

APPLICAZIONE P-GAS
Implementation Guide

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1 INTRODUZIONE

1.1 Scopo del documento

L'Applicazione P-GAS mette a disposizione per il download diverse informazioni mediante files in formato xml; questo documento descrive le transazioni, in termini di formati, utilizzate all'interno di tali files.

1.2 Applicabilità

Questo documento contiene il file Excel che descrive le transazioni XML di scambio dati supportate dall'Applicazione P-GAS.

2 FORMATO DEGLI SCHEMI

All'interno della presentazione di questa Implementation Guide vengono presentati gli XSD distinti per ogni tipo transazione.

Utilizzando opportunamente l'istruzione "include" è possibile ottenere lo schema *GMMMessage* (nello schema contenitore *GMBaseMessage*) che richiama gli xsd specifici di ogni transazione coinvolta nell'applicazione.

Di conseguenza gli esempi indicati nei capitoli successivi mostrano l'xsd della singola transazione e un esempio completo di file XML prodotto dalla piattaforma.

2.1 GMBaseMessage.xsd

```

<?xml version="1.0" encoding="iso-8859-1"?>
<schema xmlns="http://www.w3.org/2001/XMLSchema"
  targetNamespace="urn:XML-GM" xmlns:pd="urn:XML-GM"
  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="int" use="optional" />
      <attribute name="MessageType" type="pd:tyMessageType" use="optional" />
      <attribute name="MessageDate" type="date" use="required" />
      <attribute name="MessageTime" type="time" use="optional" />
      <!-- Response -->
      <attribute name="ResponseReferenceMessageCode" type="int" 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="int" use="optional" />
    </complexType>
  </element>
  <attribute name="tyVersion" abstract="true" type="string" />
</schema>

```

2.2 GMMessage.xsd

```

<?xml version="1.0" encoding="iso-8859-1"?>
<schema xmlns="http://www.w3.org/2001/XMLSchema"
  targetNamespace="urn:XML-GM"
  xmlns:pd="urn:XML-GM"
  xmlns:NameSpace1="http://www.w3.org/2001/XMLSchema"
  elementFormDefault="qualified">
  <include schemaLocation="Parameters.xsd" />
  <include schemaLocation="GMBaseMessage.xsd" />
  <include schemaLocation="GMMarketPlayer.xsd" />
  <include schemaLocation="FunctionalAcknowledgement.xsd" />
  <include schemaLocation="GMUsers.xsd" />
  <include schemaLocation="GMUserInformations.xsd" />
  <include schemaLocation="GMOffer.xsd" />
  <include schemaLocation="GMSessions.xsd" />
    <include schemaLocation="GMOfferChangeStatus.xsd" />
    <include schemaLocation="GMMarketPlayerInformations.xsd" />
  <include schemaLocation="GMProducts.xsd" />
  <include schemaLocation="BN.xsd" />
  <include schemaLocation="SessionResult.xsd" />
  <include schemaLocation="MarketPlayerResult.xsd" />

  <element name="Version" substitutionGroup="pd:tyVersion" type="string" />
  <element name="MarketPlayer" substitutionGroup="pd:TransactionDetail" type="pd:MarketPlayers" />
    <element name="MarketPlayerInformation" substitutionGroup="pd:TransactionDetail" type="pd:MarketPlayerInformations" />
  <element name="User" substitutionGroup="pd:TransactionDetail" type="pd:Users" />
    <element name="UserInformation" substitutionGroup="pd:TransactionDetail" type="pd:UserInformations" />
    <element name="Offer" substitutionGroup="pd:TransactionDetail" type="pd:Offers" />
    <element name="OfferChangeStatus" substitutionGroup="pd:TransactionDetail" type="pd:OffersChangeStatus" />
    <element name="Session" substitutionGroup="pd:TransactionDetail" type="pd:Sessions" />
  <element name="Product" substitutionGroup="pd:TransactionDetail" type="pd:Products" />
    <element name="Parameter" substitutionGroup="pd:TransactionDetail" type="pd:Parameters" />
  <element name="FunctionalAcknowledgement" substitutionGroup="pd:TransactionDetail" type="pd:FunctionalAcknowledgements" />
  <element name="BN" substitutionGroup="pd:TransactionDetail" type="pd:BNs" />
  <element name="SessionResult" substitutionGroup="pd:TransactionDetail" type="pd:SessionResults" />
  <element name="MarketPlayerResult" substitutionGroup="pd:TransactionDetail" type="pd:MarketPlayerResults" />
</schema>

```

2.3 BaseMessageTypes.xsd

```
<?xml version="1.0" encoding="iso-8859-1" ?>
<schema id="MessageTypes"
xmlns="http://www.w3.org/2001/XMLSchema"
targetNamespace="urn:XML-GM"
xmlns:pd="urn:XML-GM"
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="50" />
</restriction>
</simpleType>
<simpleType name="tyMessageCode">
<restriction base="string">
<minLength value="32" />
<maxLength value="32" />
</restriction>
</simpleType>
```

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```
<simpleType name="tyTransactionCode">
  <restriction base="string">
    <minLength value="32" />
    <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="tyMessageStatus">
  <restriction base="string">
    <enumeration value="Accepted" />
    <enumeration value="Rejected" />
    <enumeration value="PartiallyAccepted" />
  </restriction>
</simpleType>
<simpleType name="tyCompanyName">
  <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 Types.xsd

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

  <element name="RejectInformation">
    <complexType>
      <sequence>
        <element name="Reason" type="pd:ty032len"/>
        <element name="ReasonText" type="pd:ty01024len" minOccurs="0" maxOccurs="1"/>
      </sequence>
    </complexType>
  </element>

  <simpleType name="ty1len">
    <restriction base="string">
      <minLength value="1" />
      <maxLength value="3" />
    </restriction>
  </simpleType>

  <simpleType name="ty3len">
    <restriction base="string">
      <minLength value="1" />
      <maxLength value="3" />
    </restriction>
  </simpleType>

  <simpleType name="ty04len">
    <restriction base="string">
      <minLength value="0" />
      <maxLength value="4" />
    </restriction>
  </simpleType>

  <simpleType name="ty4len">
    <restriction base="string">
      <minLength value="1" />
      <maxLength value="4" />
    </restriction>
  </simpleType>
</schema>
```

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```
<simpleType name="ty08len">
  <restriction base="string">
    <minLength value="0" />
    <maxLength value="8" />
  </restriction>
</simpleType>
<simpleType name="ty8len">
  <restriction base="string">
    <minLength value="1" />
    <maxLength value="8" />
  </restriction>
</simpleType>
<simpleType name="ty016len">
  <restriction base="string">
    <minLength value="0" />
    <maxLength value="16" />
  </restriction>
</simpleType>
<simpleType name="ty16len">
  <restriction base="string">
    <minLength value="1" />
    <maxLength value="16" />
  </restriction>
</simpleType>
<simpleType name="ty032len">
  <restriction base="string">
    <minLength value="0" />
    <maxLength value="32" />
  </restriction>
</simpleType>
<simpleType name="ty32len">
  <restriction base="string">
    <minLength value="1" />
    <maxLength value="32" />
  </restriction>
</simpleType>
<simpleType name="ty30len">
  <restriction base="string">
    <minLength value="1" />
    <maxLength value="30" />
  </restriction>
</simpleType>
```

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```
<simpleType name="ty50len">
  <restriction base="string">
    <minLength value="1" />
    <maxLength value="50" />
  </restriction>
</simpleType>
<simpleType name="ty064len">
  <restriction base="string">
    <minLength value="0" />
    <maxLength value="64" />
  </restriction>
</simpleType>
<simpleType name="ty64len">
  <restriction base="string">
    <minLength value="1" />
    <maxLength value="64" />
  </restriction>
</simpleType>
<simpleType name="ty0128len">
  <restriction base="string">
    <minLength value="0" />
    <maxLength value="128" />
  </restriction>
</simpleType>
<simpleType name="ty128len">
  <restriction base="string">
    <minLength value="1" />
    <maxLength value="128" />
  </restriction>
</simpleType>
<simpleType name="ty0256len">
  <restriction base="string">
    <minLength value="0" />
    <maxLength value="256" />
  </restriction>
</simpleType>
<simpleType name="ty256len">
  <restriction base="string">
    <minLength value="1" />
    <maxLength value="256" />
  </restriction>
</simpleType>
<simpleType name="ty0512len">
  <restriction base="string">
    <minLength value="0" />
    <maxLength value="512" />
  </restriction>
</simpleType>
```

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```
<simpleType name="ty512len">
  <restriction base="string">
    <minLength value="1" />
    <maxLength value="512" />
  </restriction>
</simpleType>
<simpleType name="ty01024len">
  <restriction base="string">
    <minLength value="0" />
    <maxLength value="1024" />
  </restriction>
</simpleType>
<simpleType name="ty1024len">
  <restriction base="string">
    <minLength value="1" />
    <maxLength value="1024" />
  </restriction>
</simpleType>
<simpleType name="ty33len">
  <restriction base="string">
    <minLength value="1" />
    <maxLength value="33" />
  </restriction>
</simpleType>
<simpleType name="ty050len">
  <restriction base="string">
    <minLength value="0" />
    <maxLength value="50" />
  </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>
```

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```
<simpleType name="tyMarketPlayerType">
  <restriction base="string">
    <enumeration value="OWN"/>
    <enumeration value="REG"/>
    <enumeration value="VEN"/>
  </restriction>
</simpleType>
<simpleType name="tyResultType">
  <restriction base="string">
    <enumeration value="ZoneResults"/>
    <enumeration value="InterZoneResults"/>
    <enumeration value="GenericMarketResults"/>
  </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}$"/>
  </restriction>
</simpleType>
<simpleType name="tyCoefficient">
  <restriction base="string">
    <pattern value="^\d{1,12}(\,\d{1,3})|^?\d{1,12}(\,\d{1,2})|^?\d{1,12}(\,\d{1,1})|^?\d{1,12}$"/>
  </restriction>
</simpleType>
<simpleType name="tyPrice">
  <restriction base="string">
    <pattern value="^\d{1,12}(\,\d{1,3})?$/>
  </restriction>
</simpleType>

<simpleType name="tyAwardedPrice">
  <restriction base="string">
    <pattern value="^\d{1,12}(\,\d{1,6})|^?\d{1,12}(\,\d{1,5})|^?\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="tyFlowMwh">
  <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>
```

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

<simpleType name="tyTransactionType">
  <restriction base="string">
    <enumeration value="MarketPlayers" />
    <enumeration value="Users" />
    <enumeration value="UserInformations" />
    <enumeration value="Parameters" />
    <enumeration value="FunctionalAcknowledgement" />
    <enumeration value="Offers" />
    <enumeration value="Sessions" />
    <enumeration value="BidsOffers" />
    <enumeration value="MarketSessions" />
    <enumeration value="MarketResults" />
    <enumeration value="BidNotifications" />
    <enumeration value="BNs" />
    <enumeration value="SessionResults" />
    <enumeration value="MarketPlayerResults" />
    <enumeration value="MarketPlayerInformations" />
    <enumeration value="Unknown" />
  </restriction>
</simpleType>

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

    <simpleType name="tyOperation2">
      <restriction base="string">
        <enumeration value="AddNew"/>
        <enumeration value="DeleteInsert"/>
      </restriction>
    <enumeration value="Confirm"/>
  </restriction>
</simpleType>
</schema>
```

3 TRANSAZIONI XML MESSE A DISPOSIZIONE DEGLI OPERATORI

3.1 FunctionalAcknowledgement

3.1.1 Functional Acknowledgement Positivo

```
<?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"
MessageTypes="Response" MessageDate="2010-04-26" MessageTime="15:37:47.9867486+02:00"
ResponseMessageStatus="Accepted" xmlns="urn:XML-GM">
  <Header>
    <Sender>
      <OperatorMsgCode>IDGMEGAS</OperatorMsgCode>
    </Sender>
    <Receiver>
      <OperatorMsgCode>9999999</OperatorMsgCode>
    </Receiver>
  </Header>
  <Transaction>
    <FunctionalAcknowledgement TransactionType="MarketPlayerInformations" Status="Accepted" XmlOrder="1" />
  </Transaction>
  <Transaction>
    <FunctionalAcknowledgement TransactionType="MarketPlayerInformations" Status="Accepted" XmlOrder="2" />
  </Transaction>
</Message>
```

3.1.2 Functional Acknowledgement Negative

```
<?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"
MessageTypes="Response" MessageDate="2010-04-27" MessageTime="12:08:50.4100452+02:00"
ResponseMessageStatus="Rejected" xmlns="urn:XML-GM">
  <Header>
    <Sender>
      <OperatorMsgCode>IDGMEGAS</OperatorMsgCode>
    </Sender>
    <Receiver>
      <OperatorMsgCode>999999</OperatorMsgCode>
    </Receiver>
  </Header>
  <Transaction>
    <FunctionalAcknowledgement TransactionType="MarketPlayerInformations" Status="Rejected" XmlOrder="1">
      <RejectInformation>
        <Reason>MI08</Reason>
        <ReasonText>operation not allowed with open session</ReasonText>
      </RejectInformation>
    </FunctionalAcknowledgement>
  </Transaction>
</Message>
```

3.1.3 FunctionalAcknowledgement.xsd

```
<?xml version="1.0" encoding="iso-8859-1" ?>
<schema
  xmlns="http://www.w3.org/2001/XMLSchema"
  targetNamespace="urn:XML-GM"
  xmlns:pd="urn:XML-GM"
  elementFormDefault="qualified">
  <include schemaLocation="BaseMessageTypes.xsd" />
  <include schemaLocation="Types.xsd" />
  <complexType name="FunctionalAcknowledgements">
    <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>
```

3.2 Notifica di errore (ref xsd: TimmBaseMessage.xsd)

```
<?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="2010-04-27" MessageTime="12:08:50.4100452+02:00"
ResponseMessageStatus="Rejected" xmlns="urn:XML-GM">
  <Header>
    <Sender>
      <OperatorMsgCode>IDGMEGAS</OperatorMsgCode>
    </Sender>
    <Receiver>
      <OperatorMsgCode>9999999</OperatorMsgCode>
    </Receiver>
  </Header>
  <Error Code="M01" Description={message} />
</Message>
```

3.3 BN

```
<?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"
MessageTypes="Notify" MessageDate="2010-04-26" MessageTime="10:29:48.9166558+02:00" xmlns="urn:XML-GM">
  <Header>
    <Sender>
      <OperatorMsgCode>IDGMEGAS</OperatorMsgCode>
    </Sender>
    <Receiver>
      <OperatorMsgCode>9999999</OperatorMsgCode>
    </Receiver>
  </Header>
  <Transaction>
    <BN>
      <Date>2010-04-26</Date>
      <OfferId>19998</OfferId>
      <ProductName>M-2010-06</ProductName>
      <VendorCode>888888</VendorCode>
      <OffersDetails OfferMatchId="9876">
        <Price>250,000</Price>
        <Contracts>20</Contracts>
      </OffersDetails>
    </BN>
  </Transaction>
</Message>
```

3.3.1 BN.xsd

```
<?xml version="1.0" encoding="iso-8859-1"?>
<schema xmlns="http://www.w3.org/2001/XMLSchema"
  targetNamespace="urn:XML-GM" xmlns:pd="urn:XML-GM"
  elementFormDefault="qualified">
  <include schemaLocation="Types.xsd" />
  <complexType name="BNs">
    <sequence>
      <element name="Date" type="date" minOccurs="1" maxOccurs="1" />
      <element name="OfferId" type="int" minOccurs="1" maxOccurs="1" />
      <element name="ProductName" type="pd:ty16len" minOccurs="1" maxOccurs="1" />
      <element name="VendorCode" type="pd:ty16len" minOccurs="1" maxOccurs="1" />
      <element name="OffersDetails" type="pd:BNDetail" minOccurs="1" maxOccurs="unbounded" />
    </sequence>
  </complexType>
  <complexType name="BNDetail">
    <sequence>
      <element name="Price" type="pd:tyPrice" minOccurs="1" maxOccurs="1" />
      <element name="Contracts" type="int" minOccurs="1" maxOccurs="1" />
    </sequence>
    <attribute name="OfferMatchId" type="int" use="required" />
  </complexType>
</schema>
```

3.4 SessionResult

```
<?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="Notify" MessageDate="2010-04-26"
MessageTime="16:05:24.6912468+02:00" xmlns="urn:XML-GM">
  <Header>
    <Sender>
      <OperatorMsgCode>IDGMEGAS</OperatorMsgCode>
    </Sender>
    <Receiver>
      <OperatorMsgCode>*</OperatorMsgCode>
    </Receiver>
  </Header>
  <Transaction>
    <SessionResult SessionId="86" Date="2010-04-26">
      <ProductResult ProductName="M-2010-06" VendorCode="99999">
        <MinP>340,000</MinP>
        <MaxP>599,900</MaxP>
        <RefP>523,930000</RefP>
        <Volumes>50</Volumes>
      </ProductResult>
      <ProductResult ProductName="Y-2010/2011" VendorCode="99999">
        <MinP>0</MinP>
        <MaxP>0</MaxP>
        <RefP>0</RefP>
        <Volumes>0</Volumes>
      </ProductResult>
      <ProductResult ProductName="M-2010-06" VendorCode="88888">
        <MinP>0</MinP>
        <MaxP>0</MaxP>
        <RefP>0</RefP>
        <Volumes>0</Volumes>
      </ProductResult>
      <ProductResult ProductName="Y-2010/2011" VendorCode="88888">
        <MinP>450,000</MinP>
        <MaxP>500,000</MaxP>
        <RefP>470,000000</RefP>
        <Volumes>100</Volumes>
      </ProductResult>
    </SessionResult>
  </Transaction>
</Message>
```

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```
<ProductResult ProductName="M-2010-06" VendorCode="77777">
  <MinP>0</MinP>
  <MaxP>0</MaxP>
  <RefP>0</RefP>
  <Volumes>0</Volumes>
</ProductResult>
<ProductResult ProductName="Y-2010/2011" VendorCode="77777">
  <MinP>570,000</MinP>
  <MaxP>600,000</MaxP>
  <RefP>597,272727</RefP>
  <Volumes>11</Volumes>
</ProductResult>
</SessionResult>
</Transaction>

</Message>
```

3.4.1 SessionResult.xsd

```
<?xml version="1.0" encoding="iso-8859-1"?>
<schema xmlns="http://www.w3.org/2001/XMLSchema"
  targetNamespace="urn:XML-GM" xmlns:pd="urn:XML-GM"
  elementFormDefault="qualified">
  <include schemaLocation="Types.xsd" />
  <complexType name="SessionResults">
    <sequence>
      <element name="ProductResult" type="pd:ProductResults" minOccurs="1" maxOccurs="unbounded" />
    </sequence>
    <attribute name="SessionId" type="int" use="required" />
    <attribute name="Date" type="date" use="required" />
  </complexType>
  <complexType name="ProductResults">
    <sequence>
      <element name="MinP" type="pd:tyPrice" minOccurs="1" maxOccurs="1" />
      <element name="MaxP" type="pd:tyPrice" minOccurs="1" maxOccurs="1" />
      <element name="RefP" type="pd:tyPrice" minOccurs="1" maxOccurs="1" />
      <element name="Volumes" type="int" minOccurs="1" maxOccurs="1" />
    </sequence>
    <attribute name="ProductName" type="pd:ty30len" use="required" />
    <attribute name="VendorCode" type="pd:ty16len" use="required" />
  </complexType>
</schema>
```

3.5 MarketPlayerResult

```
<?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="Notify"
MessageDate="2010-04-26" MessageTime="16:05:24.9412596+02:00" xmlns="urn:XML-GM">
  <Header>
    <Sender>
      <OperatorMsgCode>IDGMEGAS</OperatorMsgCode>
    </Sender>
    <Receiver>
      <OperatorMsgCode>99999</OperatorMsgCode>
    </Receiver>
  </Header>
  <Transaction>
    <MarketPlayerResult SessionId="86" Date="2010-04-26">
      <Result OperationType="V" CounterpartCode="88888">
        <OperationResult ProductName="M-2010-06">
          <Price>400,000</Price>
          <Volumes>15</Volumes>
          <CashEquivalents>6480,00</CashEquivalents>
          <MatchId>4684</MatchId>
          <Timestamp>2010-04-26T11:42:50.983</Timestamp>
        </OperationResult>
        <OperationResult ProductName="M-2010-06">
          <Price>400,000</Price>
          <Volumes>5</Volumes>
          <CashEquivalents>2160,00</CashEquivalents>
          <MatchId>4687</MatchId>
          <Timestamp>2010-04-26T14:57:21.677</Timestamp>
        </OperationResult>
        <OperationResult ProductName="Y-2010/2011">
          <Price>650,000</Price>
          <Volumes>10</Volumes>
          <CashEquivalents>85410,00</CashEquivalents>
          <MatchId>4688</MatchId>
          <Timestamp>2010-04-26T14:58:04.053</Timestamp>
        </OperationResult>
      </Result>
      <Result OperationType="A" CounterpartCode="77777">
        <OperationResult ProductName="M-2010-06">
          <Price>599,900</Price>
          <Volumes>35</Volumes>
          <CashEquivalents>22676,22</CashEquivalents>
          <MatchId>4685</MatchId>
          <Timestamp>2010-04-26T11:47:17.89</Timestamp>
        </OperationResult>
      </Result>
    </MarketPlayerResult>
  </Transaction>
</Message>
```

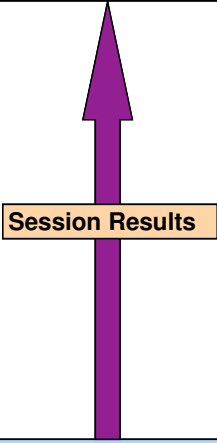
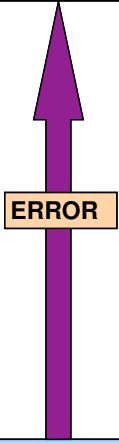
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```
<Result OperationType="A" CounterpartCode="66666">
  <OperationResult ProductName="Y-2010/2011">
    <Price>500,000</Price>
    <Volumes>25</Volumes>
    <CashEquivalents>164250,00</CashEquivalents>
    <MatchId>4689</MatchId>
    <Timestamp>2010-04-26T14:58:30.743</Timestamp>
  </OperationResult>
  <OperationResult ProductName="Y-2010/2011">
    <Price>500,000</Price>
    <Volumes>15</Volumes>
    <CashEquivalents>98550,00</CashEquivalents>
    <MatchId>4694</MatchId>
    <Timestamp>2010-04-26T15:06:19.037</Timestamp>
  </OperationResult>
</Result>
<Result OperationType="A" CounterpartCode="55555">
  <OperationResult ProductName="Y-2010/2011">
    <Price>700,000</Price>
    <Volumes>800</Volumes>
    <CashEquivalents>7358400,00</CashEquivalents>
    <MatchId>4690</MatchId>
    <Timestamp>2010-04-26T14:58:55.48</Timestamp>
  </OperationResult>
</Result>
<Result OperationType="A" CounterpartCode="4444">
  <OperationResult ProductName="M-2010-06">
    <Price>755,000</Price>
    <Volumes>15</Volumes>
    <CashEquivalents>12231,00</CashEquivalents>
    <MatchId>4693</MatchId>
    <Timestamp>2010-04-26T15:05:43.597</Timestamp>
  </OperationResult>
</Result>
</MarketPlayerResult>
</Transaction>
</Message>
```

3.5.1 MarketPlayerResult.xsd

```
<?xml version="1.0" encoding="iso-8859-1"?>
<schema xmlns="http://www.w3.org/2001/XMLSchema"
  targetNamespace="urn:XML-GM" xmlns:pd="urn:XML-GM"
  elementFormDefault="qualified">
  <include schemaLocation="Types.xsd" />
  <complexType name="MarketPlayerResults">
    <sequence>
      <element name="Result" type="pd:Results" minOccurs="1" maxOccurs="unbounded" />
    </sequence>
    <attribute name="SessionId" type="int" use="required" />
    <attribute name="Date" type="date" use="required" />
  </complexType>
  <complexType name="Results">
    <sequence>
      <element name="OperationResult" type="pd:OperationResults" minOccurs="1" maxOccurs="unbounded" />
    </sequence>
    <attribute name="OperationType" type="pd:ty4len" use="required" />
    <attribute name="CounterpartCode" type="pd:ty16len" use="required" />
    <attribute name="CounterpartName" type="pd:ty64len" use="optional" />
  </complexType>
  <complexType name="OperationResults">
    <sequence>
      <element name="Price" type="pd:tyPrice" minOccurs="1" maxOccurs="1" />
      <element name="Volumes" type="int" minOccurs="1" maxOccurs="1" />
      <element name="CashEquivalents" type="pd:tyPrice" minOccurs="1" maxOccurs="1" />
      <element name="MatchId" type="int" minOccurs="1" maxOccurs="1" />
      <element name="Timestamp" type="dateTime" minOccurs="1" maxOccurs="1" />
    </sequence>
    <attribute name="ProductName" type="pd:ty30len" use="required" />
  </complexType>
</schema>
```

Operatore P-GAS



P-GAS

	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= <u>A</u> lpha <u>N</u> umeric (Field allows for alphabetic values, numeric values, as well as any combination of alphabetic and numeric values) N= Numeric (integers only) N/A= <u>N</u> ot <u>A</u> pplicable 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 occurrences allowed for the element or attribute and x = the maximum number of occurrences for the element or attribute; or a specification directly of the number of occurrences 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= <u>N</u> ot <u>A</u> pplicable
Definition	The explanation of the Element or Attribute	N/A

FA Implementation Guide for P-GAS

Element / Attribute names	Attribute / Element	Valid Information in Field (enumeration)	Data Type	Occurrences 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		Message 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
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						
OperatorMsgCode	E	(IDGMEGAS)	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		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						
MPN	A		A/N	0/1	max=32	Identifier for the transaction assigned by the Operator (not used)
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 original 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 P-GAS						
Element / Attribute names	Attribute / Element	Valid Information in Field (enumeration)	Data Type	Occurrences Min/Max	Field Length	Definition
Message		N/A	N/A	1 for file	N/A	
xm1ns:xsd	A		A/N	1/1		Associates the actual schema instance being used to the name space.
xm1ns: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
Message Type	A	Response		0/1		Message Type
MessageDate	A	Valid Date (YYYY-MM-DD)	Date	1/1		Date of the message
MessageTime	A	ValidTime (hh:mm:ss.fiffff-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						
OperatorMsgCode	E	(IDGMEGAS)	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		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

BN Implementation Guide for P-GAS

Element / Attribute names	Attribute / Element	Valid Information in Field (enumeration)	Data Type	Occurrences Min/Max	Field Length	Definition
Message		N/A	N/A	1 for file	N/A	
xmins.xsd	A		A/N	1/1		Associates the actual schema instance being used to the name space.
xmins.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	Notify		0/1		Message Type
MessageDate	A	Valid Date (YYYY-MM-DD)	Date	1/1		Date of the message
MessageTime	A	Valid Time (hh:mm:ss.ffffff-01:00)	Time	0/1		Time of 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	(IDGMEGAS)	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		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				1 or more		
MPN	A		A/N	0/1	max=32	identifier for the transaction assigned by the Operator (not used)
BN	E	(see BN structure)		1/1		
BN						
Date	E	Valid Date (YYYY-MM-DD)	Date	1/1		Date
OfferId	E		N	1/1	int	Identifier of the offer
ProductName	E		A/N	1/1		Name of the product
VendorCode	E		A/N	1/1		PSV's code of the vendor
OffersDetails	E	(see OffersDetails data structure)		1 or more		
OffersDetails						
OfferMatchId	A		N	1/1	int	The unique identifier of the match
Price	E		Decimal	1/1	16,3	Price
Contracts	E		N	1/1	int	Number of the contracts

SessionResult Implementation Guide for P-GAS						
Element / Attribute names	Attribute / Element	Valid Information in Field (enumeration)	Data Type	Occurrences Min/Max	Field Length	Definition
Message		N/A	N/A	1 for file	N/A	
xmins.xsd	A		A/N	1/1		Associates the actual schema instance being used to the name space.
xmins.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	Notify		0/1		Message Type
MessageDate	A	Valid Date (YYYY-MM-DD)	Date	1/1		Date of the message
MessageTime	A	Valid Time (hh:mm:ss.ffffff-01:00)	Time	0/1		Time of 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	(IDGMEGAS)	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		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				1 or more		
MPN	A		A/N	0/1	max=32	identifier for the transaction assigned by the Operator (not used)
SessionResult	E	(see SessionResult structure)		1/1		
SessionResult						
SessionId	A		N	1/1	int	The unique identifier of the market session
Date	A	Valid Date (YYYY-MM-DD)	Date	1/1		Date
ProductResult	E	(see ProductResult data structure)		1 or more		
ProductResult						
ProductName	A		A/N	1/1		Name of the product
MinP	E		Decimal	1/1	16,3	minimum price of the session
MaxP	E		Decimal	1/1	16,3	maximum price of the session
RefP	E		Decimal	1/1	16,3	reference price of the session
Volumes	E		N	1/1	int	Volumes traded

MarketPlayerResults Implementation Guide for P-GAS

Element / Attribute names	Attribute / Element	Valid Information in Field (enumeration)	Data Type	Occurrences Min/Max	Field Length	Definition
Message						
		N/A	N/A	1 for file	N/A	
xmns:xsd	A		A/N	1/1		Associates the actual schema instance being used to the name space.
xmns: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	Notify		0/1		Message Type
MessageDate	A	Valid Date (YYYY-MM-DD)	Date	1/1		Date of the message
MessageTime	A	Valid Time (hh:mm:ss.ffffff-01:00)	Time	0/1		Time of 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	(IDGMEGAS)	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		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						
MPN	A		A/N	0/1	max=32	identifier for the transaction assigned by the Operator (not used)
SessionResult	E	(see SessionResult structure)		1/1		
MarketPlayerResult						
SessionId	A		N	1/1	int	The unique identifier of the market session
Date	A	Valid Date (YYYY-MM-DD)	Date	1/1		Date
Result	E	(see Result data structure)		1 or more		
Result						
OperationType	A	Buy,Sell	Enum	1/1		type of the operation
CounterpartCode	A		A/N	1/1		PSV's code of the vendor
CounterpartName	A		A/N	0/1		(not used)
OperationResults	E	(see OperationResults data structure)		1 or more		
OperationResults						
ProductName	A		A/N	1/1		Name of the product
Price	E		Decimal	1/1	16,3	Price
Volumes	E		N	1/1	int	Volumes traded
CashEquivalents	E		Decimal	1/1	16,3	cash equivalents
MatchId	E		N	1/1	int	The unique identifier of the match
Timestamp	E	YYYY-MM-DDTHH:mm:ss.dd	Datetime			match's timestamp