX-XXXXX</CodiceContratto>
        <ProfiloGiornaliero Data='20070430'>
         <ProfiloOrario Ora='1' Prezzo='12'>33,75</ProfiloOrario>
         <ProfiloOrario Ora='2' Prezzo='14'>33,76</ProfiloOrario>
         <ProfiloOrario Ora='3' Prezzo='16'>33,77</ProfiloOrario>
         <ProfiloOrario Ora='4' Prezzo='18'>33,78</ProfiloOrario>
         <ProfiloOrario Ora='5' Prezzo='20'>33,79</ProfiloOrario>
         <ProfiloOrario Ora='6' Prezzo='22'>33,8</ProfiloOrario>
         <ProfiloOrario Ora='7' Prezzo='24'>33,81</ProfiloOrario>
         <ProfiloOrario Ora='8' Prezzo='26'>33,82</ProfiloOrario>
         <ProfiloOrario Ora='9' Prezzo='28'>33,83</ProfiloOrario>
         <ProfiloOrario Ora='10' Prezzo='30'>33,84</ProfiloOrario>
         <ProfiloOrario Ora='11' Prezzo='32'>33,85</ProfiloOrario>
         <ProfiloOrario Ora='12' Prezzo='34'>33,86</ProfiloOrario>
         <ProfiloOrario Ora='13' Prezzo='36'>33,87</ProfiloOrario>
         <ProfiloOrario Ora='14' Prezzo='38'>33,88</ProfiloOrario>
         <ProfiloOrario Ora='15' Prezzo='40'>33,89</ProfiloOrario>
         <ProfiloOrario Ora='16' Prezzo='42'>33,9</ProfiloOrario>
         <ProfiloOrario Ora='17' Prezzo='44'>33,91</ProfiloOrario>
         <ProfiloOrario Ora='18' Prezzo='46'>33,92</ProfiloOrario>
```

```xml
            <ProfiloOrario Ora='19' Prezzo='48'>33,93</ProfiloOrario>
            <ProfiloOrario Ora='20' Prezzo='50'>33,94</ProfiloOrario>
            <ProfiloOrario Ora='21' Prezzo='52'>33,95</ProfiloOrario>
            <ProfiloOrario Ora='22' Prezzo='54'>33,96</ProfiloOrario>
            <ProfiloOrario Ora='23' Prezzo='56'>33,97</ProfiloOrario>
            <ProfiloOrario Ora='24' Prezzo='58'>33,98</ProfiloOrario>
          </ProfiloGiornaliero>
          <ProfiloGiornaliero Data='20070501'>
           <ProfiloOrario Ora='1' Prezzo='12'>57</ProfiloOrario>
           <ProfiloOrario Ora='2' Prezzo='14'>33,76</ProfiloOrario>
           <ProfiloOrario Ora='3' Prezzo='16'>33,77</ProfiloOrario>
           <ProfiloOrario Ora='4' Prezzo='18'>33,78</ProfiloOrario>
           <ProfiloOrario Ora='5' Prezzo='20'>33,79</ProfiloOrario>
           <ProfiloOrario Ora='6' Prezzo='22'>33,8</ProfiloOrario>
           <ProfiloOrario Ora='7' Prezzo='24'>33,81</ProfiloOrario>
           <ProfiloOrario Ora='8' Prezzo='26'>33,82</ProfiloOrario>
           <ProfiloOrario Ora='9' Prezzo='28'>33,83</ProfiloOrario>
           <ProfiloOrario Ora='10' Prezzo='30'>33,84</ProfiloOrario>
           <ProfiloOrario Ora='11' Prezzo='32'>33,85</ProfiloOrario>
           <ProfiloOrario Ora='12' Prezzo='34'>33,86</ProfiloOrario>
           <ProfiloOrario Ora='13' Prezzo='36'>33,87</ProfiloOrario>
           <ProfiloOrario Ora='14' Prezzo='38'>33,88</ProfiloOrario>
           <ProfiloOrario Ora='15' Prezzo='40'>33,89</ProfiloOrario>
           <ProfiloOrario Ora='16' Prezzo='42'>33,9</ProfiloOrario>
           <ProfiloOrario Ora='17' Prezzo='44'>33,91</ProfiloOrario>
           <ProfiloOrario Ora='18' Prezzo='46'>33,92</ProfiloOrario>
           <ProfiloOrario Ora='19' Prezzo='48'>33,93</ProfiloOrario>
           <ProfiloOrario Ora='20' Prezzo='50'>33,94</ProfiloOrario>
           <ProfiloOrario Ora='21' Prezzo='52'>33,95</ProfiloOrario>
           <ProfiloOrario Ora='22' Prezzo='54'>33,96</ProfiloOrario>
           <ProfiloOrario Ora='23' Prezzo='56'>33,97</ProfiloOrario>
           <ProfiloOrario Ora='24' Prezzo='58'>33,98</ProfiloOrario>
          </ProfiloGiornaliero>
        </ItemContrattoCommon>
      </ItemContratto>
    </Transaction>
  </Message>
```

3.2.1 ItemContratto.xsd

```xml
<?xml version="1.0" encoding="iso-8859-1"?>
<schema xmlns="http://www.w3.org/2001/XMLSchema" targetNamespace="urn:XML-TIMM" xmlns:pd="urn:XML-TIMM" elementFormDefault="qualified">
        <include schemaLocation="RegistrationTypes.xsd" />
        <include schemaLocation="Types.xsd" />
        <complexType name="tyItemContrattoCommon">
                <sequence>
                        <element name="CodiceContratto" type="pd:tyCodiceContratto" minOccurs="1" maxOccurs="1" />
    <element name ="ProfiloGiornaliero" type="pd:ProfiloGiornalieroItem" minOccurs="1" maxOccurs="unbounded" />
                </sequence>
        </complexType>
        <complexType name="ProfiloGiornalieroItem">
  <sequence>
   <element name ="ProfiloOrario" type="pd:ProfiloOrarioItem" minOccurs="1" maxOccurs="25" />
  </sequence>
  <attribute name="Data" type="pd:tyDate" use="required" />
        </complexType>
 <complexType name="ProfiloOrarioItem">
  <simpleContent>
   <extension base="pd:tyQtyMWh">
    <attribute name="Ora" type="pd:tyHourIntervalType" use="required" />
    <attribute name="Prezzo" type="pd:tyPrice" use="optional" />
   </extension>
  </simpleContent>
 </complexType>
</schema>
```

3.3 Capacity shares

```xml
<?xml version="1.0" encoding="iso-8859-1"?>
<Message xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema" MessageType="Request" MessageDate="2012-03-09"
MessageTime="13:37:29.3846727+01:00" xmlns="urn:XML-TIMM">
 <Header>
  <Sender>
   <OperatorMsgCode>OEXXXXP</OperatorMsgCode>
  </Sender>
  <Receiver>
   <OperatorMsgCode>IDGME</OperatorMsgCode>
  </Receiver>
 </Header>
 <Transaction>
  <QuoteCapacita>
   <QuoteCapacitaCommon>
    <CodiceUnita>UP_DI0342_CNOR_G</CodiceUnita>
    <QuoteCapacitaGiornaliera Data="20120401">
     <QuoteCapacitaOraria Ora="1">
      <QuoteCapacitaDelegato CodiceOperatoreDelegato="OEXXXXP">0,8</QuoteCapacitaDelegato>
      <QuoteCapacitaDelegato CodiceOperatoreDelegato="OEXXXXG">0,2</QuoteCapacitaDelegato>
     </QuoteCapacitaOraria>
     <QuoteCapacitaOraria Ora="2">
      <QuoteCapacitaDelegato CodiceOperatoreDelegato="OEXXXXP">0,4</QuoteCapacitaDelegato>
      <QuoteCapacitaDelegato CodiceOperatoreDelegato="OEXXXXG">0,6</QuoteCapacitaDelegato>
     </QuoteCapacitaOraria>
     <QuoteCapacitaOraria Ora="3">
      <QuoteCapacitaDelegato CodiceOperatoreDelegato="OEXXXXP">0,3</QuoteCapacitaDelegato>
      <QuoteCapacitaDelegato CodiceOperatoreDelegato="OEXXXXG">0,7</QuoteCapacitaDelegato>
     </QuoteCapacitaOraria>
     <QuoteCapacitaOraria Ora="4">
      <QuoteCapacitaDelegato CodiceOperatoreDelegato="OEXXXXP">0,9</QuoteCapacitaDelegato>
      <QuoteCapacitaDelegato CodiceOperatoreDelegato="OEXXXXG">0,1</QuoteCapacitaDelegato>
     </QuoteCapacitaOraria>
     <QuoteCapacitaOraria Ora="5">
      <QuoteCapacitaDelegato CodiceOperatoreDelegato="OEXXXXP">0,3</QuoteCapacitaDelegato>
      <QuoteCapacitaDelegato CodiceOperatoreDelegato="OEXXXXG">0,7</QuoteCapacitaDelegato>
     </QuoteCapacitaOraria>
     <QuoteCapacitaOraria Ora="6">
      <QuoteCapacitaDelegato CodiceOperatoreDelegato="OEXXXXP">0,3</QuoteCapacitaDelegato>
      <QuoteCapacitaDelegato CodiceOperatoreDelegato="OEXXXXG">0,7</QuoteCapacitaDelegato>
     </QuoteCapacitaOraria>
     <QuoteCapacitaOraria Ora="7">
      <QuoteCapacitaDelegato CodiceOperatoreDelegato="OEXXXXP">0,9</QuoteCapacitaDelegato>
      <QuoteCapacitaDelegato CodiceOperatoreDelegato="OEXXXXG">0,1</QuoteCapacitaDelegato>
     </QuoteCapacitaOraria>
```

```xml
<QuoteCapacitaOraria Ora="8">
 <QuoteCapacitaDelegato CodiceOperatoreDelegato="OEXXXXP">0,5</QuoteCapacitaDelegato>
 <QuoteCapacitaDelegato CodiceOperatoreDelegato="OEXXXXG">0,5</QuoteCapacitaDelegato>
</QuoteCapacitaOraria>
<QuoteCapacitaOraria Ora="9">
 <QuoteCapacitaDelegato CodiceOperatoreDelegato="OEXXXXP">0,4</QuoteCapacitaDelegato>
 <QuoteCapacitaDelegato CodiceOperatoreDelegato="OEXXXXG">0,6</QuoteCapacitaDelegato>
</QuoteCapacitaOraria>
<QuoteCapacitaOraria Ora="10">
 <QuoteCapacitaDelegato CodiceOperatoreDelegato="OEXXXXP">0,4</QuoteCapacitaDelegato>
 <QuoteCapacitaDelegato CodiceOperatoreDelegato="OEXXXXG">0,6</QuoteCapacitaDelegato>
</QuoteCapacitaOraria>
<QuoteCapacitaOraria Ora="11">
 <QuoteCapacitaDelegato CodiceOperatoreDelegato="OEXXXXP">0,9</QuoteCapacitaDelegato>
 <QuoteCapacitaDelegato CodiceOperatoreDelegato="OEXXXXG">0,1</QuoteCapacitaDelegato>
</QuoteCapacitaOraria>
<QuoteCapacitaOraria Ora="12">
 <QuoteCapacitaDelegato CodiceOperatoreDelegato="OEXXXXP">0,3</QuoteCapacitaDelegato>
 <QuoteCapacitaDelegato CodiceOperatoreDelegato="OEXXXXG">0,7</QuoteCapacitaDelegato>
</QuoteCapacitaOraria>
<QuoteCapacitaOraria Ora="13">
 <QuoteCapacitaDelegato CodiceOperatoreDelegato="OEXXXXP">0,1</QuoteCapacitaDelegato>
 <QuoteCapacitaDelegato CodiceOperatoreDelegato="OEXXXXG">0,9</QuoteCapacitaDelegato>
</QuoteCapacitaOraria>
<QuoteCapacitaOraria Ora="14">
 <QuoteCapacitaDelegato CodiceOperatoreDelegato="OEXXXXP">0,3</QuoteCapacitaDelegato>
 <QuoteCapacitaDelegato CodiceOperatoreDelegato="OEXXXXG">0,7</QuoteCapacitaDelegato>
</QuoteCapacitaOraria>
<QuoteCapacitaOraria Ora="15">
 <QuoteCapacitaDelegato CodiceOperatoreDelegato="OEXXXXP">0,1</QuoteCapacitaDelegato>
 <QuoteCapacitaDelegato CodiceOperatoreDelegato="OEXXXXG">0,9</QuoteCapacitaDelegato>
</QuoteCapacitaOraria>
<QuoteCapacitaOraria Ora="16">
 <QuoteCapacitaDelegato CodiceOperatoreDelegato="OEXXXXP">0,6</QuoteCapacitaDelegato>
 <QuoteCapacitaDelegato CodiceOperatoreDelegato="OEXXXXG">0,4</QuoteCapacitaDelegato>
</QuoteCapacitaOraria>
<QuoteCapacitaOraria Ora="17">
 <QuoteCapacitaDelegato CodiceOperatoreDelegato="OEXXXXP">0,8</QuoteCapacitaDelegato>
 <QuoteCapacitaDelegato CodiceOperatoreDelegato="OEXXXXG">0,2</QuoteCapacitaDelegato>
</QuoteCapacitaOraria>
<QuoteCapacitaOraria Ora="18">
 <QuoteCapacitaDelegato CodiceOperatoreDelegato="OEXXXXP">0,2</QuoteCapacitaDelegato>
 <QuoteCapacitaDelegato CodiceOperatoreDelegato="OEXXXXG">0,8</QuoteCapacitaDelegato>
</QuoteCapacitaOraria>
<QuoteCapacitaOraria Ora="19">
 <QuoteCapacitaDelegato CodiceOperatoreDelegato="OEXXXXP">0,5</QuoteCapacitaDelegato>
 <QuoteCapacitaDelegato CodiceOperatoreDelegato="OEXXXXG">0,5</QuoteCapacitaDelegato>
</QuoteCapacitaOraria>
<QuoteCapacitaOraria Ora="20">
```

```xml
           <QuoteCapacitaDelegato CodiceOperatoreDelegato="OEXXXXP">0,4</QuoteCapacitaDelegato>
           <QuoteCapacitaDelegato CodiceOperatoreDelegato="OEXXXXG">0,6</QuoteCapacitaDelegato>
          </QuoteCapacitaOraria>
          <QuoteCapacitaOraria Ora="21">
           <QuoteCapacitaDelegato CodiceOperatoreDelegato="OEXXXXP">0,6</QuoteCapacitaDelegato>
           <QuoteCapacitaDelegato CodiceOperatoreDelegato="OEXXXXG">0,4</QuoteCapacitaDelegato>
          </QuoteCapacitaOraria>
          <QuoteCapacitaOraria Ora="22">
           <QuoteCapacitaDelegato CodiceOperatoreDelegato="OEXXXXP">0,5</QuoteCapacitaDelegato>
           <QuoteCapacitaDelegato CodiceOperatoreDelegato="OEXXXXG">0,5</QuoteCapacitaDelegato>
          </QuoteCapacitaOraria>
          <QuoteCapacitaOraria Ora="23">
           <QuoteCapacitaDelegato CodiceOperatoreDelegato="OEXXXXP">0,5</QuoteCapacitaDelegato>
           <QuoteCapacitaDelegato CodiceOperatoreDelegato="OEXXXXG">0,5</QuoteCapacitaDelegato>
          </QuoteCapacitaOraria>
          <QuoteCapacitaOraria Ora="24">
           <QuoteCapacitaDelegato CodiceOperatoreDelegato="OEXXXXP">0,2</QuoteCapacitaDelegato>
           <QuoteCapacitaDelegato CodiceOperatoreDelegato="OEXXXXG">0,8</QuoteCapacitaDelegato>
          </QuoteCapacitaOraria>
         </QuoteCapacitaGiornaliera>
        </QuoteCapacitaCommon>
       </QuoteCapacita>
      </Transaction>
     </Message>
```

3.3.1 QuoteCapacita.xsd

```xml
<?xml version="1.0" encoding="iso-8859-1"?>
<schema xmlns="http://www.w3.org/2001/XMLSchema" targetNamespace="urn:XML-TIMM" xmlns:pd="urn:XML-TIMM" elementFormDefault="qualified">
        <include schemaLocation="RegistrationTypes.xsd" />
        <include schemaLocation="Types.xsd" />
        <complexType name="tyQuoteCapacitaCommon">
                <sequence>
                        <element name="CodiceUnita" type="pd:tyCodiceUnita" minOccurs="1" maxOccurs="1" />
                        <element name="CodiceOperatore" type="pd:tyCodiceperatore" minOccurs="1" maxOccurs="1" />
                        <element name="QuoteCapacitaGiornaliera" type="pd:QuoteCapacitaGiornaliera" minOccurs="1" maxOccurs="unbounded" />
                </sequence>
        </complexType>
        <complexType name="QuoteCapacitaGiornaliera">
  <sequence>
   <element name="QuoteCapacitaOraria" type="pd:QuoteCapacitaOraria" minOccurs="1" maxOccurs="25" />
  </sequence>
  <attribute name="Data" type="pd:tyDate" use="required" />
 </complexType>
 <complexType name="QuoteCapacitaOraria">
  <sequence>
   <element name="QuoteCapacitaDelegato" type="pd:QuoteCapacitaDelegato" minOccurs="1" maxOccurs="unbounded" />
  </sequence>
  <attribute name="Ora" type="pd:tyHourIntervalType" use="required" />
 </complexType>
 <complexType name="QuoteCapacitaDelegato">
  <simpleContent>
   <extension base="pd:tyAlpha">
    <attribute name="CodiceOperatoreDelegato" type="pd:tyCodiceOperatore" use="required" />
   </extension>
  </simpleContent>
 </complexType>
</schema>
```

4 XML TRANSACTIONS AVAILABLE FOR USERS

4.1 FunctionalAcknowledgement

4.1.1 Positive Functional Acknowledgement

```xml
<?xml version="1.0" encoding="iso-8859-1"?>
<Message xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema"
MessageType="Response" MessageDate="2009-03-25" MessageTime="10:48:49.8281250+01:00"
ResponseReferenceMessageCode="814" ResponseMessageStatus="Accepted" xmlns="urn:XML-TIMM">
  <Header>
    <Sender>
      <OperatorMsgCode>IDGME</OperatorMsgCode>
    </Sender>
    <Receiver>
      <OperatorMsgCode>OEXXXX</OperatorMsgCode>
    </Receiver>
  </Header>
  <Transaction>
    <TimmFA>
      <FunctionalAcknowledgement TransactionType="TransactionQuoteCapacita" Status="Accepted" XmlOrder="1" />
    </TimmFA>
  </Transaction>
  <Transaction>
    <TimmFA>
      <FunctionalAcknowledgement TransactionType="TransactionQuoteCapacita" Status="Accepted" XmlOrder="2" />
    </TimmFA>
  </Transaction>
</Message>
```

4.1.2   Negative Functional Acknowledgement

```xml
<?xml version="1.0" encoding="iso-8859-1"?>
<Message xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema"
MessageType="Response" MessageDate="2009-03-25" MessageTime="10:47:18.7500000+01:00"
ResponseReferenceMessageCode="812" ResponseMessageStatus="Rejected" xmlns="urn:XML-TIMM">
  <Header>
    <Sender>
      <OperatorMsgCode>IDGME</OperatorMsgCode>
    </Sender>
    <Receiver>
      <OperatorMsgCode>OEAESRL</OperatorMsgCode>
    </Receiver>
  </Header>
  <Transaction>
    <TimmFA>
      <FunctionalAcknowledgement TransactionType="TransactionQuoteCapacita" Status="Rejected" XmlOrder="1">
        <RejectInformation>
          <Reason>QC05</Reason>
          <ReasonText>la quota alfa per la data 02/03/2009 deve essere comunicata entro 01/03/2009 12.00.00
(data corrente: 25/03/2009 10.47.17)</ReasonText>
        </RejectInformation>
      </FunctionalAcknowledgement>
    </TimmFA>
  </Transaction>
  <Transaction>
    <TimmFA>
      <FunctionalAcknowledgement TransactionType="TransactionQuoteCapacita" Status="Rejected" XmlOrder="2">
        <RejectInformation>
          <Reason>QC05</Reason>
          <ReasonText>la quota alfa per la data 04/03/2009 deve essere comunicata entro 03/03/2009 12.00.00
(data corrente: 25/03/2009 10.47.17)</ReasonText>
        </RejectInformation>
      </FunctionalAcknowledgement>
    </TimmFA>
  </Transaction>
</Message>
```

4.1.3   FunctionalAcknowledgement.xsd

```xml
<?xml version="1.0" encoding="iso-8859-1" ?>
<schema
  xmlns="http://www.w3.org/2001/XMLSchema"
  targetNamespace="urn:XML-TIMM"
  xmlns:pd="urn:XML-TIMM"
  elementFormDefault="qualified">
  <include schemaLocation="RegistrationTypes.xsd" />
  <include schemaLocation="BaseMessageTypes.xsd" />
  <include schemaLocation="Types.xsd" />
  <complexType name="tyFunctionalAcknowledgement">
   <sequence>
    <element ref = "pd:RejectInformation" minOccurs="0" maxOccurs="unbounded"/>
   </sequence>
   <attribute name="TransactionType" type="pd:tyTransactionType" use="optional"/>
   <attribute name="Status" type="pd:tyTransactionStatus" use="required"/>
   <attribute name="MPN" type="string" use="optional"/>
   <attribute name="XmlOrder" type="int" use="required"/>
  </complexType>
</schema>
```
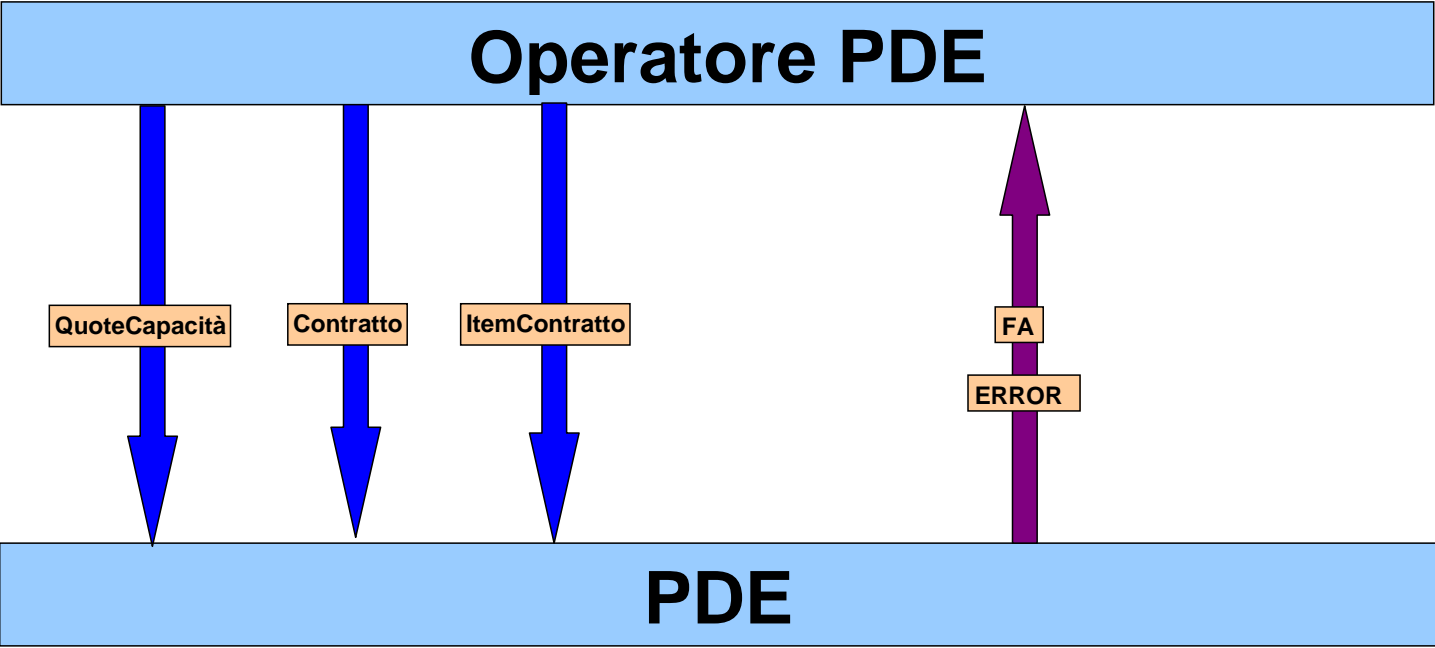
4.2   Error message (ref xsd: TimmBaseMessage.xsd)

```xml
<?xml version="1.0" encoding="iso-8859-1"?>
<Message xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema"
MessageDate="2009-03-25" MessageTime="10:44:25.1406250+01:00" ResponseReferenceMessageCode="809"
ResponseMessageStatus="Rejected" xmlns="urn:XML-TIMM">
  <Header>
    <Sender>
      <OperatorMsgCode>IDGME</OperatorMsgCode>
    </Sender>
    <Receiver>
      <OperatorMsgCode>IDAU</OperatorMsgCode>
    </Receiver>
  </Header>
  <Error Code="M01" Description="The 'Ora' attribute is invalid - The value '' is invalid according to its
datatype 'urn:XML-TIMM:tyHourIntervalType' - The string '' is not a valid Integer value." />
</Message>
```

	Description	Possible Values
Element / Attribute Name	The name of the Element or Attribute used in the XML file	N/A
Attribute / Element	Whether a field is an Attribute or an Element within the XML document	A = Attribute
		E = Element
Valid Information in Field (enumeration)	Validation rules for element or attribute value, including list of possible values in enumeration	
Data Type	Describes the type of data expected in the field	A/N= AlphaNumeric (Field allows for alphabetic values, numeric values, as well as any combination of alphabetic and numeric values)
		N= Numeric (integers only)
		N/A= Not Applicable
		Enum= The only valid values are listed.
		Date= Date format used.
		Bool = boolean
		Decimal= Illustrates the position of the decimal point in reference to the overall length of the field.
Occurances Min/Max	Describes the expected number of times that the attribute or element can occur within the XML document	n/x where n= the minimum number of occurrances allowed for the element or attribute and x = the maximum number of occurrances for the element or attribute; or a specification directly of the number of occurrances within another structure, such as "1 per PIPEDocument".
Field Length	The expected length of the field	either a number which represents the required number of characters, or max=nn, where nn is the maximum number of digits or characters allowed for the field
		N/A= Not Applicable
Definition	The explanation of the Element or Attribute	N/A

Contratto Implementation Guide for PDE

Element / Attribute names	Attribute / Element	Valid Information in Field (enumeration)	Data Type	Occurances Min/Max	Field Length	Definition
Message		N/A	N/A	1 for file	N/A	
xmlns:xsd	A		A/N	1/1		Associates the actual schema instance being used to the name space.
xmlns:xsi	A		A/N	1/1		Defines the schema instance being used.
Version	E	1.0.2.0	A/N		max=7	Identifies the version of the CeMessageSchema
Header	E	(see Header data structure)		1/1		Sender and recipient of the message
Transaction	E	(see Transaction data structure)		1 or more		Transaction Container
MessageCode	A		A/N	0/1	min=1. max=32	Message identifier
MessageType	A	Request	Enum	0/1		Messag Type
MessageDate	A	Valid Date (YYYY-MM-DD)	Date	1/1		Date of the message
MessageTime	A	ValidTime (hh:mm:ss.ffffff+01:00)	Time	0/1		Time of the message
MessageSubject	A		Enum	0/1		identifies the type of the transaction inside the message
Header						
Sender	E	(see Sender data structure)		1/1		message sender
Receiver	E	(see Receiver data structure)		1/1		message receiver
Sender				1/1		
OperatorMsgCode	E		A/N		min=1 max=16	The unique identifier of the Sender
CompanyName	E		A/N	0/1	min=1 max=60	The Name of the Sender
UserMsgCode	E		A/N	0/1	min=1 max=16	The unique identifier for the user who sends
Receiver						
OperatorMsgCode	E	(IDGME)	A/N	1/1	min=1 max=16	The unique identifier of the Receiver
CompanyName	E		A/N	0/1	min=1 max=60	The Name of the Receiver
UserMsgCode	E		A/N	0/1	min=1 max=16	The unique identifier for the user who receives
Transaction						
Contratto	E	(see Contratto data structure)		1/1		
MPN	A		A/N	0/1	max=32	identifier for the transaction assigned by the Operator
Contratto						
ContrattoCommon	E	(see ContrattoCommon data structure)		1/1		
ContrattoCommon						
CodiceContratto	E		A/N	1/1	min=1 max=32	Contratto unique identifier
DataStipula	E	valid date (YYYYMMDD)	Date	1/1	decimal(8,0)	Contratto's date of conclusion
Cedente	E		A/N	1/1	min=1 max=150	Seller's ETSO code (only for electricity operators)/ VAT
RagioneSocialeCedente	E		A/N	0/1	max=256	Seller's name
Acquirente	E		A/N	1/1	min=1 max=150	Buyer's ETSO code (only for electricity operators)/ VAT
RagioneSocialeAcquirente	E		A/N	0/1	max=256	Buyer's name
ControparteElettrica	E	true,false	Bool	1/1	bool	type of counterparty
Tipologia	E	STD,OTCO,OTC	Enum	1/1		OTC (over the counter), STD (organized market), OTCO (organized over the counter)
MercatoOrganizzato	E		A/N	0/1	min=0 max=256	organized market's code
Struttura	E	future, swap, opzione,forward, altro	Enum	1/1		structure of the contract
Descrizione	E		A/N	0/1	min=0 max=512	description of the structure if the Struttura is "altro"
Indicizzato	E	true,false	Bool	1/1		indicates whether the contract is indexed in price
Indicizzazione	E		A/N	0/1	min=0 max=256	description of the indexing if the Indicizzato is true
Flessibile	E	true,false	Bool	1/1		indicates whether the contract is indexed both in price and quantity
DescrizioneFlessibile	E		A/N	0/1	min=0 max=256	description of "flessibile" if "flessibile" is true
Premio	E	999999999999,99	Decimal	0/1		Award of contract
PrezzoRiferimento	E	Pun, Pnord, Pmftv, Pcnor, Pcsud, Psud, Pfogn, Pbrrn, Prosn, Psici, Pprgp, Psard, Pfran, Psviz, Paust, Pslov, Pcoac, Pcors, Pgrec, Altro	Enum	1/1		Reference price index
DescrizionePrezzoRiferimento						description of the reference price if the PrezzoRiferimento is "Altro"
Frequenza	E	integer	int	0/1	min=1 max=36	frequency of ex-post comunications
ProfiloGiornaliero	E	(see ProfiloGiornaliero structure)		1 or more		
ProfiloGiornaliero						
ProfiloOrario	E	(see ProfiloOrario structure)		1 to 25		
Data	A	valid date (YYYYMMDD)	Date	1/1		Date
ProfiloOrario	E	999999999999,99	Decimal		(18,3)	Quantity
Ora	A		N	1/1	min=1 max=25	Hour
Prezzo	A	999999999999,99	Decimal	0/1	(18,2)	Price

ItemContratto Implementation Guide for PDE

Element / Attribute names	Attribute / Element	Valid Information in Field (enumeration)	Data Type	Occurances Min/Max	Field Length	Definition
Message		N/A	N/A	1 for file	N/A	
xmlns:xsd	A		A/N	1/1		Associates the actual schema instance being used to the name space.
xmlns:xsi	A		A/N	1/1		Defines the schema instance being used.
Version	E	1.0.2.0	A/N		max=7	Identifies the version of the CeMessageSchema
Header	E	(see Header data structure)		1/1		Sender and recipient of the message
Transaction	E	(see Transaction data structure)		1 or more		Transaction Container
MessageCode	A		A/N	0/1	min=1. max=32	Message identifier
MessageType	A	Request	Enum	0/1		Messag Type
MessageDate	A	Valid Date (YYYY-MM-DD)	Date	1/1		Date of the message
MessageTime	A	ValidTime (hh:mm:ss.ffffff+01:00)	Time	0/1		Time of the message
MessageSubject	A		Enum	0/1		identifies the type of the transaction inside the message
Header						
Sender	E	(see Sender data structure)		1/1		message sender
Receiver	E	(see Receiver data structure)		1/1		message receiver
Sender						
OperatorMsgCode	E		A/N	1/1	min=1 max=16	The unique identifier of the Sender
CompanyName	E		A/N	0/1	min=1 max=60	The Name of the Sender
UserMsgCode	E		A/N	0/1	min=1 max=16	The unique identifier for the user who sends
Receiver						
OperatorMsgCode	E	(IDGME)	A/N	1/1	min=1 max=16	The unique identifier of the Receiver
CompanyName	E		A/N	0/1	min=1 max=60	The Name of the Receiver
UserMsgCode	E		A/N	0/1	min=1 max=16	The unique identifier for the user who receives
Transaction						
ItemContratto	E	(see ItemContratto data structure)		1/1		
MPN	A		A/N	0/1	max=32	identifier for the transaction assigned by the Operator
ItemContratto						
ContrattoCommon	E	(see ItemContrattoCommon data structure)		1/1		
ItemContrattoCommon						
CodiceContratto	E		A/N	1/1	min=1 max=32	Contratto unique identifier
ProfiloGiornaliero	E	(see ProfiloGiornaliero structure)		1 or more		
ProfiloGiornaliero						
ProfiloOrario	E	(see ProfiloOrario structure)		1 to 25		
Data	A	valid date (YYYYMMDD)	Date	1/1		Date
ProfiloOrario	E	999999999999,99	Decimal		(18,3)	Quantity
Ora	A		N	1/1	min=1 max=25	Hour
Prezzo	A	999999999999,99	Decimal	0/1	(18,2)	Price

QuoteCapacita Implementation Guide for PDE

Element / Attribute names	Attribute / Element	Valid Information in Field (enumeration)	Data Type	Occurances Min/Max	Field Length	Definition
Message		N/A	N/A	1 for file	N/A	
xmlns:xsd	A		A/N	1/1		Associates the actual schema instance being used to the name space.
xmlns:xsi	A		A/N	1/1		Defines the schema instance being used.
Version	E	1.0.2.0	A/N		max=7	Identifies the version of the CeMessageSchema
Header	E	(see Header data structure)		1/1		Sender and recipient of the message
Transaction	E	(see Transaction data structure)		1 or more		Transaction Container
MessageCode	A		A/N	0/1	min=1. max=32	Message identifier
MessageType	A	Request	Enum	0/1		Messag Type
MessageDate	A	Valid Date (YYYY-MM-DD)	Date	1/1		Date of the message
MessageTime	A	ValidTime (hh:mm:ss.fffffff+01:00)	Time	0/1		Time of the message
MessageSubject	A		Enum	0/1		identifies the type of the transaction inside the message
Header						
Sender	E	(see Sender data structure)		1/1		message sender
Receiver	E	(see Receiver data structure)		1/1		message receiver
Sender						
OperatorMsgCode	E		A/N	1/1	min=1 max=16	The unique identifier of the Sender
CompanyName	E		A/N	0/1	min=1 max=60	The Name of the Sender
UserMsgCode	E		A/N	0/1	min=1 max=16	The unique identifier for the user who sends
Receiver						
OperatorMsgCode	E	(IDGME)	A/N	1/1	min=1 max=16	The unique identifier of the Receiver
CompanyName	E		A/N	0/1	min=1 max=60	The Name of the Receiver
UserMsgCode	E		A/N	0/1	min=1 max=16	The unique identifier for the user who receives
Transaction						
ItemContratto	E	(see ItemContratto data structure)		1/1		
MPN	A		A/N	0/1	max=32	identifier for the transaction assigned by the Operator
QuoteCapacita						
QuoteCapacitaCommon	E	(see QuoteCapacitaCommon data structure)		1/1		
QuoteCapacitaCommon						
CodiceUnita	E		A/N	1/1	min=1 max=16	Alphanumeric code identifying the Consumption or Production Unit
CodiceOperatore	E		A/N	1/1	min=1 max=16	Operator's ETSO code
QuoteCapacitaGiornaliera	E	(see QuoteCapacitaGionraliera structure)		1 or more		
QuoteCapacitaGiornaliera						
QuoteCapacitaOraria	E	(see QuoteCapacitaOraria structure)		1 to 25		
Data	A	valid date (YYYYMMDD)	Date	1/1		Date
QuoteCapacitaOraria						
QuoteCapacitaDelegato	E	(see QuoteCapacitaDelegatostructure)		1 or more		
Ora	A	valid date (YYYYMMDD)	N	1/1		Date
QuoteCapacitaDelegato	E		Decimal		(3,2)	
CodiceOperatoreDelegato	A		A/N	1/1	min=1 max=16	Hour

FA Implementation Guide for PDE

Element / Attribute names	Attribute / Element	Valid Information in Field (enumeration)	Data Type	Occurances Min/Max	Field Length	Definition
Message		N/A	N/A	1 for file	N/A	
xmlns:xsd	A		A/N	1/1		Associates the actual schema instance being used to the name space.
xmlns:xsi	A		A/N	1/1		Defines the schema instance being used.
Header	E	(see Header data structure)		1/1		Sender and recipient of the message
Transaction	E	(see Transaction data structure)		1 or more		Transaction Container
MessageType	A	Response		0/1		Messag Type
MessageDate	A	Valid Date (YYYY-MM-DD)	Date	1/1		Date of the message
MessageTime	A	ValidTime (hh:mm:ss.fffffff+01:00)	Time	0/1		Time of the message
ResponseReferenceMessageCode	A					Indicates the ID of message that is being referred to
ResponseMessageStatus	A		Accepted/Rejected/PartiallyAccepted	1/1		In the FunctionalAcknowledgment transaction indicates: 1. If the document is accepted (Accept) which means that all the transactions in the document have passed validation, partially accepted (Partial) which means that at least one transaction has been rejected, or rejected (Reject) which means that all the transaction have been rejected. 2. That a single transaction has been accepted or rejected.
Header						
Sender	E	(see Sender data structure)		1/1		message sender
Receiver	E	(see Receiver data structure)		1/1		message receiver
Sender				1/1		
OperatorMsgCode	E	(IDGME)	A/N		min=1 max=16	The unique identifier of the Sender
CompanyName	E		A/N	0/1	company max=60	The Name of the Sender
UserMsgCode	E		A/N	0/1	min=1 max=16	The unique identifier for the user who sends
Receiver				1/1		
OperatorMsgCode	E		A/N		min=1 max=16	The unique identifier of the Receiver
CompanyName	E		A/N	0/1	min=1 max=60	The Name of the Receiver
UserMsgCode	E		A/N	0/1	min=1 max=16	The unique identifier for the user who receives
Transaction				1 or more		
MPN	A		A/N	0/1	max=32	identifier for the transaction assigned by the Operator
TimmFA	E	(see TimmFA structure)		1/1		
TimmFA						
FunctionalAcknowledgement	E	(see FunctionalAcknowledgement structure)		1/1		Contains tags that define the positive or negative acknowledgement of receipt of the orignal transaction.
FunctionalAcknowledgement						
TransactionType	A	ENUM	A/N	0/1		Indicates the type of transaction that is being referred to.
Status	A	Accept or Reject	A/N	1/1		
XmlOrder	A		A/N	1/1	int	original order in message that is being referred to
RejectInformation	E	(see Reject Information data structure)	A/N	0 or more		
RejectInformation						
Reason	E	N/A	A/N	1/1	max=30	A short description of the rejection of the transaction
ReasonText	E	N/A	A/N	1/1	max=250	The text explanation for the rejection of the transaction

ERROR Implementation Guide for PDE

Element / Attribute names	Attribute / Element	Valid Information in Field (enumeration)	Data Type	Occurances Min/Max	Field Length	Definition
Message		N/A	N/A	1 for file	N/A	
xmlns:xsd	A		A/N	1/1		Associates the actual schema instance being used to the name space.
xmlns:xsi	A		A/N	1/1		Defines the schema instance being used.
Header	E	(see Header data structure)		1/1		Sender and recipient of the message
Transaction	E	(see Transaction data structure)		1 or more		Transaction Container
MessageType	A	Response		0/1		Messag Type
MessageDate	A	Valid Date (YYYY-MM-DD)	Date	1/1		Date of the message
MessageTime	A	ValidTime (hh:mm:ss.fffffff+01:00)	Time	0/1		Time of the message
ResponseReferenceMessageCode	A					Indicates the ID of message that is being referred to
ResponseMessageStatus	A		Rejected	1/1		
Header						
Sender	E	(see Sender data structure)		1/1		message sender
Receiver	E	(see Receiver data structure)		1/1		message receiver
Sender				1/1		
OperatorMsgCode	E	(IDGME)	A/N		min=1 max=16	The unique identifier of the Sender
CompanyName	E		A/N	0/1	min=1 max=60	The Name of the Sender
UserMsgCode	E		A/N	0/1	min=1 max=16	The unique identifier for the user who sends
Receiver						
OperatorMsgCode	E		A/N	1/1	min=1 max=16	The unique identifier of the Receiver
CompanyName	E		A/N	0/1	min=1 max=60	The Name of the Receiver
UserMsgCode	E		A/N	0/1	min=1 max=16	The unique identifier for the user who receives
Error				1 /1		
Code	A		A/N	0/1	max=30	A short description of the rejection of the message
Description	E	(see TimmFA structure)		1/1	max=250	The text explanation for the rejection of the message