

Gemini API Specification

Update Renominations

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1 API Specification

1.1 Overview

Using this API, BA will be able to update input/output renominations for a Gas Day and a Service Id. The input / output renominations are differentiated based on the service identifier.

This specification contains interface details (relevant URLs, request and response XML message formats, specific error messages) for this API. For more general guidance on API function and usage, see the API Usage Guidelines document.

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/UpdateRenominationsControllerAPI/`

URL for Request XSD

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

`/gemini/api/schema/geminiapiupdaterenominationsreq.xsd`

URL for Response XSD

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

`/gemini/api/schema/geminiapiupdaterenominationsres.xsd`

1.3 XML Specifications

An asterisk in the 'Hierarchy' column of API Request and Response element tables denotes an element or group that may occur multiple times.

1.3.1 API Request

Element Table

Hierarchy	Data Element	Description	Data Type	Data Length	Mandatory
0	UPDT_RNM	Top level hierarchy for the Update Renominations			
1	GAS_DAY	Gas Day for which renominations are updated	Date	10	Yes
1	SERV_ID	Unique ID associated to a BA's service	String	15	Yes
1*	UPDT_RNM_DTL	Top level hierarchy for the details of update Renominations			
2	ACTVTY_NBR	Unique number within a Service which defines the flow of gas through a meter	Integer	6	Yes
2	STRT_TM	Start time of the Renomination step. The Start Time should be in the range 0 to 23.	Integer	2	Yes
2	REQ_NRG	Quantity of energy requested for the Gas Day for the Service/Activity (kWh)	Long	13	Yes
2	IGNR_TLRNCE	A flag to indicate whether the tolerance check must be carried out for the record or whether it should be ignored. The permissible values are (Case sensitive): Y - To ignore the tolerance check. N - To carry out the tolerance check.	String	1	Yes

Schema Definition

Name of file: geminiapiupdaterenominationsreq.xsd

```

<?xml version="1.0"?>
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="UPDT_RNM">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="GAS_DAY" type="xs:date"/>
        <xs:element name="SERV_ID">
          <xs:simpleType>
            <xs:restriction base="xs:string">
              <xs:whiteSpace value="replace"/>
              <xs:minLength value="1"/>
              <xs:maxLength value="15"/>
            </xs:restriction>
          </xs:simpleType>
        </xs:element>
        <xs:element name="UPDT_RNM_DTL" minOccurs="0" maxOccurs="unbounded">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="ACTVTY_NBR">
                <xs:simpleType>
                  <xs:restriction base="xs:nonNegativeInteger">
                    <xs:totalDigits value="6"/>
                  </xs:restriction>
                </xs:simpleType>
              </xs:element>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>

```

```

<xs:element name="STRT_TM">
  <xs:simpleType>
    <xs:restriction base="xs:nonNegativeInteger">
      <xs:minInclusive value="0"/>
      <xs:maxInclusive value="23"/>
    </xs:restriction>
  </xs:simpleType>
</xs:element>
<xs:element name="REQ_NRG">
  <xs:simpleType>
    <xs:restriction base="xs:unsignedLong">
      <xs:totalDigits value="13"/>
    </xs:restriction>
  </xs:simpleType>
</xs:element>
<xs:element name="IGNR_TLRNCE">
  <xs:simpleType>
    <xs:restriction base="xs:string">
      <xs:whiteSpace value="collapse"/>
      <xs:enumeration value="Y"/>
      <xs:enumeration value="N"/>
    </xs:restriction>
  </xs:simpleType>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:schema>

```

1.3.2 API Response

Element Table

Hierarchy	Data Element	Description	Data Type	Data Length
0	UPDT_RNM_OUT	Top level hierarchy for update elements		
1	METADATA	Top level hierarchy for meta information elements		
2	TMSTMP	Time stamp of API access	DateTime	19
1	GAS_DAY	Gas Day for which renominations are updated	Date	10
1	SERV_ID	Unique ID associated to a BA's service	String	15
1*	ACTVTY	Top level hierarchy for activity elements		
2	ACTVTY_NBR	Unique number within a service which defines the flow of gas through a meter	Integer	6
2*	STEP	Top level hierarchy for step elements		
3	STRT_TM	Start time within a gas day. The Start Time is of 2 characters. Range 0 to 23.	Integer	2
3	REQ_NRG	Quantity of energy requested for the Gas Day for the Service/Activity	Long	13
3	STS	The status of the records The permissible values are: S - Success F - Failure	String	1
3	MSG_CD	This field gives the message code.	String	18
3	MSG_DESC	This field gives more descriptive information on the status of the record. If a record is successful it indicates the	String	400

	<p>same. In case if a record has failed, it gives the reason for failure of the record.</p>		
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Schema Definition

Name of file: geminiapiupdaterenominationsres.xsd

```

<?xml version="1.0"?>
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="UPDT_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="GAS_DAY" type="xs:date"/>
        <xs:element name="SERVC_ID" type="xs:string"/>
        <xs:element name="ACTVTY" minOccurs="0" maxOccurs="unbounded">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="ACTVTY_NBR" type="xs:nonNegativeInteger"/>
              <xs:element name="STEP" minOccurs="0" maxOccurs="unbounded">
                <xs:complexType>
                  <xs:sequence>
                    <xs:element name="STRT_TM" type="xs:nonNegativeInteger"/>
                    <xs:element name="REQ_NRG" type="xs:long"/>
                    <xs:element name="STS" type="xs:string"/>
                    <xs:element name="MSG_CD" type="xs:string"/>
                    <xs:element name="MSG_DESC" type="xs:string"/>
                  </xs:sequence>
                </xs:complexType>
              </xs:element>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>

```

1.4 API Specific 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_0051	Invalid Service Id for the BA
GEM_API_ERROR_0052	Current time is before the beginning renom deadline
GEM_API_ERROR_0053	Invalid Production Date - greater than D+1
GEM_API_ERROR_0054	Current time is after the ending renom deadline
GEM_API_ERROR_0055	Production Date has expired
GEM_API_ERROR_0056	Nomination for the Activity Number-Special Function combination already exists
GEM_API_ERROR_0057	Invalid Activity for entered Contract
GEM_API_ERROR_0058	Cannot create Nomination for NDMA meters
GEM_API_ERROR_0059	The meter on this Activity is inactive
GEM_API_ERROR_0060	Opposite flow nomination cannot be added
GEM_API_ERROR_0061	Renomination Lead Time validation has failed for some of the steps of this Activity
GEM_API_ERROR_0062	Lead Time Parameter has not been defined for the Meter Type
GEM_API_ERROR_0063	Gas trade already exists at N status
GEM_API_ERROR_0064	Tolerance validation has failed for some of the steps of this Activity
GEM_API_ERROR_0065	Flow Rate validation has failed for some of the steps of this Activity
GEM_API_ERROR_0066	Flow Rate Validation Parameter has not been defined for all the Meter Types
GEM_API_ERROR_0067	Flow Rate Validation Parameter has not been defined for the BA
GEM_API_MSG_0068	Renominations have been successfully created / updated for this Activity
GEM_API_ERROR_0084	The data required is currently locked by another user
GEM_API_ERROR_0085	Start Time Cannot be Equal to or Earlier than Last Approved Start Time

2 Document Control

2.1 Superseded Documents

Title	Reference	Version	Date
Gemini – API Specification for Energy Balancing and Exit Capacity Release	4021	1	21-Oct-2004

2.2 Version History

Version	Status	Date	Author(s)	Summary of Changes
Prior version history removed for brevity				
1	Approved	20-Jan-2005	NGT IS	Baseline approved at January 2005 UK-Link Committee.
2	For Representation	03-Feb-2005	NGT IS	Cardinality (*) indicator added to element tables.
2	For Representation	15-Feb-2005	NGT IS	Changes following NGT internal review as follows: - Section reference to API Usage Guidelines document for generic error messages corrected.
2	Approved	17-Mar-2005	NGT IS	Approved at UK-Link Committee.
3	For Representation	07-Sep-2005	National Grid IS	Corrections highlighted during Gemini trials as follows: - Superfluous “s” in URL in section 1.3.2; - Missing GEM_API_ERROR_0085 error message documented. Also, references to NGT changed to National Grid.
3	For Approval	29-Sep-2005	National Grid IS	No representation comments received. Submitted “For Approval” without further modification.