# UK LINK MANUALACCESS DOCUMENT

**UKLAD3** 

# UK LINK FILE TRANSFER DEFINITION

<mark>July</mark> 2017

**Version 13.1 For Approval** 

#### VERSION CONTROL

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**Effective Date:** []

#### 1. Introduction

- 1.1 This document (Document), setting out how UK Link Users exchange files with other UK Link Users, including the CDSP, is the UK Link Access Document UKLAD3 UK Link File Transfer Definition referred to in the paragraph 2.1.1 (c) (iii) 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 above.
- 1.4 In this Document:
  - (a) Terms defined in the Glossary shall have the meaning set out in the Glossary;
  - (b) 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;
  - (c) Terms defined in any other CDSP Service Documents and not otherwise defined in this Document shall have the meaning given in the CDSP Service Document;
  - (d) 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
  - (e) 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 describe:
  - (a) the principles of UK Link; and
  - (b) the procedures that UK Link Users should follow when sending a communication to another UK Link User using UK Link.
- 1.7 For the purposes of this Document, references to UK Link User or UK Link Users exclude the CDSP.
- 1.8 In the case of any conflict between the provisions of this Document and the UK Link Terms and Conditions the latter shall prevail.

#### 1.2 Structure of Document

Section 2 describes the overall hardware/software configuration and file naming convention supporting file transfers.

Sections 3 and 4 describe how a UK Link User sends and receives files.

Subsequent sections set out contingency and housekeeping arrangements, audit logs, and where to go for help.

Impl<sup>n</sup>: 13th October 2017

Appendix A defines treatment specific to a UK Link User that interacts with the CDSP via the UK Link Network.

Appendix B lists the variables involved if UK Link Users use the TCP/IP-based file transfer protocol (ftp).

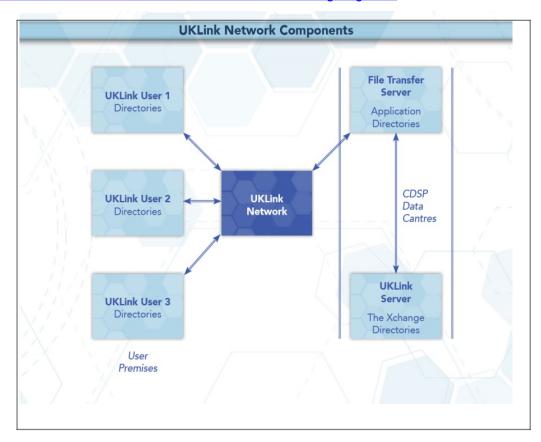
Appendix C lists the values of the environment and priority indicators in the file name.

Appendix E and F provide UK Link Users with guidance in respect to moving files to export and import directories using recognised file transfer protocols. This is provided to assist UK Link Users. This does not form part of the UK Link Manual.

## 2. Configuration

#### 2.1 File Transfer Arrangements

Each UK Link User has a gateway ("User Gateway") located at their premises or if agreed with the CDSP at another location. Each User Gateway has relevant directories loaded onto it by the CDSP and these directories are accessed as shown in the following diagram.



Figur e 1: UK

#### **Link Network Context**

Audit logs generated on a daily basis on the User Gateway will record details of all file transfers performed through the UK Link Network. These are explained in more detail in Section 6.

#### 2.2 User Gateway Configuration

There are a number of directories configured onto each User Gateway. The structure of these directories is shown in the following diagram and further explained in section 2.3.

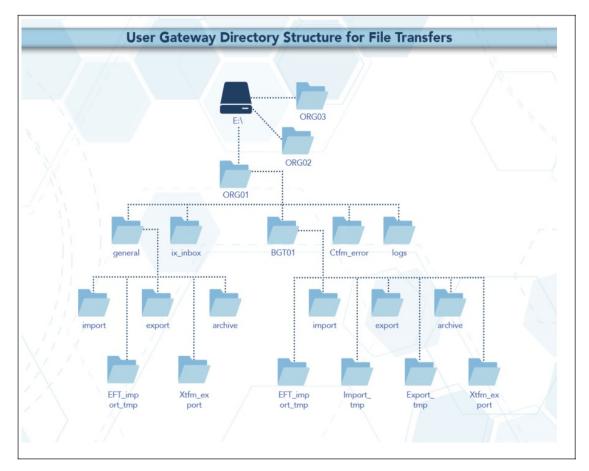


Figure 2: User Gateway Configuration

#### 2.3 User Data Directories - e.g. e:\ORG01

The directories for sending and receiving files are located on the E: drive of the User Gateway under e:/ORG01. ORG will be the 3 letter User short code assigned by the CDSP, and 01 is a number assigned to the node by the CDSP for unique identification purposes. Throughout this document ORG01 is used for example purposes only.

These directories will hold the incoming (*import*), outgoing (*export*), and archived (*archive*) files. There is also a directory (*cftm\_error*) to hold invalid files that the UK Link User has attempted to send.

All activities performed using the file transfer mechanism will be recorded in audit logs in the *logs* directory. The content of the daily audit logs are explained in more detail in Section 6.

In addition, there is a staging directory, the *ix\_inbox*. Files to be sent should be copied to the *ix\_inbox* directory, then either moved or renamed to the *export* directory. This latter step is required to prevent transferring a file that has only been partially created. Refer to Section 3 for further details.

The interrelationship of these directories will be shown in subsequent sections. Access to the directories, and to the files within them, are set out in the following table.

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<del>2.4.3.3</del>					
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e:\ORG01	Y	Υ		
\cftm_error	Υ	Υ		Υ
\ix_inbox	Υ	Υ	Υ	Υ
\logs	Υ	Υ		
\BGT01	Υ			
\import	Υ	Υ		Υ
\export	Υ	Υ	Υ	Υ
\archive	Υ	Υ		
\eft_import_tmp	Υ			
\general	Y			
\import	Υ	Υ		Υ
\export	Υ	Υ	Y	Y
\archive	Υ	Υ		

#### 2.4 File Naming

This section <u>defines\_describes</u> the naming convention of the file as it needs to be conveyed over the UK Link Network – i.e. when a <u>UK Link User places a file on</u>, or retrieves a file from, the User Gateway.

This section identifies those constituent data items that form the significant addressing information required to enable the successful routing of files to and from other <a href="UK Link">UK Link</a> Users.

#### 2.4.1 Summary of File Naming

The file name is used to route files across the UK Link Network. The UK Link file naming standards are as follows:-

This is referred to as 5.8.3 naming convention.

This level is the destination / originator code in the format *ORGnn* where ORG is the <u>UK Link</u> User's Short Code, and *nn* is the node (example '01'). A </evel\_1> directory exists for each recipient Gateway that is to receive and/or send files via the UK Link Network.

This element of the file name will be appended by the file transfer mechanism for certain <u>User</u> Organisation Types. Please refer to Section 2.4.3 which sets out specific treatment by <u>User</u> Organisation Type.

<u>User Organisation Types that must observe the 5.8.3 naming convention must use UKL01 when sending a file to the CDSP.</u> Files to such <u>User Organisation Types from the CDSP will appear in a User's import directory as UKL01.</u>

- This level is 8 characters in length, in the format *EPNNNNNN*. Where *E* indicates the environment, e.g. test or production, *P* is the priority, and *NNNNNN* is a 6-digit generation number.
- **level\_3** This 3-character suffix identifies the file type as defined in the Interface Documents relevant to each <u>User</u> Organisation Type.

#### NOTE: All file names should be in UPPERCASE.

Files not consistent with the naming convention shall be rejected.

#### Example file names:

PN123456.NOM UKL01.PN012345.SIF PN000001.MBR

TN100123.MBR (Please note the Environment reference not denoting Production)

For further information on file suffixes and file formats please refer to the relevant Organisation TypeUser Interface Document contained in the UK Link Manual.

#### Format key:

A - Alphabetic

N - Numeric

X - Alphanumeric

#### 2.4.2 File Naming Structure

#### Level 1

<level\_1> data items identify the addressing information of the correct import or export location.

Data Item	Format	Fixed / Variable Length	Description
<pre><routing_id> / Short Code (*)</routing_id></pre>	AAA	Fixed	Short Code denoting:  • the gateway User Gateway identity of the recipient gateway User Gateway for UK Link User (exported) files.  • the gateway User Gateway identity of the sending gateway User Gateway for UK Link User imported files.  Synonyms: ( <shipper code="" short=""> <business abbreviation="" associate=""> <user id=""> <rooting id="">)</rooting></user></business></shipper>
<routing_loc> / Node (*)</routing_loc>	NN	Fixed	Identifies the location node on the gatewayUser Gateway for files transmitted to or from the CDSP via the UK Link Network.  Enables up to 99 multiple nodes per <routing_id>; range 01 -&gt; 99.  Synonyms: (<routing loc=""> <node> <location>)</location></node></routing></routing_id>

#### Level 2

<level\_2> data items identify the addressing information. This number must be unique to the organisational node and suffix to stop duplicate files being processed. The currently supported  $\underline{E}$ nvironment and  $\underline{P}$ riority values are listed in Appendix B.

Data Item	Format	Fixed /	Description
		Variable	
		Length	

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<environment_in< th=""><th>A</th><th>Fixed</th><th>Environment indicator.</th></environment_in<>	A	Fixed	Environment indicator.
d>			"P" => Production;
			Other characters may imply a Test file, there could be a number of Test environments which may need to be differentiated between.
			UK Link Users must not place a test file on the UK Link Network without prior notice and authorisation.
			The environment indicator can be used to control the routing of Test files received from outside the CDSP (e.g. Shipper Users) across the UK Link Network to an application environment. All files will be received into the same gateway.
<pre><priority></priority></pre>	A	Fixed	Priority code. "N" => Normal; Transfer in sequence of submission (default). Currently only the default will be used in the File Name.
<pre><generation_nu mber=""></generation_nu></pre>	NNNNN	Fixed	Unique reference when read in conjunction with level 3. Used to provide a unique qualifier to the file name.
			It is the responsibility of the generating application to ensure that this data item is unique per <file_type>. If the data item is not unique then there is the possibility that the file could be overwritten by another file of the same type.</file_type>
			Non unique file names will be rejected.

#### Level 3

<level\_3> data item identifies the type of file being transmitted.

Data Item	Format	Fixed / Variable Length	Description
<file_type></file_type>	XXX	Fixed	Identifies the File being transmitted.

The <level\_3> data item signifies the type of file transmitted between gatewaysUser Gateways of a sender/recipient. These file types are defined within the User Interface Documents.

The file name (i.e. all constituent parts – level 1, 2 and 3) has to be unique. Where <u>UK Link</u> Users exhaust unique file names the <generation number> records must be deleted by file type by Organisation. It would be expected that the <generation number> would restart from 000001. The CDSP will contact the <u>UK Link</u> User in the event that this is identified as being required, alternatively <u>UK Link</u> Users may contact the CDSP Service Desk.

# 2.4.3 File Naming Conventions for Files passed between <u>User</u> Organisation Types

The <u>User</u> Organisation Type defines whether an organisation is required to provide, or will receive, the <level\_1> element of the file naming convention or whether the file transfer mechanism will determine this.

The file transfer mechanism will be configured by <u>User Organisation Type</u>. Any exceptions must be explicitly registered and will be defined in Appendix A of this <u>Document</u>.

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The two Communication Types have been developed to support distinct and separate requirements. It is not expected that a Communication Type 1 <u>UK Link</u> User will interact with a Communication Type 2 <u>UK Link</u> User. Any exceptions to this rule will be defined set out in Appendix A of this Document.

The CDSP is able to UK Link Network can support both Communication Types.

#### 2.4.3.1 Communication Type 1

For Communication Type 1 the gateway User Gateway will address the files appropriately without the need for the <level\_1> element of the file naming convention. Typically these types of files are exchanged between a User and the CDSP.

These files will be presented to Usersplaced in the BGT01\import directory.

The table below shows which Organisation Types will use this convention.

Any exceptions to this principle are defined by Organisation Type by file typeset out in Appendix A of this Document.

#### 2.4.3.2 Communication Type 2

For Communication Type 2 the <u>relevant UK Link</u> User is required to use <level\_1> within the naming convention —<u>i.e. this will use 5.8.3 naming convention</u> <u>as described in sections 2.4.1 and 2.4.2 of this Document.</u>

When the originating Organisation <a href="Type">Type</a> places the file onto the UK Link Network the characters forming < level\_1> of the file name <a href="(i.e. the '5' in the 5.8.3 format">(i.e. the '5' in the 5.8.3 format</a>) will be the Short Code and node of the Recipient User.

The UK Link Network will process the incoming file and change the Short Code and Node of the Recipient User to that of the Originating User before placing the file in the recipient's import directory.

These files will be presented to Usersplaced in the general/import directory.

The table below shows which Organisation Types will use this convention. Communication Type 1 and which will use Communication Type 2.

Any exceptions to this principle are defined by Organisation Type by file type in Appendix A.

The following table sets out which naming convention a User shall apply when sending or receiving files from another User.

# 2.4.3.3 Communication Type / Organisation Type The following table denotes whether Communication Type 1 or 2 is used for files exchanged between each User Organisation Typeset out in Appendix A of this Document.

Organisation Type	Communication Type	Comments
Network Operator (Distribution	1	
Network)		
Network Operator	1	
(Transmission Network)		
Market Operator	1	
Interconnector	1	
Trader User	1	
Shipper User	1	

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	Supplier	2	
	Meter Asset Manager	2	
ĺ	Independent Gas Transporter	2	
	(iGT)		

Any organisation acting as a User Agent need to utiliseshall use the Organisation Type of the UK Link User on whose behalf they are sending anythe communication to determine whether it is classified as Communication Type 1 or Communication Type 2.

Any exceptions to this principle are set out in the Appendix A - Treatment specific to User Organisation Type of this Document.

#### 2.4.4 Delivery Receipts

Organisations UK Link Users who provide Communication Type 2 will receive delivery receipts. The delivery receipt will be in a flat file format, i.e. it will not be processed through the CSV utility.

The delivery receipt file name will be the same as the file being receipted but with a <delivery\_receipt\_type> appended to the original file name of: .DEL- for all files which could not be/were not sent and for files which were successfully sent to the external organisation.

The relevant applications are able to identify the file as a delivery receipt and process accordingly e.g. record or to delete the file without reading.

Example Delivery Receipt file names:

XYZ01.PN999999.XXX.DEL – Example DEL file where initial file was a Type 2 file.

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#### 3. Sending a file

<u>UK Link</u> Users are responsible for placing a file in the *ix\_inbox*, then moving (or renaming) the file into the *export* directory. Note that copying the file directly into the *export* directory may pick up the file before all the data has been copied and result in a partial file being transferred.

The file transfer mechanism is responsible for remotely monitoring the *export* directory and downloading all the files.

The User Gateway Configuration as described above in Figure 2 of this Document shows two export directories – one subordinate to **BGT01** and the other subordinate to **General**. The Organisation Type of an Organisation the UK Link User will define which folder will be polled.

If the file is valid it will be submitted for export and sends themsent over the UK Link Network to the *import* directory on the <u>User</u> Gateway. If the file name is invalid or the file is of zero bytes, upon detection the file will be moved to the *cftm error* directory on the originating <u>UK Link</u> User's Gateway.

#### 3.1 Sending a Communication Type 1 File

**UK Link** Users should place a Communication Type 1 file in the **export** directory subordinate to **BGT01**.

Any exceptions to this principle are set out in the Appendix A - Treatment specific to User Organisation Type of this Document.

The following diagram summarises the process of sending a Communication Type 1 file and the functionality performed by the file transfer mechanism (referred to as EFT in the diagram):

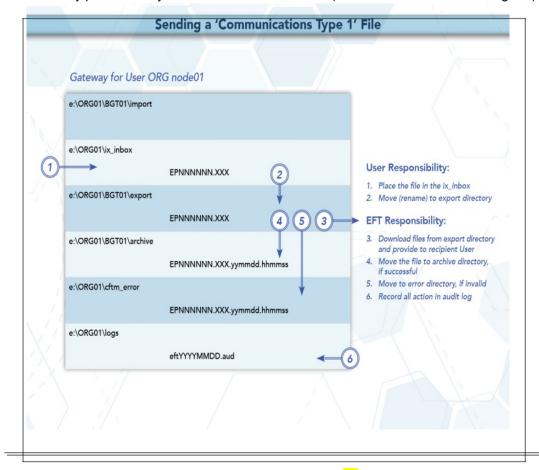


Figure 3: Sending a Communication Type 1 File

#### 3.2 Sending a Communication Type 2 File

<u>UK Link</u> Users should place a Communication Type 2 file in the *export* directory subordinate to *general*.

Any exceptions to this principle are set out in the Appendix A Treatment specific to User Organisation Type of this Document.

The following diagram summarises the process of sending a Communication Type 2 file and the functionality performed by the file transfer mechanism (referred to as EFT in the diagram):

Sending a 'Communications Type 2' File Gateway for UKLink User ORG node01 e:\ORG01\general\import **UKLink User Responsibility:** 1. Place the file in the ix\_inbox e:\ORG01\ix\_inbox 2. Move (rename) to export directory AXXnn.EPNNNNNN.XXX **EFT Responsibility:** e:\ORG01\general\export 3. Download files from export AXXnn.EPNNNNNN.XXX 5 directory and provide to recipient UKLink User e:\ORG01\general\archive 4. Move the file to archive directory, AXXnn.EPNNNNNN.XXX.yymmdd.hhmmss if successful

AXXnn.EPNNNNNN.XXX.yymmdd.hhmmss

eftYYYYMMDD aud

File naming conventions are required to be in 5.8.3 consistent with Section 2.4.2. AXXnn will be the intended recipient of the file - Short Code (AXX) and Node (nn)

Fig ure 4: Sen din g a Co mm uni cati on Typ e 2 File

#### 4. Receiving a file

e:\ORG01\cftm\_error

e:\ORG01\logs

**3.** 

5. Move to error directory, if invalid

6. Record all actions in audit log

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Files sent to the User Gateway will be delivered into the *import* directory either within the *BGT01* or *General* directory.

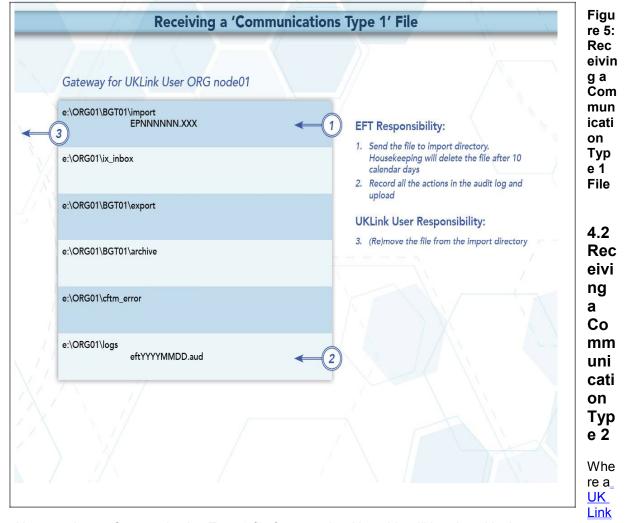
#### 4.1 Receiving a Communication Type 1 file

Communication Type 1 files will be placed into the **BGT01/import** directory. These files will not have the <level\_1> addressing file naming convention.

Any exceptions to this principle are set out in the Appendix A - Treatment specific to User Organisation Type of this Document.

<u>UK Link</u> Users will use *ftp* or shared disk facility to transfer the <u>datafiles</u> into their own applications. <u>UK Link</u> Users have the facility to remove files from the *import* directory.

The following diagram summarises the process of receiving a file from the CDSP and the functionality performed by the file transfer mechanism (referred to as EFT in the diagram):



User receives a Communication Type 2 file from another User this will be placed in the *general/import* directory.

The file will include the <level\_1> addressing file naming convention described above. The <level\_1> file naming convention will show the Short Code and Node of the originating Organisation of the file.

Any exceptions to this principle are set out in the Appendix A - Treatment specific to User Organisation Type of this Document.

The following diagram summarises the process of receiving a file from another User and the functionality performed by the file transfer mechanism (referred to as EFT in the diagram):

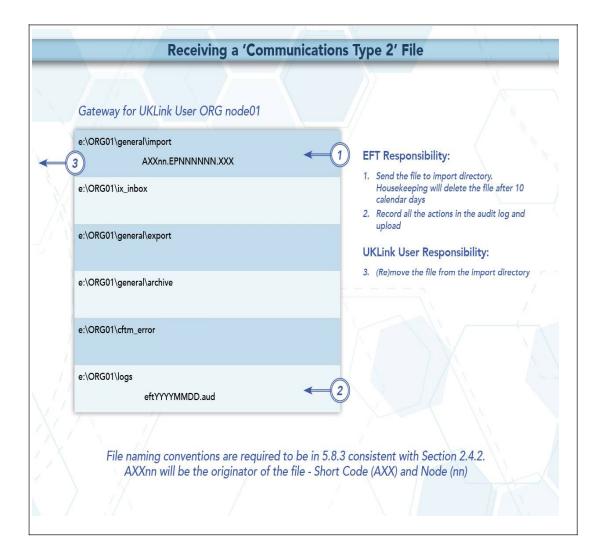


Figure 6: Receiving a Communication Type 2 File

4.

#### 5. Disaster Recovery Processes

The Disaster Recovery Process canmay be invoked if a <u>UK Link</u> User experiences a loss of the file transfer service. This is only applicable to those <u>UK Link Users</u> who have arranged for access to a secondary <u>User</u> Gateway for the purposes of Disaster Recovery. This Disaster Recovery equipment must be located at an alternative location. It can be either at alternative premises of that <u>UK Link</u> User, or <u>if agreed with the CDSP</u>, located at another premises where a <u>User</u> Gateway is installed – this could also be another <u>UK Link</u> User's or a User Agent's premises.

#### 5.1 Requirements when registering Disaster Recovery Arrangements

When a <u>UK Link</u> User specifies that it has Disaster Recovery arrangements, that <u>UK Link</u> User must provide at least one (but no more than three), **Disaster Recovery Representatives** (DR Representative).

The following contact details must be provided:

- DR Representative Name(s) or Role e.g. User Service Desk Manager
- Telephone number for each DR Representative
- A valid email address for each DR Representative

The DR Representative is a person (or persons) must be available 24 hours a day / 7 days a week.

Where a <u>UK Link</u> User is using another <u>UK Link</u> User's Gateway for the purposes of Disaster Recovery, both <u>UK Link</u> Users must provide evidence <u>in a form prescribed by CDSP</u> that they have agreed to these arrangements <u>and signature of that sharing letter</u>. Where a <u>UK Link</u> User intends to utilise a User Agent's premises, the <u>UK Link</u> User must provide a User Agent Agreement to the CDSP at the time that they register the Disaster Recovery Arrangements.

It is the <u>UK Link</u> User's responsibility to inform the CDSP of any changes to DR Arrangements including DR Representative contact details. Any changes must be notified to the CDSP Customer Life Cycle Team at: customerlifecycle.spa@xoserve,com

The CDSP shall contact User DR Representatives every 6 months to ensure contact details are up to date and will validate the details the CDSP holds on file.

#### 5.2 Responsibilities in the event that DR Arrangements are invoked

- If a loss of service is identified by the <u>UK Link</u> User, a representative of that <u>UK Link</u> User must raise a call with the **CDSP Service Desk**.
  - If the <u>UK Link</u> User raises a call, the CDSP Service Desk will advise if the <u>UK Link</u> User has registered Disaster Recovery arrangements and provide the caller with the DR Representative contact details.
  - The CDSP Service Desk will refer the call to the CDSP Duty Manager (CDSP DM) who will liaise with the DR Representative.
- If a proactive alert is identified by the CDSP, the CDSP will contact the DR Representative accordingly.
- The DR Representative must be available 24 hours a day / 7 days a week.—In the event that DR Arrangements are invoked and the CDSP DM is unable to contact the User DR Representative then a telephone message will be left at each of the contact telephone numbers registered where the number is in service and a messaging service is available. The CDSP DM will take no further action until a DR Representative contacts them.
- The DR Representative will liaise with the CDSP DM to agree a way forward.

- The CDSP will attempt to provide an alternate file delivery service within 48 hours of the failure OR as agreed otherwise with the DR Representative.
- Updates will be provided by the CDSP DM to DR Representative as and when available.

#### 5.3 Loss of Service without DR Processes

In the event of complete file transfer failure, the CDSP will attempt to provide an alternate file delivery service within 48 hours of the failure. In the event a <a href="UK Link">UK Link</a> User experiences a loss of the file transfer service please contact the CDSP Service Desk. Contact details are defined in the UK Link Overview Manual.

Impl<sup>n</sup>: 13th October 2017

#### 6. Audit Logs

#### 6.1 Audit Log of Successful File Transfers

The CDSP is responsible for ensuring that an Automatic Audit Trail Facility is maintained. The audit logs are maintained in the **e:\ORG01\logs** area on the <u>User</u> Gateway, which are labelled as follows:

- 'EFTYYYMMDD.aud' (Daily audit log)
  - · Where eft denotes the file transfer mechanism
  - YYYY is a four digit year
  - MM is a two digit month
  - · DD is a two digit date

e.g. EFT20150601.aud would be the log file for 1st June 2015

<u>UK Link</u> Users have READ ONLY access to this log. The audit log holds details of all successful file transfers to and from the CDSP, together with details of retries and failed transfers. The information is in text format and is self-explanatory. On a daily basis data in the current audit log will be archived by the CDSP. The information in these audit logs is archived for seven years.

The CDSP will collate <u>writesupdates</u> to the file transfer log in order to reduce administrative IX traffic. The frequency of writes will be reviewed from time to time to determine the most effective period. Any changes to the 'write time' will be notified to <u>UK Link</u> Users to confirm that this does not impact their processes or systems. **Write time is currently set at 5 minutes.** 

Currently all previous daily and monthly audit logs are available on the <u>User</u> Gateway. <u>UK Link</u> Users are advised to use these files as part of their own audit strategy.

It is important that no software is used which 'locks' the audit logs when reading these audit files.

#### 6.1.1 File Naming Convention for Successful Files in the Audit Log

When files are written within the daily directory these are written with the following naming convention:

File names in the archive directory are appended with the date and time they are moved to those directories. These would be shown as:

EPNNNNN.SFX.YYYYMMDD.HHMMSS

Where the file is Communication Type 1 this will not include <level 1> in the file naming convention.

Where the file is Communication Type 2 it shall include the <level 1> in the file naming convention.

#### 6.2 Audit Log of Unsuccessful File Transfers

Unsuccessful files shall be written to the *cftm\_error* directory.

#### 6.2.1 File Naming Convention for Unsuccessful Files in the Error Log

File names in the archive and error directories are appended with the date and time they are moved to those directories. These would be shown as:

EPNNNNN.SFX.YYYYMMDD.HHMMSS

The error log will represent the file name as generated by the originating <u>UK Link</u> User, including where this included <-level 1> in the file naming convention.

#### 7. Housekeeping

Data files remaining in any directories on the e: drive, other than the log directories, will be deleted after 10 calendar days. If any non-standard, unauthorised directories exist on the e: drive, they, and any files within them, may also be deleted. Files are deleted irrespective of whether the files have been read or not. Audit logs of the housekeeping actions are kept in the logs directory and will be updated daily with the name EFTyyyymmdd.del e.g. EFT20130301.del would be the housekeeping log for 1st March 2013. This log shows the names of the files and the dates on which files were deleted.

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# 8. Help

If <u>UK Link</u> Users have any queries or problems relating to file transfers over the UK Link Network, they should contact the CDSP Service Desk. Contact details are defined in the UK Link <del>Overview</del> Manual Description Document.

#### 9. Summary

With respect to the UK Link Network, Users will have responsibility for:

- creating files whose names conform to the standards defined within the UK Link Manual
- sending files to their ix\_inbox, followed by a move (or rename) to the relevant export directory-
- processing files received into the import directory, using them as required within 10 days of receipt. File resends may incur a charge
- reviewing the audit log held on their Gateway to ensure that IX file transfers have been successful

The CDSP, through file transfer software, will have responsibility for:

- the timely and complete transfer of data across the IX Network
- creating archive and cftm\_error files at source
- housekeeping (deleting) all files on the Gateway that are over 10 calendar days old

<del>10.</del>

#### Appendix A Treatment specific to User Organisation Type

#### A1 - User Organisation Type - Shipper Users

Shipper Users may receive the following exception files:

<file type&gt;</file 	From	То	Folder	Format	File Description
SMR	<del>iGT</del>	Shipper	BGT01/import	5.8.3	Smart Metering Update file. This file type will be withdrawn from Project Nexus Implementation Date.
BBR	DMSP	Shipper	BGT01/import	5.8.3	Within Day Daily Meter Readings File

Shipper Users may send the following exception files:

	< <del>file</del>	From	<del>To</del>	Folder	<b>Format</b>	File Description
:	t <del>ype&gt;</del>					
	SMU	Shipper	<del>iGT</del>	<b>BGT01/export</b>	<del>5.8.3</del>	Smart Metering Update file. This file type will
						be withdrawn from Project Nexus
						Implementation Date.

#### A2 - User Organisation Type - Trader Users

No exception file types are registered.

#### A3 - User Organisation Type – Distribution Networks DN Operators

No exception file types are registered.

#### A4 - User Organisation Type – Transmission Networks National Grid NTS

No exception file types are registered.

#### A5 - User Organisation Type – Independent Gas Transporters

No exception file types are registered.

Note: SMU files issued / received by the iGTs will be issued / received via import / export directories in the *general* directory respectively consistent with Communication Type 2.

# A6 - User Organisation Type - Daily Metered Service Provider

No exception file types are registered.

Note: BBR files are issued by the DMSP via import / export directories in the general directory respectively consistent with Communication Type 2.

#### A7 - User Organisation Type - Suppliers

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No exception file types are registered

#### A8 - User Organisation Type - Meter Asset Managers

No exception file types are registered.

A9 - User Organisation Type - Interconnector Agents / Market Operator Delivery Facility Operators and Connected System Operators.

No exception file types are registered.

#### A10 – Data Communications Company

The Smart Registration Data Provider files sent to the DCC by Xoserve under Section E2 of the Smart Energy Code are transmitted via the DCC User Gateway. The formats and specifications of the messages are defined in the REGIS (Registration Interface Spec.) and CoCo (Code of Connections) documentation. The DCC itself is responsible for the provision and maintenance of the supporting infrastructure.

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# 41. Appendix B Key to Variables

Field	Description.
<ip_address></ip_address>	IP address of User's Gateway
<user_id></user_id>	Format xxxuser, where xxx is the 3 character short code (contact the CDSP Service Desk. Contact details are defined in the UK Link Overview Manual.)
<password></password>	*****
<li>local_file_name&gt;,</li> <li>transient_file_name&gt;</li>	User-determined file name on local platform. Typically, the User may choose to use a directory structure to maintain local file names (e.g. on DOS <level 1="">\<level 2="">.<level 3="">).</level></level></level>
<org></org>	Three character User shortcode.
<level_1></level_1>	Destination service name - "ORGnn".
<level_2></level_2>	Unique file name (reference section 2.4)
<level_3></level_3>	3-character file suffix, e.g. "NOM" for the input site nominations

### **12.** Appendix C File Name Values

This chart lists the possible values of the environment (E) and priority (P) fields within the file name EPNNNNN.SFX:

Environment ( <i>E</i> )	Т	Test environment prefix
Environment (E)	Х	Alternate Test environment prefix
Production ( <i>E</i> )	Р	Production environment
Priority ( <b>P</b> )	N	Normal (default) priority

Test files should only be sent upon agreement with source and destination system. Users should not send the Test files without prior notice and agreement.

Example file names: PN123456.NOM

TN123567.CFR PN123789.SC9

### -13. Appendix D - Glossary

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

Term	Synony ms	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	
CDSP		GTD 1.2.1a	and time of such sending or receipt.  Central Data Services Provider	
CDSP- Service- Desk	Service Desk	UK Link Manual Terms and Conditions	Provision by the CDSP of a Service 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- Communicat ion		GTD 5.1e	A communication required in the UNC, IGT-UNC or the IGTAD	
Communicat ion			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- Arrangemen ts			Disaster Recovery Arrangements	
DR- Representati ve			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	
GTD			General Terms Section D of Uniform- Network Code	
LAN Organisation al Node			Local Area Network  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	
1 31 711			Protocol	
Third Party		GTD-3.7	Services provided consistent with policy	
Services			described in GTD 3.7.	
UK Link	message	GTD-5.1d	A communication transmitted by a User, in	
Communicat	Ŭ		this document, exclusively by file sent via	
ion			the UK Link Network.	
UK Link	IXN / I'X		An information exchange system, allowing	
Network			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			Persons acting as an Organisation	
User			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		GTD 5.1.2	A third part agreement allowing access to	
<del>User</del>		f	relevant elements of the UK Link System.	
Agreement				
Users			Term to refer to both UK Link Users and	
			External UK Link Users.	
<del>User</del>			A "Gateway" is a computer server forming	
Gateway			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).	
<del>User</del>	Organisat		A type of organisation authorised to use	
Organisation	ion Type		the UK Link Network by being a party to	
<del>Type</del>			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			A three character code assigned to each	
Code			User. These are maintained by the CDSP	
			and published within the UK Link Manual.	

# **9. 14.**

**UKLAD3** 

#### Appendix E - Moving a file to the export directory with a Local Area Network (LAN) connection

The following two sections describe ways in which UK Link Users can send files via the UK Link Network. The example shown considers a Communication Type 1.

Network communication between the <u>UK Link</u> Users LAN and the <u>User</u> Gateway uses the TCP/IP protocol. To connect using either FTP or Shared drive, the UK Link User will require the following information (where ORG will be the 3 letter organisation short code assigned by the CDSP):

Gateway Name: ORG01

IP Address: xxx.xxx.xxx (this will be assigned by the CDSP)

Username: Orguser (where ORG denotes the UK Link Users short code)

The <password> is provided to the Authorised Representative of the UK Link User as defined in the UK Link Manual Supplementary Business Document UKLBD1 - UK Link Security Policy Operating Framework.

If technical information or assistance is required please contact the CDSP Service Desk. Contact details are defined in the UK Link Overview Manual Description Document.

Two methods are suggested for UK Link Users who have connected the UK LINK NETWORKLINK Network to their own internal LAN, either FTP or Shared drive facility.

#### E1 - Using File Transfer Product (ftp)

Assuming ftp is installed and configured on UK Link Users' systems, a typical session might be as follows:

Note: the text in bold is what UK Link Users would code in their local environment; the normal text shows the prompts and responses. The variables within the code, designated by < > are, described in Appendix A.

C:\ftp ixn-xxx-01

Connected to ixn-xxx-01.

220-Microsoft FTP Service

Do not proceed unless you are an authorised user.

Failure to comply may result in prosecution under the Computer Misuse Act 1990.

User (ixn-xxx-01:(none)): xxxuser

331 Password required for xxxuser.

Password:

230 User xxxuser logged in.

Figure 7: Example of FTP text to add a file

ftp> put PN123456.NOM /ORG01/ix inbox/PN123456.NOM

200 PORT command successful

2 - Shared Drive Facility
150 Opening ASCII mode data connection for /ORG01/ix\_inbox/PN123456.NOM

If the Link Users are lethning MS Windows Operating Systems on their PCs it is possible for the PC to be configured to have cashared drive /toethe Gateway. The UK Link User needs to use the 'Map Network Drive' facility within Windows Explorer to connect to the UK Link User Gateway located on their premises. Forter of 19RGN 1631/PRG 23 456! No Rath GREGOP IN 1982 AND HE WITH SUPER AND INC. Windows Explorer can then be used to "drag and drop" files from the shared drive to the local environment as required.

250 RNTO command successful.

ftp> bye

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C:\>

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#### 10.15. Appendix F - Moving from the import directory with a LAN Connection

Two methods are suggested here for <u>UK Link</u> Users that have connected their <u>User</u> Gateway to their own internal LAN, either using FTP or the use of a Shared Drive facility. The example shown considers a Communication Type 1.

#### F1 - Using ftp

Assuming *ftp* is installed and configured on <u>UK Link</u> Users' systems, then a typical session might be as follows. Note: the text in bold is what Users would code in their local environment; the normal text shows the prompts and responses.

```
C:\ftp ixn-xxx-01
Connected to ixn-xxx-01.
220-Microsoft FTP Service
Do not proceed unless you are an authorised user.
Failure to comply may result in prosecution under the Computer Misuse Act 1990.
User (ixn-xxx-01:(none)): xxxuser
331 Password required for xxxuser.
Password:
230 User xxxuser logged in.
ftp> prompt off
Interactive mode off
ftp> mget /ORG01/bgt01/import/*.*
200 Type set to A.
200 PORT command successful.
150 Opening ASCII mode data connection for /ORG01/bgt01/import/*.* (x bytes).
226 Transfer complete.
x bytes received in x seconds (x Kbytes/sec)
ftp>get /ORG01/bgt01/import/PN000111.SC9
200 PORT command successful.
150 Opening ASCII mode data connection for /ORG01/bgt01/import/PN000111.SC9 (x bytes).
226 Transfer complete.
x bytes received in x seconds (x Kbytes/sec)
ftp> bye
```

Figure 8: Example of FTP text to move to the User LAN

#### C:\ftp ixn-xxx-01

Connected to ixn-xxx-01.

220-Microsoft FTP Service

Do not proceed unless you are an authorised user.

Failure to comply may result in prosecution under the Computer Misuse Act 1990.

User (ixn-xxx-01:(none)): xxxuser

331 Password required for xxxuser.

Password:

230 User xxxuser logged in.

#### ftp> prompt off

Interactive mode off

#### ftp> mget /ORG01/bgt01/import/\*.\*

200 Type set to A.

200 PORT command successful.

150 Opening ASCII mode data connection for /ORG01/bgt01/import/\*.\* (x bytes).

226 Transfer complete.

x bytes received in x seconds (x Kbytes/sec)

#### ftp> get /ORG01/bgt01/import/PN000111.SC9

200 PORT command successful.

150 Opening ASCII mode data connection for /ORG01/bgt01/import/PN000111.SC9 (x bytes).

226 Transfer complete.

x bytes received in x seconds (x Kbytes/sec)

ftp> bye

#### F2 - Shared Drive Facility

If <u>UK Link</u> Users are running MS Windows Operating Systems on their PCs it is possible for the PC to be configured to have a shared drive to the <u>User</u> Gateway. The <u>UK Link</u> User needs to use the 'Map Network Drive' facility within Windows Explorer to connect to the User Gateway located on their premises. Enter \\ORG01s1\ORG01 as the Path and connect as *orguser* with the required password>. Windows Explorer can then be used to copy files from the *import* directory onto <u>UK Link</u> User's local environment as required for storage of the files.

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Document comparison by Workshare Compare on 19 July 2017 16:28:24

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Document 1 ID	file://Y:\Shared\NGSRV51H003\TeamData\Xoserve Contracts\UK Link Manual post Nexus\UKLM Component Docs in mark up - baseline from DA\UKLM File Transfer Definition v13 1 FA 20170706.doc
Description	UKLM File Transfer Definition v13 1 FA 20170706
Document 2 ID	file://Y:\Shared\NGSRV51H003\TeamData\Xoserve Contracts\UK Link Manual post Nexus\JM - UKLM Component Docs Clean\UKLM File Transfer Definition v13.2 JM.doc
Description	UKLM File Transfer Definition v13.2 JM
Rendering set	Standard

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

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Deletions	308			
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Moved to	0			
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Format changed	0			
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