

# Gemini API Specification

## *Maintain Physical Renominations (Update)*

*Copyright National Grid, all rights reserved.*

*No part of this publication may be reproduced in any material form (including photocopying and restoring in any medium or electronic means and whether or not transiently or incidentally) without the written permission of National Grid except in accordance with the provisions of the Copyright, Designs and Patents Act 1998.*

*For further information on the use of this document please refer to the Information Services Management System (ISMS) or contact the Quality Systems Group.*

Author (for this version):	<b>National Grid IS</b>
Owner:	<b>National Grid O&amp;T</b>
Document Reference:	<b>4055.3</b>
Version:	<b>2</b>
Status:	<b><u>For Approval</u><del>For Representation</del></b>
Date:	<b><u>29 September 2005</u> <del>08 September 2005</del></b>



## Table of Contents

<b>1</b>	<b>API Specification</b> .....	<b>3</b>
1.1	Overview .....	3
1.2	API URLs.....	3
1.3	XML Specifications .....	3
1.3.1	API Request .....	3
1.3.2	API Response .....	5
1.4	API Specific Error Messages .....	7
<b>2</b>	<b>Document Control</b> .....	<b>98</b>
2.1	Superseded Documents .....	98
2.2	Version History.....	98

## 1 API Specification

### 1.1 Overview

**Physical and Locational Trades conducted by a Market Operator through the On-the-day Commodity Market require confirmation by BA's within timescales defined by the specified Physical Renomination Incentive. This API allows BA's to confirm OCM Physical trades by providing the Location at which the Shipper wishes to renominate. Renominations will be created for confirmed trades.**

### 1.2 API URLs

**All URLs are expressed relative to the root URL for the API service. BAs are advised to parameterise URLs to minimise the impact of change.**

URL to Access the API

**API clients must invoke this URL to access this API's functionality:**  
**/gemini/controllers/UpdatePhysicalRenominationsControllerAPI/**

URL for Request XSD

**The XSD found at this URL can be used to validate the request XML format:**

**/gemini/api/schema/geminiapiconfirmphysicalrenominationreq.xsd**

URL for Response XSD

**The XSD found at this URL can be used to validate the response XML format:**

**/gemini/api/schema/geminiapiconfirmphysicalrenominationres.xsd**

### 1.3 XML Specifications

#### 1.3.1 API Request

Element Table

Hierarchy	Data Element	Screen Label	Description	Data Type	Data Length	Mandatory
0	UPDT_PHY_RNM	Top-level hierarchy for Update Physical Renominations.				

1	GAS_DAY	Gas Day	The Gas Day for which OCM physical trades are to be confirmed.  The date should be in YYYY-MM-DD format.	Date	10	Y
1*	UPDT_PHY_RNM_DTL	Top-level hierarchy for Update Physical Renominations for Gas Day.				
2	BID_ID	Bid Id	The bid identifier associated with each Bid (unique).	String	8	Y
2	MTR_ID	Meter Id	The Meter Id against which the trade is to be confirmed.	String	10	Y
2	IGNR_TLRNCE	Ignore Tolerance Check?	Flag to indicate whether the tolerance check must be carried out for the record.  Permissible values are: Y - Ignore tolerance check N - Perform tolerance check	String	1	Y

## Schema Definition

*Name of file:* geminiapiconfirmphysicalrenominationreq.xsd

```

<?xml version="1.0"?>
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="UPDT_PHY_RNM">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="GAS_DAY" type="xs:date"/>
        <xs:element name="UPDT_PHY_RNM_DTL" minOccurs="0" maxOccurs="unbounded">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="BID_ID">
                <xs:simpleType>
                  <xs:restriction base="xs:string">
                    <xs:maxLength value="8"/>
                    <xs:minLength value="1"/>
                  </xs:restriction>
                </xs:simpleType>
              </xs:element>
              <xs:element name="MTR_ID">
                <xs:simpleType>
                  <xs:restriction base="xs:string">
                    <xs:maxLength value="10"/>
                    <xs:minLength value="1"/>
                  </xs:restriction>
                </xs:simpleType>
              </xs:element>
              <xs:element name="IGNR_TLRNCE">
                <xs:simpleType>

```

```

    <xs:restriction base="xs:string">
      <xs:enumeration value="Y"/>
      <xs:enumeration value="N"/>
      <xs:length value="1"/>
    </xs:restriction>
  </xs:simpleType>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:schema>
```

### 1.3.2 API Response

#### Element Table

Hierarchy	Data Element	Screen Label	Description	Data Type	Data Length
0	UPDT_PHY_RNM_OUT	Top-level hierarchy for output elements.			
1	METADATA	Top-level hierarchy for meta information elements.			
2	TMSTMP		Timestamp of API access	DateTime	19
1	DTL	Top-level hierarchy for Details.			
2	UPDT_PHY_RNM_DTL_QRY	Top-level hierarchy for Physical Renominations.			
3	GAS_DAY	Gas Day	The Gas Day for which OCM trades are to be confirmed	Date	10
3*	UPDT_PHY_RNM_DTL	Top-level hierarchy for Physical Renominations response for the Gas Day.			
4	BID_ID	Bid Id	The bid identifier associated with each Bid (unique) for which the OCM trades are confirmed.	String	8
4	MTR_ID	Meter Id	The Meter Id against which the trade is confirmed.	String	10
4	IGNR_TLRNCE	Ignore Tolerance Check?	Flag to indicate whether the tolerance check must be carried out for the record.  Permissible values are: Y - Ignore tolerance check N - Perform tolerance check	String	1

4	STS		<p>The status of the records.</p> <p>Expected values are:  <b>S</b> - Success  <b>F</b> - Failure</p>	String	1
4	MSG_CD		<p>This field gives the corresponding message code, in the case of success as well as failure.</p>	String	18
4	MSG_DESC		<p>This field provides further descriptive information on the status of the record.</p> <p>Indicates if record is successful or has failed. In case of failure, a reason is provided.</p>	String	-

## Schema Definition

*Name of file:* geminiapiconfirmphysicalrenominationres.xsd

```

<?xml version="1.0"?>
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="UPDT_PHY_RNM_OUT">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="METADATA">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="TMSTMP" type="xs:dateTime"/>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
        <xs:element name="DTL">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="UPDT_PHY_RNM_DTL_QRY">
                <xs:complexType>
                  <xs:sequence>
                    <xs:element name="GAS_DAY" type="xs:date"/>
                    <xs:element name="UPDT_PHY_RNM_DTL" minOccurs="0"
maxOccurs="unbounded">
                      <xs:complexType>
                        <xs:sequence>
                          <xs:element name="BID_ID">
                            <xs:simpleType>
                              <xs:restriction base="xs:string">
                                <xs:maxLength value="8"/>
                              </xs:restriction>
                            </xs:simpleType>
                          </xs:element>
                          <xs:element name="MTR_ID">
                            <xs:simpleType>
                              <xs:restriction base="xs:string">
                                <xs:maxLength value="10"/>
                              </xs:restriction>
                            </xs:simpleType>
                          </xs:element>
                          <xs:element name="IGNR_TLRNCE">
                            <xs:simpleType>
                              <xs:restriction base="xs:string">
                                <xs:enumeration value="Y"/>
                                <xs:enumeration value="N"/>
                                <xs:length value="1"/>
                              </xs:restriction>
                            </xs:simpleType>
                          </xs:element>
                        </xs:sequence>
                      </xs:complexType>
                    </xs:element>
                  </xs:sequence>
                </xs:complexType>
              </xs:element>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>

```

```

</xs:simpleType>
</xs:element>
<xs:element name="STS">
  <xs:simpleType>
    <xs:restriction base="xs:string">
      <xs:enumeration value="S"/>
      <xs:enumeration value="F"/>
      <xs:length value="1"/>
    </xs:restriction>
  </xs:simpleType>
</xs:element>
<xs:element name="MSG_CD">
  <xs:simpleType>
    <xs:restriction base="xs:string">
      <xs:maxLength value="18"/>
    </xs:restriction>
  </xs:simpleType>
</xs:element>
<xs:element name="MSG_DESC">
  <xs:simpleType>
    <xs:restriction base="xs:string"/>
  </xs:simpleType>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:schema>

```

## 1.4 API Specific Error Messages

This API can return the following specific messages. These are in addition to any generic error messages that the API can return. See the API Usage Guidelines section 4.1.4. Where different APIs return messages with the same code, the meaning will be the same.

The messages below will be reported in the response XML structure for this API in the MSG\_CD and MSG\_DESC elements, whereas generic error messages, which represent a more fundamental failure, will be reported in the error XML structure. Note that the messages below include the report of successful updates.

Note that, though message codes will stay fixed, message descriptions can be changed without formal notification to improve clarity.

Table 1 - API Specific Messages

Message Code	Message
GEM_API_ERROR_0300	Invalid Bid Id for the BA
GEM_API_ERROR_0302	Current time is before the beginning Renominations deadline.
GEM_API_ERROR_0303	Current time is after the ending Renominations deadline.
GEM_API_ERROR_0304	Production Date has expired.
GEM_API_MSG_0305	Renomination committed successfully.



GEM_API_ERROR_0306	Meter is not active on Gemini system.
GEM_API_ERROR_0307	Location should be ST, DC, OS, SE, XI, XF.
GEM_API_ERROR_0308	Shipper is not a registered user for the meter.
GEM_API_ERROR_0309	A negative implied flow rate validation has occurred.
GEM_API_MSG_0310	Renomination committed with PRI charges.
GEM_API_ERROR_0311	Tolerance value has been exceeded while confirming the trade.
GEM_API_ERROR_0314	Duplicate Bids are not allowed.
GEM_API_ERROR_0315	Service is not available for the shipper



## 2 Document Control

### 2.1 Superseded Documents

Title	Reference	Version	Date
Gemini API Specifications – Additional API’s Entry Capacity & Energy Balancing	Gemini API Specifications – Additional API’s for Entry Capacity and Energy Balancing	1	26-Nov-2004

### 2.2 Version History

Version	Status	Date	Author(s)	Summary of Changes
1	For Representation	28-Jan-2005	NGT IS	Baseline version generated from contents of superseded document.
1	For Representation	03-Feb-2005	NGT IS	Various changes as follows: <ul style="list-style-type: none"> <li>- API URL corrected.</li> <li>- Various changes to input and output XSDs.</li> <li>- Removal of length restriction on output message.</li> <li>- Two new error messages added.</li> </ul>
1	For Representation	15-Feb-2005	NGT IS	Changes following NGT internal review as follows: <ul style="list-style-type: none"> <li>- Section reference to API Usage Guidelines document for generic error messages corrected.</li> </ul>
1	For Approval	11-Mar-2005	NGT IS	Change to the error message text for message GEM_API_ERROR_0314.
1	Approved	17-Mar-2005	NGT IS	Approved at UK-Link Committee.
2	For Representation	08-Sep-2005	National Grid IS	Corrections highlighted during Gemini trials as follows: <ul style="list-style-type: none"> <li>- Missing “s” in URL in section 1.2;</li> <li>- “Transco” replaced by “Gemini” in message GEM_API_ERROR_0306.</li> </ul> <p>Also, all references to NGT changed to National Grid.</p>
<u>2</u>	<u>For Approval</u>	<u>29-Sep-2005</u>	<u>National Grid IS</u>	<u>No representation comments received. Submitted “For Approval” without further modification.</u>