

# UK LINK DESCRIPTION DOCUMENT

Version Control

Version	COR	Date of Change	Changes	Author
1 Draft	-	June 2017	Update to reflect implementation of UNC Modification 0565A.	David Addison
1 Live		October 2017	Minor amendment to following 0613S representations. Description of component interface diagram (p5).	David Addison
<a href="#">2 For Approval</a>		<a href="#">October 2018</a>	<a href="#">Amendment to include option to raise Service Contacts via Service Desk Portal.</a>	<a href="#">DA</a>

<b><u>UK LINK DESCRIPTION DOCUMENT</u></b> .....	<b><u>1</u></b>
<u>VERSION CONTROL</u> .....	<u>2</u>
<u>VERSION: 1 LIVE</u> .....	<u>4</u>
<u>1. <del>PURPOSE OF THIS DOCUMENT</del> <u>INTRODUCTION</u></u> .....	<u>4</u>
<u>2. <u>DESCRIPTION OF UK LINK</u></u> .....	<u>45</u>
<u>2.1 <u>General Description</u></u> .....	<u>45</u>
<u>2.1.1. <u>Parties authorised to access UK Link</u></u> .....	<u>56</u>
<u>2.1.2 <u>UK Link Gemini</u></u> .....	<u>6</u>
<u>2.1.2.1 <u>UK Link Gemini (Exit)</u></u> .....	<u>67</u>
<u>2.1.3 <u>UK Link System Application</u></u> .....	<u>7</u>
<u>2.1.3.1 <u>Supply Point Administration</u></u> .....	<u>78</u>
<u>2.1.3.2 <u>UK Link System Application Database</u></u> .....	<u>78</u>
<u>2.1.3.3 <u>Invoicing</u></u> .....	<u>89</u>
<u>2.1.3.4 <u>Connection and Disconnection Store</u></u> .....	<u>89</u>
<u>2.1.4 <u>UK Link Portal</u></u> .....	<u>89</u>
<u>2.1.5 <u>UK Link Online Services</u></u> .....	<u>89</u>
<u>2.1.6 <u>Data Enquiry Service (DES)</u></u> .....	<u>89</u>
<u>2.1.7 <u>Contact Management Service (CMS)</u></u> .....	<u>9</u>
<u>2.1.8 <u>UK Link Network</u></u> .....	<u>910</u>
<u>2.1.8.1 <u>Physical Design</u></u> .....	<u>910</u>
<u>2.1.8.2 <u>Supporting Services</u></u> .....	<u>1011</u>
<u>2.2 <u>Other services</u></u> .....	<u>1011</u>
<u>2.2.1 <u>Active Notification</u></u> .....	<u>1011</u>
<u>2.3 <u>CDSP Service Desk</u></u> .....	<u>1011</u>

**Version: 1 Live**

**Effective Date: 13<sup>th</sup> October 2017**

## **1. Introduction**

- 1.1 This document (Document) is the UK Link Description Document referred to in 2.1.1(b) of the UK Link Manual Framework Document.
- 1.2 This Document is an integral part of and is incorporated in the UK Link Manual.
- 1.3 The version of this Document that is in force and the date from which it is in force, are as stated on the first page of this Document.
- 1.4 In this Document:
- (a) terms defined in the DSC Terms and Conditions and not otherwise defined in this Document shall have the meaning given in the DSC Terms and Conditions;
  - (b) terms defined in any other CDSP Service Document and not otherwise defined in this Document shall have the meaning given in the CDSP Service Document;
  - (c) terms defined in the UK Link Framework Document and not otherwise defined in this Document shall have the meaning given in the UK Link Manual Framework Document; and
  - (d) the further provisions of the DSC Terms and Conditions as to interpretation apply.
- 1.5 This Document may be changed in accordance with the applicable procedures contained in the Change Management Procedures.
- 1.6 The purpose of this document is to provide for:
- (a) a description of UK Link as envisaged by UNC GTD 5.1.2 including a description of the component parts of UK Link and the relationship between these component parts;
  - (b) a description of UK Link Gemini as envisaged by UNC GTD 5.1.2; and
  - (c) a description of the support services available in relation to UK Link and UK Link Gemini, in particular, the CDSP Service Desk. This document also sets out the process for contacting the CDSP Service Desk and the process which will apply once any operational issues are referred to the CDSP Service Desk.
- 1.7 For the purposes of this Document, references to a UK Link User or UK Link Users exclude the CDSP.
- 1.8 In the case of the any conflict between the provisions of this Document and the UK Link Terms and Conditions the UK Link Terms and Conditions shall prevail.
- 1.9 UNC GT D5.2.3 does not apply in respect of this Document, and accordingly the provisions of this Document are not binding on UK Link Users.

## **2. DESCRIPTION OF UK LINK**

This section describes UK Link, and the constituent elements of UK Link. It also outlines the access, interfaces and support facilities available to UK Link Users.

### **2.1 General Description**

As stated in GTD 5.1.2 (a) "UK Link" means the information technology and communications (ITC) systems (in aggregate) used by the CDSP to provide the CDSP Services (including an information exchange system allowing the electronic transfer of information between the CDSP and UK Link Users and access to other parts of such ITC systems).

The UK Link system is an integrated set of computer systems, which have been developed to support the operation of the gas transportation system in accordance with the Uniform Network Code by, for example, providing a vehicle by which specific Code Communications between UK Link Users can be provided.

The UK Link System also allows additional communications (UK Link Communications) for example to view information already input in order to verify its accuracy, or to communicate with another User.

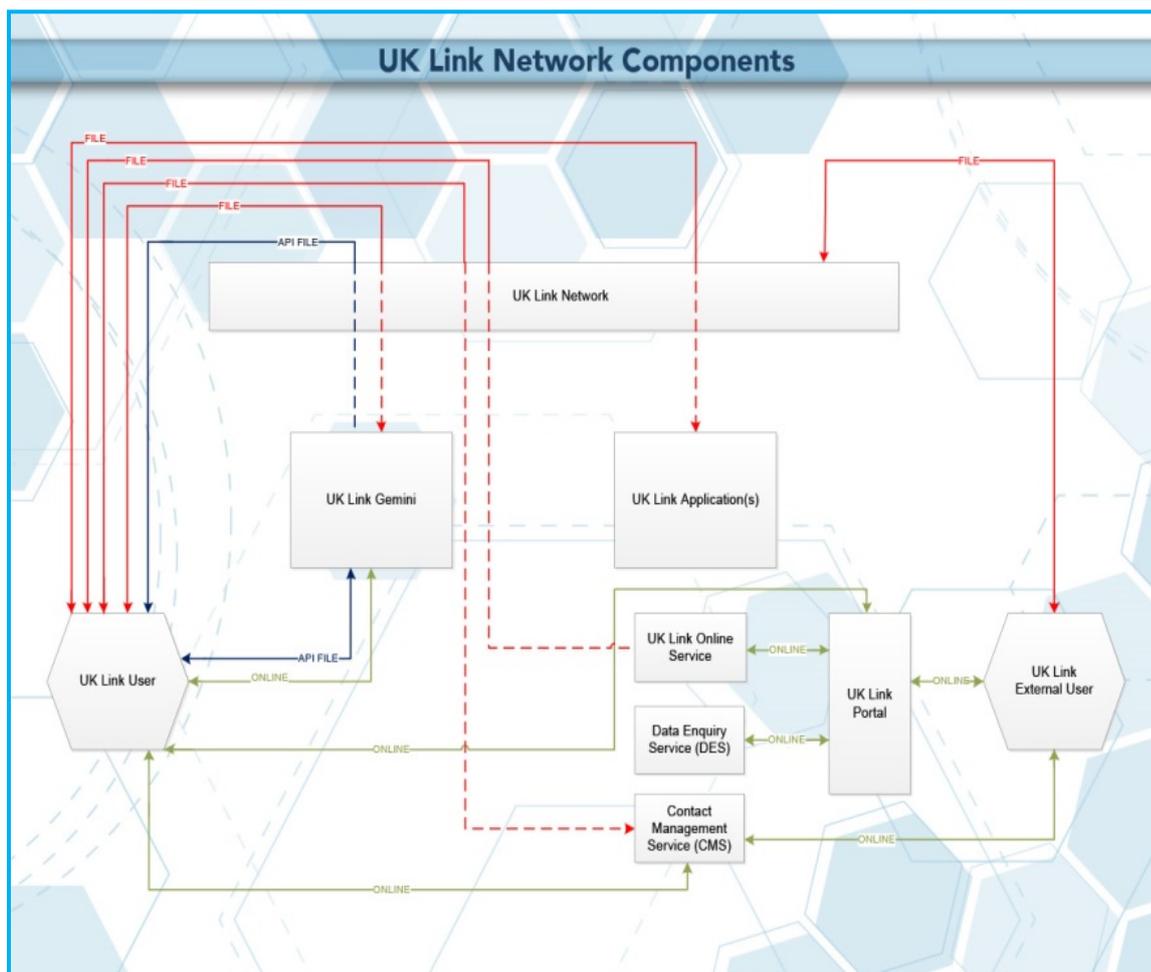
The UK Link system is operated by the CDSP.

The component parts of UK Link are:

- UK Link Gemini (including UK Link Gemini Exit and UK Link Gemini Online Services);
- UK Link System Application;
- UK Link Portal;
- UK Link Online Services;
- Data Enquiry Service;
- Contact Management Service; and
- UK Link Network (IX).

Each of these component parts is described in more detail below.

The diagram below shows the interactions with UK Link Users and the UK Link system components:



The system does not validate the accuracy of the data input by Authorised Representatives in Code Communications except where expressly stated in the Data Services Contract or other relevant contract with the UK Link User. The integrity of the data within the database is controlled via application coding checks, and the referential integrity functions inherent within the database and applications system. If a file or record provided by an Authorised Representative is rejected, a message will be sent to the relevant User providing reasons for such rejection. These messages are defined in the UK Link Communications Document UKLCD3 – UK Link Interface.

**2.1.1. Parties authorised to access UK Link**

The Uniform Network Code (GT D 5.1.2) defines the parties who are considered to be UK Link Users.

Any Party in their capacity as a UK Link User shall cease to be a UK Link User upon the User Discontinuance Date.

UK Link Users can access some components of the UK Link system via online services (including UK Link Gemini using the UK Link Network) and others by sending batch files across the UK Link Network which is described in section 2.1.8 of this Document.

**2.1.2 UK Link Gemini**

As stated in GTD 5.1.2 (b), “UK Link Gemini” means those parts of UK Link which support the implementation of the provisions of TPD Section B in relation to NTS Entry Capacity and NTS Exit Capacity and of TPD Sections E and F in respect of the determination of Energy Balancing Charges.

In order to balance the gas transportation system, the Transporters need to know how much gas will flow into and out of the National Transmission System on a daily basis. UK Link Gemini is used by UK Link Users and the Transporters to support this process.

UK Link Gemini also incorporates the functions that are provided by a discrete system, UK Link Gemini (Exit) – the functions specific to this aspect are described below in section 2.1.2.1.

The main functions provided by UK Link Gemini are:

- Storage Inventories;
- Gas Flow Nominations (and renominations);
- Scheduling;
- Gas Trade Registration from Market Operators;
- Measurement;
- Allocations and Balancing; and
- NTS Invoicing.

In order to flow gas into the National Transmission System users must obtain System Entry Capacity. UK Link Gemini is used by UK Link Users (including Distribution Networks) and the Transporter responsible for the National Transmission System to support this process.

UK Link Gemini provides the following key functions:

- NTS Entry Capacity Auctions;
- NTS Entry Capacity Transfers;
- Constraint Management services;
- NTS Invoicing; and
- NTS Entry Capacity Trading.

To the extent described in the UK Link Business Document UKLBD1 - UK Link Security Operating Framework and to the extent that they are entitled to it, UK Link Users have online access to the UK Link Gemini (Energy & Exit Capacity) system.

#### **2.1.2.1 UK Link Gemini (Exit)**

In order to flow gas out of the National Transmission System Users must obtain NTS Exit Flat Capacity. UK Link Gemini Exit is used by both UK Link Users (including Distribution Networks) and the Transporter responsible for the National Transmission System to support this process.

UK Link Gemini Exit provides the following key functions:

- NTS Exit (Flat) Capacity Application Processes;
- NTS Exit (Flat) Capacity Auction Processes;
- NTS Exit (Flat) Capacity Transfers;
- Assignment of NTS Exit (Flat) Capacity;
- Offtake Capacity Statement (OCS) and Offtake Pressure Statement (OPS) registration;
- Constraint Management services;
- NTS Exit (Flexibility) Capacity – for DNs only;
- Flow Swaps – For DNs only; and
- NTS Invoicing.

#### **2.1.3 UK Link System Application**

The UK Link System Application provides the functionality of the central UK Link system. This supports the following processes:

- Maintain Supply Meter Point Register;
- Maintain Gas Industry Stakeholders;
- Predict and Allocate Daily Energy;
- Settle Meter Point Consumption; and
- Invoice Charges.

The above processes are supported by the following notional application components:

- Supply Point Administration;
- UK Link System Application database;
- Invoicing; and
- Connection and Disconnection Store.

Each of these application components is described in more detail below.

### **2.1.3.1 Supply Point Administration**

The Supply Point Administration system (SPA) enables the CDSP to maintain records of every Supply Meter Point – i.e. the Supply Meter Point Register. UK Link Users can interact and update this function using batch files transferred across the UK Link Network, or for specific Supply Meter Points using an email interface. Supply Point Administration consists of two elements: Supply Point Maintenance and Supply Point Measurement.

Supply Point Maintenance is used to support three main functions:

- supply point nominations, confirmations, withdrawals and isolations;
- maintenance of supply point details; and
- portfolio management.

The UK Link System Application relies upon a database that provides the information which supports these facilities, this is described in section 2.1.3.2 of this Document.

The Supply Point Measurement part of SPA collates and consolidates the following:

- telemetered readings from entry, exit, and storage points to and from the NTS and LDZs, via central control systems; and
- readings from meters at Supply Meter Points

The UK Link Application will record the meter readings. These measurements enable the CDSP to record the quantity of gas supplied to each meter at each Supply Meter Point in order that the Shipper User can be charged appropriately.

### **2.1.3.2 UK Link System Application Database**

The UK Link System Application Database is the primary store of information relating to Supply Meter Points. The database includes details such as the address, asset information and readings for each Supply Meter Point. It also records details of the Registered User for each Supply Meter Point, relevant appointed organisations and contact details as necessary in the Uniform Network Code. The database is the source of all information on Supply Meter Points and provides this information to the other components of UK Link. This enables, for example, UK Link Gemini to use aggregated readings to calculate the gas transportation charges payable by Users. The database also provides facilities for the components of the UK Link system to update the information in a controlled manner to enable the integrity of the data to be preserved.

### **2.1.3.3 Invoicing**

The CDSP shall in accordance with the Data Services Contract, on behalf of the Transporters, raise invoices each month to cover all of the daily charges (and payments) arising from gas transportation activities and any other charges payable by UK Link Users.

Invoices are generated from the UK Link System Application or from UK Link Gemini and invoices are delivered to Shipper Users as batch files across the UK Link Network.

NTS Invoices are typically generated using UK Link Gemini. The remainder of transportation invoicing is generated using the Invoicing elements of the UK Link System Application.

A Contact Management Service is used to deal with all invoicing and associated queries.

### **2.1.3.4 Connection and Disconnection Store**

This component records details of any connection and disconnection of a meter notified to the CDSP. It shall also generate any notifications that the Transporter is obliged to provide to a UK Link User of any such activity.

### **2.1.4 UK Link Portal**

The UK Link Portal has been designed to provide a single sign on access to the online services provided by the Data Enquiry Service and the UK Link Online Service for Authorised Representatives of UK Link Users. This element of UK Link also enables Local Security Officers to administer access to these online services.

UK Link Business Document UKLBD1 – UK Link Security Operating Framework describes the functionality available and the procedures for use of this UK Link Portal.

### **2.1.5 UK Link Online Services**

UK Link Users with the correct permissions may access the UK Link Online Service in order to view data held within the UK Link System Application.

Functionality exists for Authorised Representatives of Users to update records, perform small data extracts and schedule larger data extracts.

The screens that are available to UK Link Users are defined in **UKLCD3**.

### **2.1.6 Data Enquiry Service (DES)**

The Data Enquiry Service (DES) is an online service designed to be used by Authorised Representatives of UK Link Users to interrogate certain data relating to Supply Meter Points.

It also allows Authorised Representatives of appropriately authorised UK Link Users the ability to access further details relating to Supply Meter Points that are within their Supply Meter Point portfolio, and provided that the relevant data permissions exist the relevant UK Link Users can use this service to view data relating to Supply Meter Points that are held within the UK Link System Application.

The screens that are available to UK Link Users are defined in **UKLCD3**.

### **2.1.7 Contact Management Service (CMS)**

The Contact Management Service is an online service for processing contacts with the CDSP.

It enables UK Link Users to raise contacts via batch and online interfaces and provides the ability to track them through to resolution.

The screens that are available to UK Link Users are defined in **UKLCD3**.

### **2.1.8 UK Link Network**

The UK Link Network (also known as the Information 'Xchange Network or IXN) is the communications infrastructure which allows UK Link Users to communicate with each other. The term 'Network' is used to refer to both the network hardware and also the software and services which control and support it.

To the extent that they are entitled to it, UK Link Users have access to the main services that the UK Link Network supports:

- Online access to UK Link Gemini; and
- File transfer facilities to allow secure, auditable transfer of data in batch files.

External UK Link Users are able to utilise the UK Link Network services in accordance with the UK Link User Agreement between that External UK Link User and the CDSP.

In order to access the UK Link Network, UK Link Users shall require the equipment and software which is described in UKLAD2.

#### **2.1.8.1 Physical Design**

The UK Link Network Wide Area Network (WAN) consists of Gateways and Network Access Points (NAPs) sited at the User premises. The Gateways are PC file servers which use Microsoft Windows as their operating software.

The Gateways are connected by telecommunications lines of configurable bandwidth supporting Transmission Control Protocol/ Internet Protocol (TCP/IP).

Transmission of data along the telecommunication lines is controlled by NAP equipment (sometimes referred to as routers) which routes messages across a wide area network and can be programmed to send the messages to a predefined address.

The UK Link Business Document UKLBD3 – UK Link Standards Guide provides guidance to UK Link Users on File Naming and Routing Principles; File Naming Standards for UK Link Communications; Interface File Definition for File Definition, Record Definition and Record Standards; Error Reporting; and Version Control. Failure to comply with these standards may result in your file not being transferred.

The UK Link Access Document UKLAD3 – UK Link File Transfer Definition describes address protocols when conveying a file to another User.

Each Gateway and NAP will require an IP address. UK Link Users must register their own IP addresses in order to avoid potential problems arising from duplication.

Prior to any communications being transferred over the UK Link Network IP addresses must be lodged with the CDSP who will maintain and keep secure from unauthorised access a central repository of all registered IP addresses on the UK Link Network.

Online services provided by UK Link Gemini can be accessed from UK Link User premises. In order to access UK Link Gemini Online, UK Link Users shall require software which is described in UKLAD2.

### **2.1.8.2 Supporting Services**

A controlled file transfer mechanism controls the sending and receiving of batch files between the UK Link Users. The relevant software resides on each of the UK Link Network Gateways and maintains audit trails of all file traffic (including failed transmissions). Further information is available within the UK Link Access Document UKLAD3 – UK Link File Transfer Definition.

## **2.2 Other services**

### **2.2.1 Active Notification**

The Active Notification System, independent of the UK Link Network, is provided and operated by National Grid NTS to notify UK Link Users operating within mainland UK of business or time critical events which require the UK Link User to respond rapidly. The system is administered by National Grid NTS. This system does not form part of the UK Link.

## **2.3 CDSP Service Desk**

UK Link Users are supported by a Service Desk operated by the CDSP (“CDSP Service Desk”). The purpose of the CDSP Service Desk is to:

- (a) provide the first point of contact for UK Link Users to report any operational problems experienced in accessing or using UK Link; ~~and or~~
- (b) to raise Service Requests, each of which shall be referred to as a “Service Contact”.

Please refer to the UK Link Business Document UKLBD2 – UK Link IS Service Definition for more details.

UK Link Users ~~are able to telephone~~ can raise a Service Contact by calling the CDSP Service Desk on the following numbers:

Telephone from the UK: 0845 600 0506  
Telephone from outside the UK: +44 121 623 2858

[Alternatively UK Link Users may log a Service Contact via the Service Desk Portal accessible from the 'Contact Us' section of the Xoserve website.](#)

The CDSP Service Desk will log all ~~calls~~ Service Contacts received and, if required, pass ~~calls the~~ Service Contact to the appropriate second-line support group. All ~~calls to~~ Service Contacts raised with the CDSP Service Desk will be logged and a priority assigned depending on the severity of the problem and its impact. These priorities are defined in the UK Link Business Document UKLBD2 – UK Link IS Service Definition.

The operational hours of the CDSP Service Desk are 24 hours a day 365 days a year.

~~When calling the CDSP Service Desk you will be presented with various options. Upon selection you will be automatically transferred to the appropriate support group to take your call.~~

[In order to raise the Service Contact the UK Link User will be asked for details of the issue. The information necessary to raise the Service Contact is defined in the UK Link Business Document UKLBD2 – UK Link IS Service Definition, but additional information may be required to understand and direct the Service Contact which will vary depending on the contact.](#)

The CDSP Service Desk should be the first point of contact for reporting any problem which a UK Link User believes could result in a Code Contingency being declared by the CDSP.

[It is recommended that any problem which a UK Link User believes could result in a Code Contingency being declared is raised by calling the CDSP Service Desk rather than via the Service Desk Portal.](#)

The CDSP Service Desk reserves the right to charge for this service in accordance with the DSC or the agreement with the relevant UK Link User.

The Service Desk is not responsible for queries relating to business processes.

<b>Legend:</b>	
<u>Insertion</u>	
<del>Deletion</del>	
<del>Moved from</del>	
<u>Moved to</u>	
Style change	
Format change	
<del>Moved deletion</del>	
Inserted cell	
Deleted cell	
Moved cell	
Split/Merged cell	
Padding cell	

<b>Statistics:</b>	
	Count
Insertions	40
Deletions	29
Moved from	1
Moved to	1
Style change	0
Format changed	0
Total changes	71