

Gemini API Specification

Capacity Trading - Confirm Trade API

Copyright National Grid, all rights reserved.

No part of this publication may by 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):	Wipro Technologies
Owner:	National Grid
Document Reference:	
Version:	1
Status:	For Review
Date:	05-Dec-2005

Gemini	Version: 1
API Specification for Confirm Trade	Date: 05-Dec-2005

Table of Contents

1 API Specification.....	3
1.1 Overview	3
1.2 API URLs.....	3
1.3 XML Specifications	4
1.3.1 API Request	4
1.3.2 API Response	4
1.4 API Specific Error Messages	7
2 Document Control.....	9
2.1 Superseded Documents	9
2.2 Version History.....	9

National Grid Confidential	Page 2 of 9	Doc Ref: ConfirmCapacityTradeAP I.doc
---------------------------------------	--------------------	--

Gemini	Version: 1
API Specification for Confirm Trade	Date: 05-Dec-2005

1 API Specification

1.1 Overview

This API provides the Business Associates to confirm a trade that has already been registered but not been withdrawn by the selling shipper. The buying shipper can confirm the trade registered by the selling shipper within the trade window. If the buying shipper does not confirm trade within elapsed or trade window, the trade will be timed out. If O&T cancels the trade within the preset time, then the buying shipper will not be allowed confirm the trade. When the buying shipper confirms trade within the preset time O&T will not be allowed to cancel the trade. At the end of it, it provides the information to business associate with the result of the trade status i.e. confirmed successful or not.

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/ConfirmTradeControllerAPI.java**

URL for Request XSD

**The XSD found at this URL can be used to validate the request XML format:
/gemini/api/schema/geminiapitradeconfirmreq.xsd**

URL for Response XSD

**The XSD found at this URL can be used to validate the response XML format:
/gemini/api/schema/geminiapitradeconfirmres.xsd**

National Grid Confidential	Page 3 of 9	Doc Ref: ConfirmCapacityTradeAP I.doc
---------------------------------------	--------------------	--

Gemini	Version: 1
API Specification for Confirm Trade	Date: 05-Dec-2005

1.3 XML Specifications

1.3.1 API Request

Element Table: INPUT

Hierarchy	Data Element	Screen Label	Description	Data Type	Data Length	Mandatory
0	CPCTY_TRD_CON_INP	Top level hierarchy for field elements				
1	TRD_REF_NMBR	Trade Reference	The trade reference number generated by the system when the trade is registered (used for re-trading)	String	15	Y

Schema Definition

Name of file: geminiapitradeconfirmreq.xsd

```
<?xml version="1.0"?>
<xsschema xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xselement name=" CPCTY_TRD_CON_INP ">
    <xsccomplexType>
      <xsssequence>
        <xselement name=" TRD_REF_NMBR ">
          <xssimpleType>
            <xstrrestriction base="xs:string">
              <xsmilength value="1"/>
              <xsmmaxlength value="15"/>
            </xstrrestriction>
          </xssimpleType>
        </xselement>
      </xsssequence>
    </xsccomplexType>
  </xselement>
</xsschema>
```

1.3.2 API Response

Element Table: OUTPUT

Hierarchy	Data Element	Screen Label	Description	Data Type	Data Length	
0	CPCTY_TRD_CON_OUT	Top level hierarchy for output elements				
1	METADATA	Top level hierarchy for meta information elements				

Gemini	Version: 1
API Specification for Confirm Trade	Date: 05-Dec-2005

2	TMSTMP		Timestamp of API access.	DateTime	19
1	CPCTY_TRD_CON_INP	Top level hierarchy for input elements			
2	TRD_REF_NMBR	Trade reference	The trade reference number generated by the system when the trade is registered (used for re-trading)	String	15
1	DTL	Top-level hierarchy for details.			
2	SELL_BA	Selling BA	Business Associate short code of the Business Associate who sells the trade	String	3
2	BUY_BA	Buying BA	Business Associate short code of the Business Associate who buys the trade	String	3
2	TRD_REF_NMBR	Trade Reference	Trade Reference	String	15
2	TRD_TM	Time Of Registration	Time of Registration of Trade	DateTime	19
2	LCTN	Location	Location Code	String	10
	TRD_QTY	Trade Qty(kWh)	The quantity of capacity being traded. (kWh)	Long	13
2	TRD_PRC	Trade Price(p/kWh)	Unit price for the trade being done between Business Associates. (p/kWh)	Float	6,4
2	PRD_FRM	Period From	Trade start Date	Date	11
2	PRD_TO	Period To	Trade end Date	Date	11
2	TRD_STS	Status	Status of the trade	String	3
2	MSG	-	The Message to be shown to Business Associate. E.g. Trade Reference XXXXXX confirmed successfully	String	60

National Grid Confidential	Page 5 of 9	Doc Ref: ConfirmCapacityTradeAP I.doc
-------------------------------	-------------	---

Gemini	Version: 1
API Specification for Confirm Trade	Date: 05-Dec-2005

Output schema Definition

Name of file: geminiapitradeconfirmres.xsd

```
<?xml version="1.0"?>
<xsschema xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xselement name=" CPCTY_TRD_CON_OUT ">
    <xsccomplexType>
      <xsssequence>
        <xselement name="METADATA">
          <xsccomplexType>
            <xsssequence>
              <xselement name="TMSTMP" type="xs:dateTime"/>
            </xsssequence>
          </xsccomplexType>
        </xselement>
        <xselement name=" CPCTY_TRD_CON_INP ">
          <xsccomplexType>
            <xsssequence>
              <xselement name=" TRD_REF_NMBR ">
                <xssimpleType>
                  <xstrrestriction base="xs:string">
                    <xssminLength value="1"/>
                    <xssmaxLength value="15"/>
                  </xstrrestriction>
                </xssimpleType>
              </xselement>
            </xsssequence>
          </xsccomplexType>
        </xselement>
        <xselement name="DTL">
          <xsccomplexType>
            <xsssequence>
              <xselement name="SELL_BA">
                <xssimpleType>
                  <xstrrestriction base="xs:string">
                    <xsslength value="3"/>
                  </xstrrestriction>
                </xssimpleType>
              </xselement>
              <xselement name="BUY_BA">
                <xssimpleType>
                  <xstrrestriction base="xs:string">
                    <xsslength value="3"/>
                  </xstrrestriction>
                </xssimpleType>
              </xselement>
            </xsssequence>
          </xsccomplexType>
        </xselement>
      </xsssequence>
    </xsccomplexType>
  </xselement>
</xsschema>
```

Gemini	Version: 1
API Specification for Confirm Trade	Date: 05-Dec-2005

```

</xs:restriction>
</xs:simpleType>
</xs:element>
<xs:element name="TRD_REF_NMBR">
<xs:simpleType>
<xs:restriction base="xs:string">
<xs:maxLength value="15"/>
</xs:restriction>
</xs:simpleType>
</xs:element>
<xs:element name="TRD_TM" type="xs:dateTime"/>
<xs:element name="LCTN">
<xs:simpleType>
<xs:restriction base="xs:string">
<xs:maxLength value="10"/>
</xs:restriction>
</xs:simpleType>
</xs:element>
<xs:element name="TRD_QTY">
<xs:simpleType>
<xs:restriction base="xs:long">
<xs:totalDigits value="13"/>
</xs:restriction>
</xs:simpleType>
</xs:element>
<xs:element name="TRD_PRC" type="xs:float"/>
<xs:element name="PRD_FRM" type="xs:date"/>
<xs:element name="PRD_TO" type="xs:date"/>
<xs:element name="TRD_STS">
<xs:simpleType>
<xs:restriction base="xs:string">
<xs:length value="3"/>
</xs:restriction>
</xs:simpleType>
</xs:element>
<xs:element name="MSG">
<xs:simpleType>
<xs:restriction base="xs:string">
<xs:maxLength value="60"/>
</xs:restriction>
</xs:simpleType>
</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 error 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.

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

Table 1 - API Specific Error Messages

Message Code	Message
GEM_API_ERROR_0210	Registered Trade does not exist.
GEM_API_ERROR_0211	Unauthorized operation for this trade.

National Grid Confidential	Page 7 of 9	Doc Ref: ConfirmCapacityTradeAP I.doc
-------------------------------	-------------	---

Gemini	Version: 1
API Specification for Confirm Trade	Date: 05-Dec-2005

GEM_API_ERROR_0214	Only buying Business Associate can confirm trade.

National Grid Confidential	Page 8 of 9	Doc Ref: ConfirmCapacityTradeAP I.doc
---------------------------------------	--------------------	--

Gemini	Version: 1
API Specification for Confirm Trade	Date: 05-Dec-2005

2 Document Control

2.1 Superseded Documents

Title	Reference	Version	Date
None	None	None	None

2.2 Version History

Version	Status	Date	Author(s)	Summary of Changes
1	For Review	05-Dec-2005	Wipro Technologies	Initial version developed for GPIN0055

Reviewers

Name	Role	Organisation Unit
Andy Earnshaw	Project Officer	Xoserve
Richard Loukes	Business Analyst	Xoserve

Management Approval

Name	Role	Organisation Unit
Simon McKeown	Project Manager	Xoserve

National Grid Confidential	Page 9 of 9	Doc Ref: ConfirmCapacityTradeAP I.doc
---------------------------------------	--------------------	--