EQUIPMENT REQUIRED TO ACCESS UK LINK

June 2017

Version 1 For Approval

Version Control

Version	COR	Date of Change	Changes	Author
1 For Approval	-	June 2017	Update to reflect implementation of UNC Modification 0565A.	David Addison

[STANDARD FRONT END TO BE INSERTED]

1. PURPOSE OF THIS DOCUMENT

1.1 Introduction

This document describes the hardware, software and telecommunications which a User requires in order to access UK Link and the configurations for such equipment and software on which UK Link has been designed and tested to operate.

1.2 UK Link User Types

There are a number of different types of UK Link User who may access UK Link , as defined in the UK Link Terms and Conditions.

The hardware and software components necessary for each type of UK Link User is dependent upon the UK Link services to which that UK Link User requires access. For example, where a UK Link User does not require access to file transfer facilities or Gemini UK Link Online Services they would not be supplied with a Gateway.

For the purposes of this document, references to a UK Link User exclude the CDSP.

2. INFRASTRUCTURE REQUIREMENTS

2.1 Proposed Utilisation by UK Link User or External UK Link User

Where a UK Link User requires access to the Gemini UK Link Online Service or the file transfer facilities through the UK Link Network an assessment will need to be undertaken to determine the necessary size of the Gateway and the bandwidth of the telecommunication lines. UK Link Users are classed by expected usage based on the User Type and portfolio.

2.2 Equipment and Software Required by Users

In order to access the UK Link Network and UK Link Gemini Online Services, a UK Link User will need to have certain equipment and software installed or a kit sharing arrangement or use of User Agent.

For access to UK Link Gemini Online Services a User requires:

- · a PC
- · a Network Access Point (NAP) with a registered IP address
- · a telecommunication line

For access to the batch transfer service via the UK Link Network a UK Link User requires:

- · a PC file server (to fulfil the functions of the Gateway) with a registered IP address and Windows operating system
- · a NAP with a registered IP address
- · a telecommunication line
- · the CDSP specified file transfer software package

The same NAP, with a registered IP address and telecommunication line can be used for any of the above services.

For access to the UK Link Services accessed via the internet a UK Link User requires:

- a device capable of accessing internet services
- a Network Access Point (NAP) with a registered IP address
- compatible web browser for the relevant UK Link Service as defined in Appendix E of the UK Link Manual Supplementary Document – IS Service Definition

For access to the Active Notification System a UK Link User requires the necessary Active Notification Device recommended by the Transporters. This service is not provided by the CDSP so is outside the scope of this document. This service is operated by National Grid NTS.

The equipment and software provided by the CDSP is described in Sections 2.2 and 2.3 below.

2.3 Equipment required by Users

The equipment described in Section 2.1 above, can be broken down into the following categories:

2.3.1 CDSP Available Equipment

The following hardware is provided by CDSP and is the "CDSP Available Equipment" for the purposes of the UK Link Manual Terms and Conditions:

- Telecommunication lines
- NAP equipment
- Gateway
- Equipment rack to house the hardware

There are different options in relation to the CDSP Available Equipment as the specification of the Gateway and telecommunication lines provided to a UK Link User will vary depending on the expected and actual usage volumes of the UK Link User. Specification may also be dictated by other factors, such as site location and other local factors.

In determining the size of the Gateway and the bandwidth of the telecommunication lines, UK Link Users are classed by expected usage based on the User Type and portfolio. The CDSP will recommend a Gateway configuration and bandwidth which it will agree with the UK Link User prior to installation. The standard options in relation to the CDSP Available Equipment are set out in Appendix B.

CDSP Available Equipment may be upgraded from time to time in accordance with the DSC Change Management Procedures.

2.3.2 Other UK Link User Hardware

A UK Link User is not permitted to access the UK Link Network directly using the supplied Gateway since local logons are disabled. This is to avoid the UK Link User affecting performance by installing software on the Gateway other than that installed by the CDSP. Each UK Link User therefore requires at least one PC which it can use to transfer files to and from the Gateway and/or to access UK Link Gemini Online services.

Multiple access points can be provided using a UK Link User's own internal PC networks. The CDSP does not supply the PCs which UK Link Users must use to access UK Link.

2.3.2.1 Active Notification Devices

The Active Notification System is supported by National Grid NTS. The Active Notification Devices are not provided by the CDSP or National Grid NTS, but the Active Notification Devices must be consistent with the any specification defined in the UK Link Manual Supplementary Document – Active Notification System Supplementary Document and capable of receiving Active Notification communications.

2.3.2.2 XP1

XP1 is currently provided as a contingency solution to all Users in mainland UK requiring access to UK Link Gemini. It consists of a security access token, and Users access information. Its continued use is subject to review as part of the UK Link Modification process.

2.4 Software required by Users

The software which a User needs to have installed on equipment at its own premises is broken down into the following categories:

2.4.1 Licensed Software

The terms of licence for Licensed Software are contained in the UK Link Terms and Conditions.

The following Licensed Software is:

· [None]

The Licensed Software will be upgraded and/or modified from time to time as the Benchmark UK Link Configuration is updated.

2.4.2 CDSP Provided Software

The following software is provided by the CDSP and is the "CDSP Available Software" for the purposes of the UK Link Terms and Conditions:

· Microsoft Windows operating system
· Virus checking software

The first two items on this list are loaded onto the UK Link User's Gateway.

The CDSP Provided Software will be upgraded from time to time in accordance with the UK Link Modification Procedures.

2.4.3 Software to be obtained by UK Link User

The following Licensed Software must be downloaded by the UK Link User:

· Citrix client

2.5 Benchmark UK Link Configuration

[None]

2.6 Updates of CDSP Available Software

In accordance with the UK Link Terms and Conditions, the CDSP will notify each User of any update required to the version of the Software.
Notification of the change will be provided in accordance with the DSC Change Management Procedure, or for UK Link Users that are not DSC Customers in accordance with the procedure agreed with such UK Link User. This notification shall provide the means that the Software update shall be made.

Updates to Software installed may be made by the following means:

- deployed centrally by the CDSP e.g. to a User Gateway or NAP
- an engineer visit instructed by the CDSP and arranged with the User
- [provision by the CDSP of an updated version (e.g. via a physical copy on disk) or where an updated version is available (e.g. a website link)]

[Any updates to Software installed on User PCs will be made by notifying the User to update the software at a specified date and time, and where appropriate, the method that the User shall obtain the updated software.]

It is the responsibility of each User, on the date and at the time notified to the User by the CDSP, to:

· Carry out any necessary reconfiguration of its internal computer system: and
· Install any update to Software on its internal PCs

2.7 Operational Environment

The equipment supplied by the CDSP does not have any special operating environment requirements other than those recommended by the equipment manufacturers and contained within relevant EU and UK Health & Safety legislation. Each installation will be site specific with the following requirements:

· for maintenance purposes, a clear working area of one metre is required at the front and rear of the rack. This can be achieved by moving the rack into free working space;
· for maintenance purposes, the Gateway requires a clear working area of one metre on all sides. Again, this can be achieved by moving the Gateway into clear working space;
· for operational purposes the Gateway requires a clear air flow front and back;
· the operating environment for all equipment should not be excessively dusty or smoky;
· the operating temperature must be in the range 10-40°C; and the operating humidity must be in the range 10-90% relative humidity;
· [to be confirmed].

The CDSP will not install any CDSP Available Equipment if these requirements cannot be met.

2.8 Relocation of CDSP Provided User Equipment

All relocations of the CDSP Provided User Equipment will be carried out by the CDSP approved personnel and is chargeable.

Relocation of CDSP Provided User Equipment may impact on the load and traffic on part of the UK Link Network and may also require installation of new telecommunications lines.

If a UK Link User wishes to relocate User Equipment (with the exception of the Active Notification Device), it must notify the CDSP Service Desk.. The relevant notice period is 45 Business Days.

The CDSP will determine procedures for each relocation on a case-by-case basis and use its reasonable endeavours to ensure that relocations are completed within the relevant notice period. The CDSP will arrange for the telecommunications provider to relocate the telecommunications circuits. The CDSP will agree a date for the relocation with the User and will give an estimate of the costs to be incurred.

In the case of an emergency which, in the reasonable opinion of the User is causing or is likely to cause damage to any the CDSP Provided User Equipment, a User may temporarily relocate such equipment provided that the User shall notify the CDSP of any such relocation within one Business Day and shall allow the CDSP to undertake any checks which ,in its reasonable opinion, shall deem

necessary to ensure that the equipment is functioning normally and continues to fulfil the requirements.

Appendix A - Glossary

Where a reference is stated this document shall have the same meaning as the source reference. In such circumstances this is reproduced to assist the reader, but readers must not rely upon the definition stated.

Term	Synonyms	Reference	Definition / Expansion	Comments
Automatic Audit Trail Facility			a facility forming part of the UK Link System installed at premises designated by the CDSP, which will automatically record the sending or the receipt by the CDSP of the message comprised in such UK Link Communication and log the date and time of such sending or receipt.	
CDSP		GTD 1.2.1a	Central Data Services Provider	
CDSP help desk	help desk	UK Link Manual Terms and Conditions 10	Provision by the CDSP of a help desk function as defined in the UK Link Overview Manual	
CDSP Duty Manager	CDSP DM		A representative of the CDSP that will engage with a User in the event of a DR Arrangement	
Code Communication		GTD 5.1e	A communication required in the UNC, IGT UNC or the IGTAD	
Communication			A generic term used within this document to signify a Code Communication, a UK Link Communication or a message conveyed by the UK Link Network	
Core Customer		GTD 1.2.1d	Means a party to the Code (other than a Trader User) in the capacity of a party to the DSC	
DSC		GTD 1.2.1c	Data Services Contract	
DR Representative			This nominated person(s) responsible for managing Disaster Recovery processes when a complete file transfer failure occurs.	
External UK Link User			An Organisation (other than UNC parties) who is entitled to use UK Link Systems consistent with the UK Link Terms and Conditions 2.2, including as a result of entering into an additional services contract with the CDSP.	
File Transfer server			CDSP provided server on User premises used to send & receive files	
FTP			File Transfer Protocol	
GTD			General Terms Section D of Uniform Network Code	
LAN			Local Area Network	
Organisational Node			Destination code in the format *ORGnn,* where ORG is the User's shortcode, and *nn* is the node	
message			A discrete transmission sent by a User	
TCP/IP			Transmission Control Protocol / Internet Protocol	

Third Party Services		GTD 3.7	Services provided consistent with policy described in GTD 3.7.	
UK Link Communication	message	GTD 5.1d	A communication transmitted by a User, in this document, exclusively by file sent via the UK Link Network.	
UK Link Network	IXN / I'X		An information exchange system, allowing the electronic transfer of information between the CDSP and Users and certain access (as described in the UK Link Manual) by Users to the UK Link System.	
UK Link User			Persons acting as an Organisation authorised to have access to and use of UK Link System, including the UK Link Network. **This definition excludes External UK Link Users unless specified to the contrary.**	
UK Link User Agreement		GTD 5.1.2 f	A third part agreement allowing access to relevant elements of the UK Link System.	
Users			Term to refer to both UK Link Users and External UK Link Users.	
User Gateway			A "**Gateway**" is a computer server forming part of the UK Link Network, installed at premises designated by the CDSP and of each User (and in the case of a User forming part of the User Equipment and including Licensed Software).	
User Organisation Type	Organisation Type		A type of organisation authorised to use the UK Link Network by being a party to the Data Services Contract or a contract that otherwise allows access including, but not limited to, Customer Class as defined in GTD 1.2 – e.g. Shipper Users, DMSPs, MAMs	
User Short Code			A three character code assigned to each User. These are maintained by the CDSP and published within the UK Link Manual.	

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Appendix B: UK Link User Equipment Options

Option 1 - Low cost option for standard customer sites with no access restrictions.
- The hardware that will be installed is 1 x Cisco 2901 router and 1 x HP DL120 or 1x HP ML110 rack mount server (with rails provided). 2 x DSL circuits. Devices are 1U and require 1 x 13amp power supply for each device.
- Subject to availability of access, circuits and distance from serving exchange. May need to be upgraded to Option 2 or 3 if access/circuits unavailable.
- Engineer's names cannot be obtained prior to site visit.

Option 2 -Where Both circuits cannot be provided over DSL
- The hardware that will be installed is 1 x Cisco 2901 Router and 1x HP DL120 or 1x HP ML110 Server either 1U rack mount or small tower. Primary link presented via 2Mb EFM (Ethernet First Mile) or PPC (Partial Private Circuit). Backup link presented via Business Grade ADSL (BGADSL) 16.
- When EFM/PPC circuit are used there may be additional hardware installed. Total power requirements are 2 x 13amp sockets, but could be up to 4 x 13amp sockets required.
- Engineer's names cannot be obtained prior to site visit.

Option 3 - Provided where DSL option is unavailable. Suitable for data centres with strict access requirements,
- The hardware that will be installed is 1 x Single Cisco 2901 Router and 1x HP DL120 or 1x HP ML110 either 1U rack mount or small tower
- Primary link presented via 2Mb EFM (Ethernet First Mile) or PPC (Partial Private Circuit) Backup link presented via 2Mb EFM (Ethernet First Mile) or PPC (Partial Private Circuit)
- When EFM/PPC circuit are used there may be additional hardware installed. Total power requirements are 2 x 13amp sockets, but could be up to 4 x 13amp sockets required. Engineer's names can be obtained prior to site visit.

[Option 4 - …]
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Please note: the hardware is owned and supported by Vodafone. Following service installation any faults/issues can be raised via CDSP help desk. The IP addresses/ports for CDSP systems are fixed
and will be provided at a later date. The Cisco router will have one Ethernet interface for connection onto your network device. The IP address for this interface and your source addresses will need to be agreed prior to equipment installation.