

UK LINK ACCESS DOCUMENT

UKLAD3

UK LINK FILE TRANSFER DEFINITION

VERSION CONTROL

Version	COR	Date of change	Changes	Author
8 Approved	CORs: 1000.1 2355	July 2014	Changes to: <ul style="list-style-type: none"> • Reflect introduction of EFT • Deferred Audit Log Writes 	Chris Fears
9.2 Live	COR353 8 / COR315 1.1	August 2015	Changes to: <ul style="list-style-type: none"> • Section 6: Audit logs • Section 9: Summary • Section 10: Questions & answers (Q3) Changes to: <ul style="list-style-type: none"> • Section 7: Housekeeping • Section 9: Summary 	Mark Pollard / Jon Follows
10 Live	-	November 2015	<u>Updates to:</u> <ul style="list-style-type: none"> • Section 5: UK Link User Sending non UK Link user a file • Section 6: UK Link User receiving a file from non UK Link user 	Tahera Choudhury
11 Live		December 2015	Updates to: <ul style="list-style-type: none"> • Section 14: Appendix B File Name Values 	Rachel Hinsley
12 Live	COR314 3	August 2016	Removed the references of XFTM Updates to: Contents <ul style="list-style-type: none"> • Section 1: Addition to Glossary • Section 2: Insertion of Naming Convention section from UK Link Standards Guide. Highlighted text denotes additional text above what was extracted from the Standards Guide. • Section 3. Amended wording & insertion of new formatted diagram • Section 4: Amended diagram. • Section 5: Amended diagram • Section 6: Amended wording and diagram. • Section 7: Disaster Recovery Services • Section 8&9: Amended wording • Section 11: Amended wording • Section 12: Questions removed as will be managed in a separate document. 	Harish Karanam / Dawn Griffiths
13 Live		October 2017	Amendments to: <ul style="list-style-type: none"> • General review in line with revised governance (UNC Modification 0565A refers). • Remove references to EFT, IXN, I'X. 	David Addison

			<p>Insert references to UK Link Network.</p> <ul style="list-style-type: none">• CDSP referenced.• Insert Appendices for each User Organisation Type	
--	--	--	---	--

TABLE OF CONTENTS

Version: []	5
1. Introduction	5
1.2 Structure of Document.....	5
2. Configuration.....	6
2.1 File Transfer Arrangements.....	6
2.2 User Gateway Configuration	6
2.3 User Data Directories – e.g. e:\ORG01	7
2.4 File Naming.....	8
2.4.1 Summary of File Naming	8
2.4.2 File Naming Structure	9
2.4.3 File Naming Conventions for Files passed between User Organisation Types	10
2.4.3.1 Communication Type 1	10
2.4.3.2 Communication Type 2	11
2.4.4 Delivery Receipts.....	11
3. Sending a file	12
3.1 Sending a Communication Type 1 File	12
3.2 Sending a Communication Type 2 File	13
4. Receiving a file.....	13
4.1 Receiving a Communication Type 1 file	15
4.2 Receiving a Communication Type 2.....	15
5. Disaster Recovery Processes	17
5.1 Requirements when registering Disaster Recovery Arrangements	17
5.2 Responsibilities in the event that DR Arrangements are invoked	17
5.3 Loss of Service without DR Processes	18
6. Audit Logs	19
6.1 Audit Log of Successful File Transfers	19
6.1.1 File Naming Convention for Successful Files in the Audit Log.....	19
6.2 Audit Log of Unsuccessful File Transfers	19
6.2.1 File Naming Convention for Unsuccessful Files in the Error Log.....	19
7. Housekeeping	20
8. Help	21
Appendix A Treatment specific to User Organisation Type	22
A1 - User Organisation Type – Shipper Users	22
A2 - User Organisation Type – Trader Users.....	22
A3 - User Organisation Type – DN Operators.....	22
A4 - User Organisation Type – National Grid NTS.....	22
A5 - User Organisation Type – Independent Gas Transporters.....	22
A6 - User Organisation Type – Daily Metered Service Provider	22
A7 - User Organisation Type – Suppliers.....	22
A8 - User Organisation Type – Meter Asset Managers.....	22
A9 - User Organisation Type – Delivery Facility Operators and Connected System Operators....	22
A10 – Data Communications Company	23
Appendix B Key to Variables	24
Appendix C File Name Values.....	25
9. Appendix E - Moving a file to the export directory with a Local Area Network (LAN) connection	26
E1 - Using File Transfer Product (ftp).....	26
E2 - Shared Drive Facility	26
10. Appendix F - Moving from the import directory with a LAN Connection	27
F1 - Using ftp	27
F2 - Shared Drive Facility	28

Version: 13 Live

Effective Date: 13th October 2017

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 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 Documents 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 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.
- 1.9 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.

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.

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.

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.

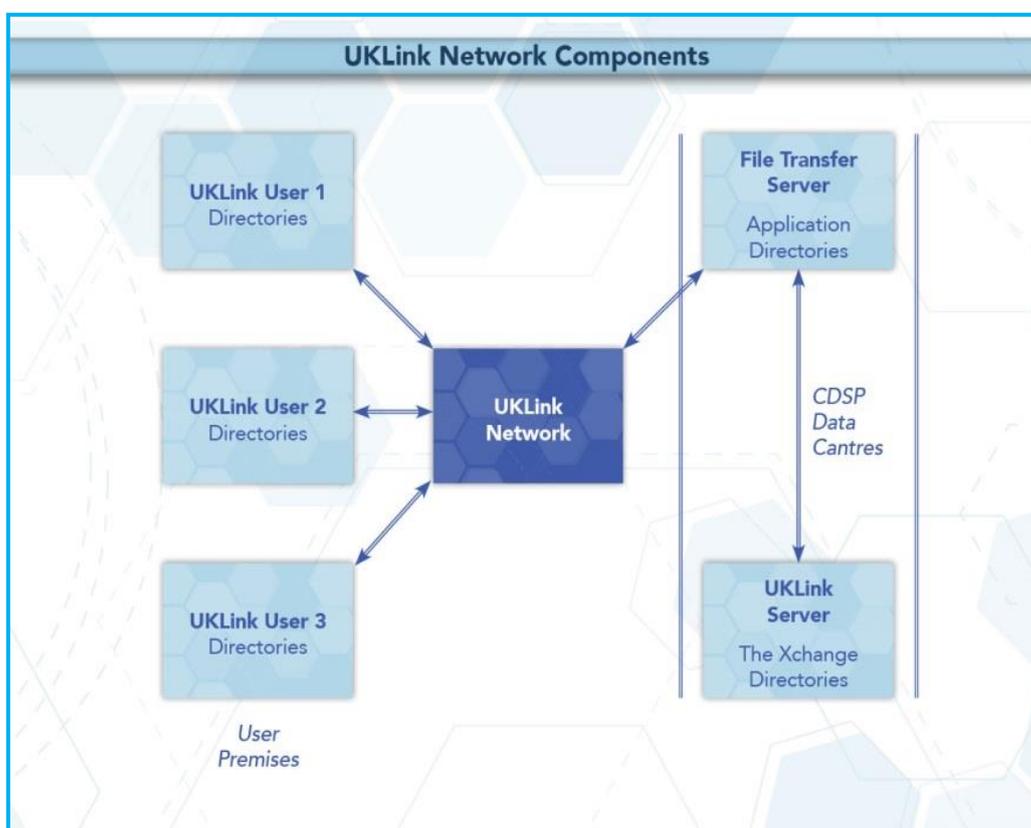


Figure 1: UK Link Network Context

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.

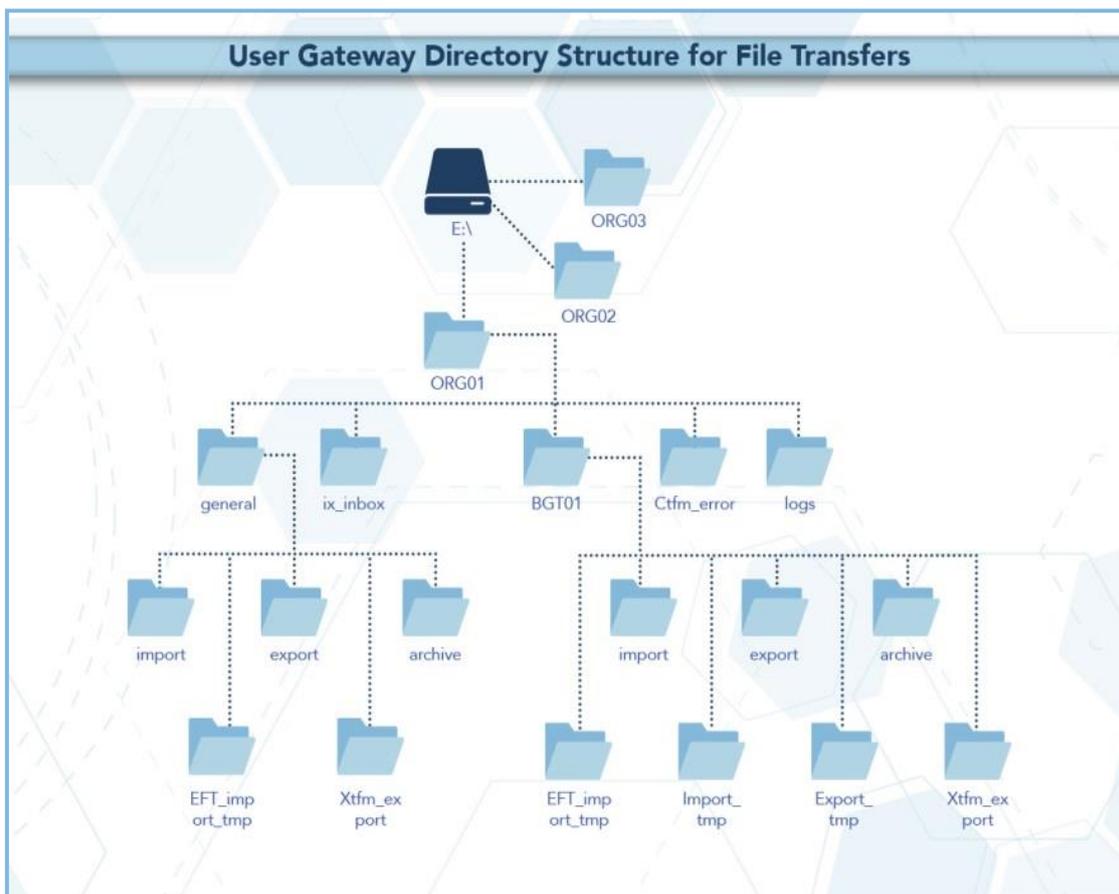


Figure 2: User Gateway Configuration

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.

Directory	directory: read/exec	file: Read	file: Write	file: delete
e:\ORG01	Y	Y		
\cftm_error	Y	Y		Y

\ix_inbox	Y	Y	Y	Y
\logs	Y	Y		
\BGT01	Y			
\import	Y	Y		Y
\export	Y	Y	Y	Y
\archive	Y	Y		
\left_import_tmp	Y			
\general	Y			
\import	Y	Y		Y
\export	Y	Y	Y	Y
\archive	Y	Y		

2.4 File Naming

This section describes the naming convention of the file as it needs to be conveyed over the UK Link Network – i.e. when a UK Link User places a file on 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 UK Link 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:-

< level_1 >.< level_2 >.< level_3 >
ORGnn.EPNNNNNN.SFX

This is referred to as 5.8.3 naming convention.

level_1 This level is the destination / originator code in the format *ORGnn* where *ORG* is the UK Link User's Short Code, and *nn* is the node (example '01'). A <level_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 User Organisation Types. Please refer to Section 2.4.3 which sets out specific treatment by User Organisation Type.

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

level_2 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 User 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 User 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
<routing_id> / Short Code (*)	AAA	Fixed	Short Code denoting: <ul style="list-style-type: none"> the User Gateway identity of the recipient User Gateway for UK Link User (exported) files. the User Gateway identity of the sending User Gateway for UK Link User imported files. Synonyms: (<shipper short code> <business associate abbreviation> <user id> <routing id>)
<routing_loc> / Node (*)	NN	Fixed	Identifies the location node on the User 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 -> 99. Synonyms: (<routing loc> <node> <location>)

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 Environment and Priority values are listed in Appendix B.

Data Item	Format	Fixed / Variable Length	Description
<environment_in d>	A	Fixed	Environment indicator. "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.

<priority>	A	Fixed	Priority code. "N" => Normal; Transfer in sequence of submission (default). Currently only the default will be used in the File Name.
<generation_number>	NNNNNN	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. 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>	XXX	Fixed	Identifies the File being transmitted.

The <level_3> data item signifies the type of file transmitted between User 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 UK Link 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 UK Link User in the event that this is identified as being required, alternatively UK Link Users may contact the CDSP Service Desk.

2.4.3 File Naming Conventions for Files passed between User Organisation Types

The User 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 User Organisation Type. Any exceptions must be explicitly registered and will be defined in Appendix A of this Document.

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

The UK Link Network can support both Communication Types.

2.4.3.1 Communication Type 1

For Communication Type 1 the User Gateway will address the files appropriately without the need for the <level_1> element of the file naming convention.

These files will be placed in the **BGT01\import** directory.

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

Any exceptions to this principle are set out in Appendix A of this Document.

2.4.3.2 Communication Type 2

For Communication Type 2 the relevant UK Link User is required to use <level_1> within the naming convention as described in sections 2.4.1 and 2.4.2 of this Document.

When the originating Organisation Type places the file onto the UK Link Network the characters forming < level_1> of the file name 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 placed in the **general\import** directory.

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

Any exceptions to this principle are set out in Appendix A of this Document.

Organisation Type	Communication Type
Network Operator (Distribution Network)	1
Network Operator (Transmission Network)	1
Market Operator	1
Interconnector	1
Trader User	1
Shipper User	1
Supplier	2
Meter Asset Manager	2
Independent Gas Transporter (iGT)	2

Any organisation acting as a User Agent shall use the Organisation Type of the UK Link User on whose behalf they are sending the 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 of this Document.

2.4.4 Delivery Receipts

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.

Example Delivery Receipt file names:

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

3. Sending a file

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

If the file is valid it will be submitted for export sent over the UK Link Network to the **import** directory on the User 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 UK Link 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 Appendix A of this Document.

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

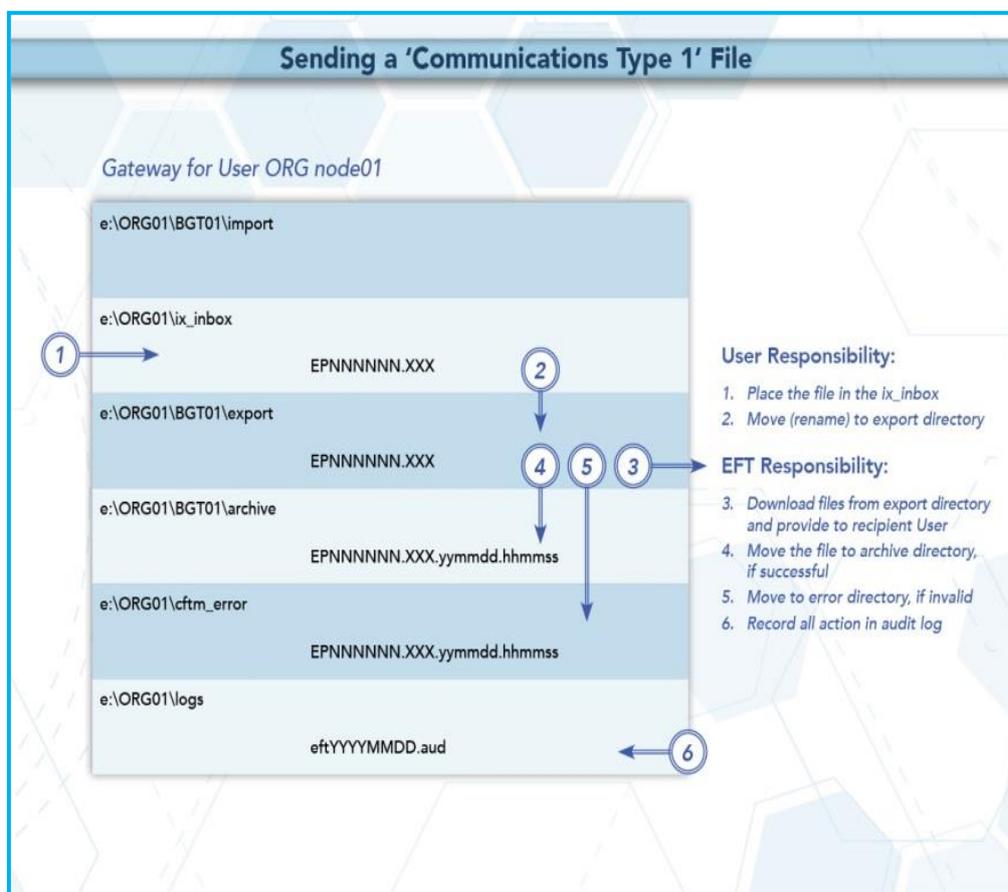


Figure 3: Sending a Communication Type 1 File

3.2 Sending a Communication Type 2 File

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

Any exceptions to this principle are set out in Appendix A 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):

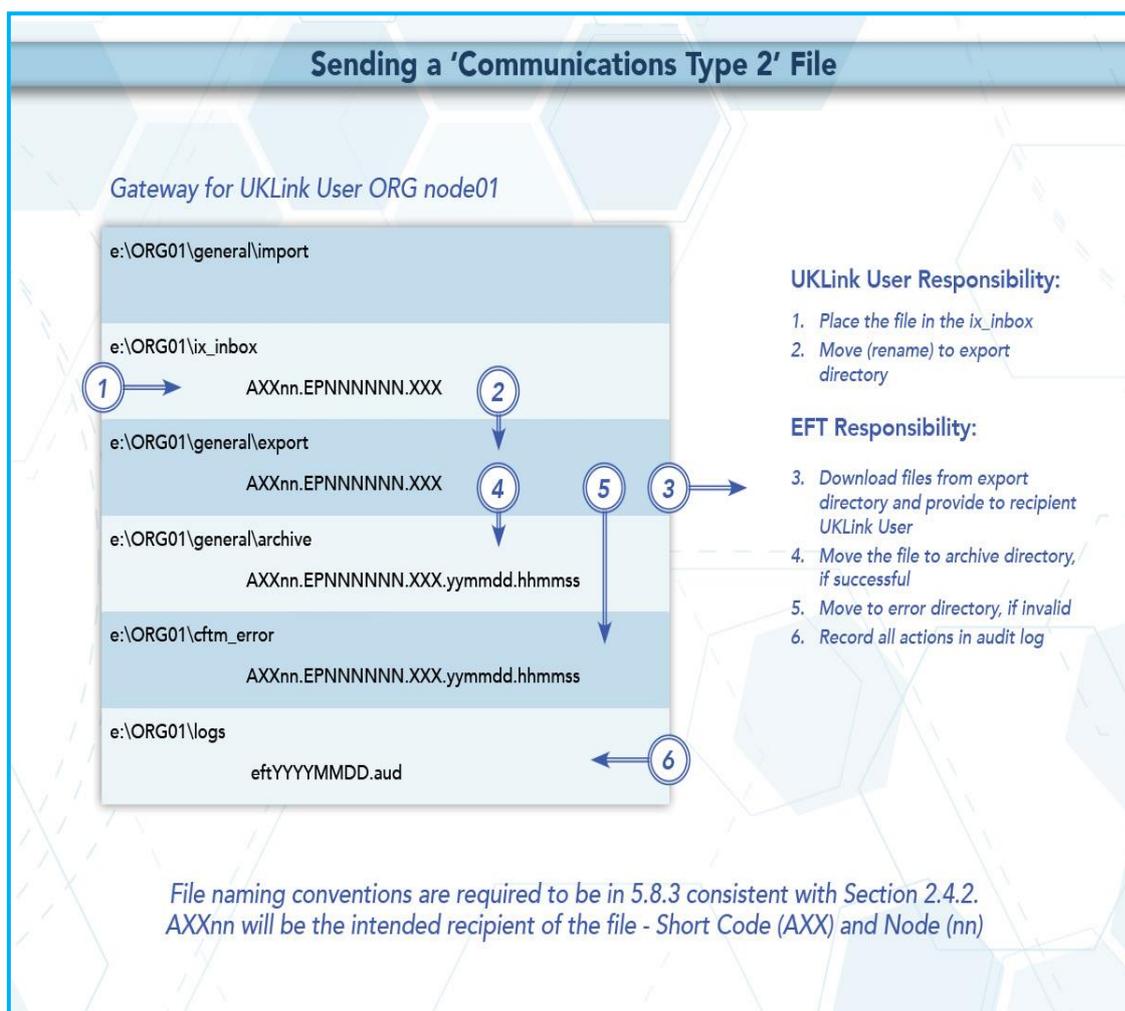


Figure 4: Sending a Communication Type 2 File

4. Receiving a file

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> file naming convention.

Any exceptions to this principle are set out in Appendix A of this Document.

UK Link Users will use *ftp* or shared disk facility to transfer the files into their own applications. UK Link 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):

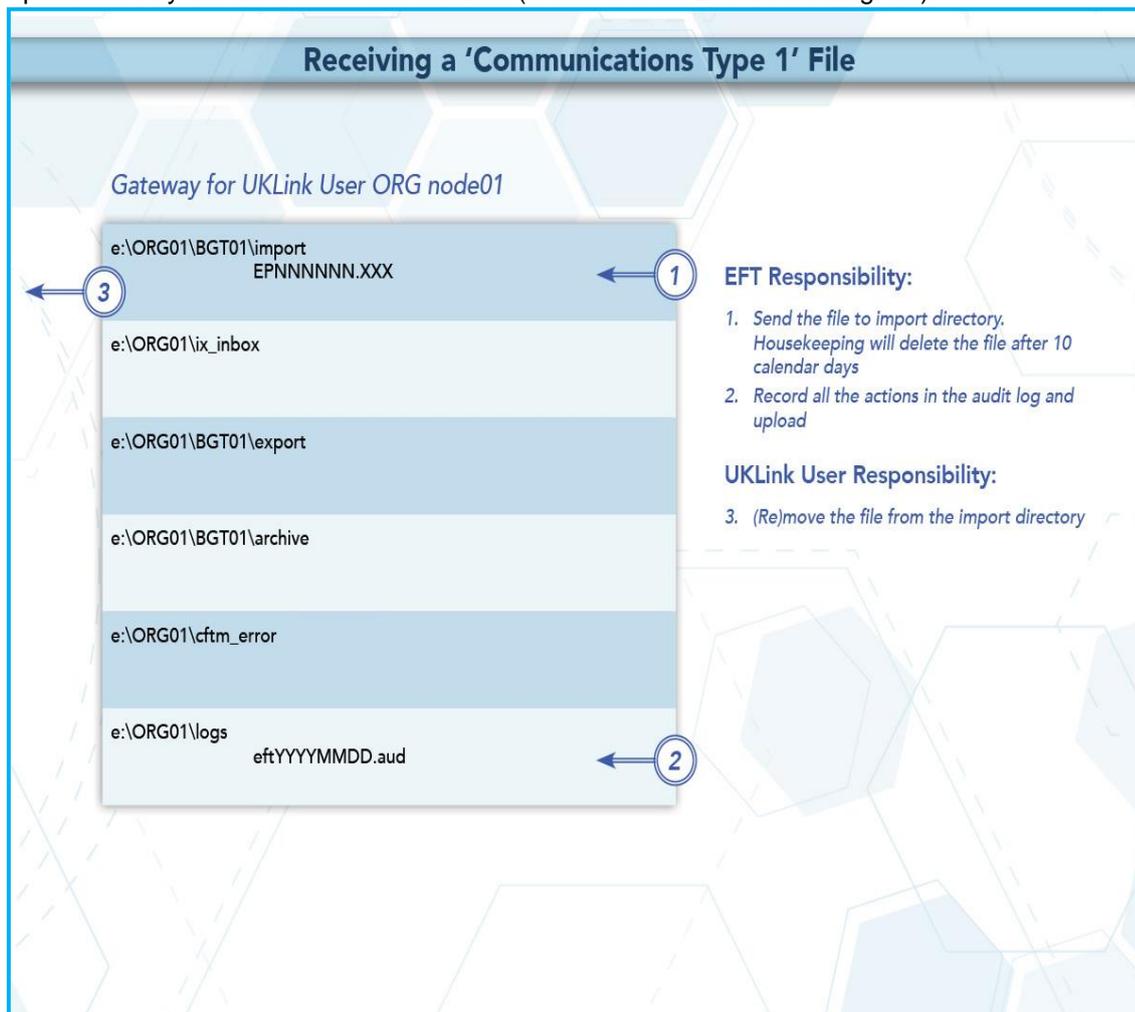


Figure 5: Receiving a Communication Type 1 File

4.2 Receiving a Communication Type 2

Where a UK Link 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> 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 Appendix A of this Document.

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

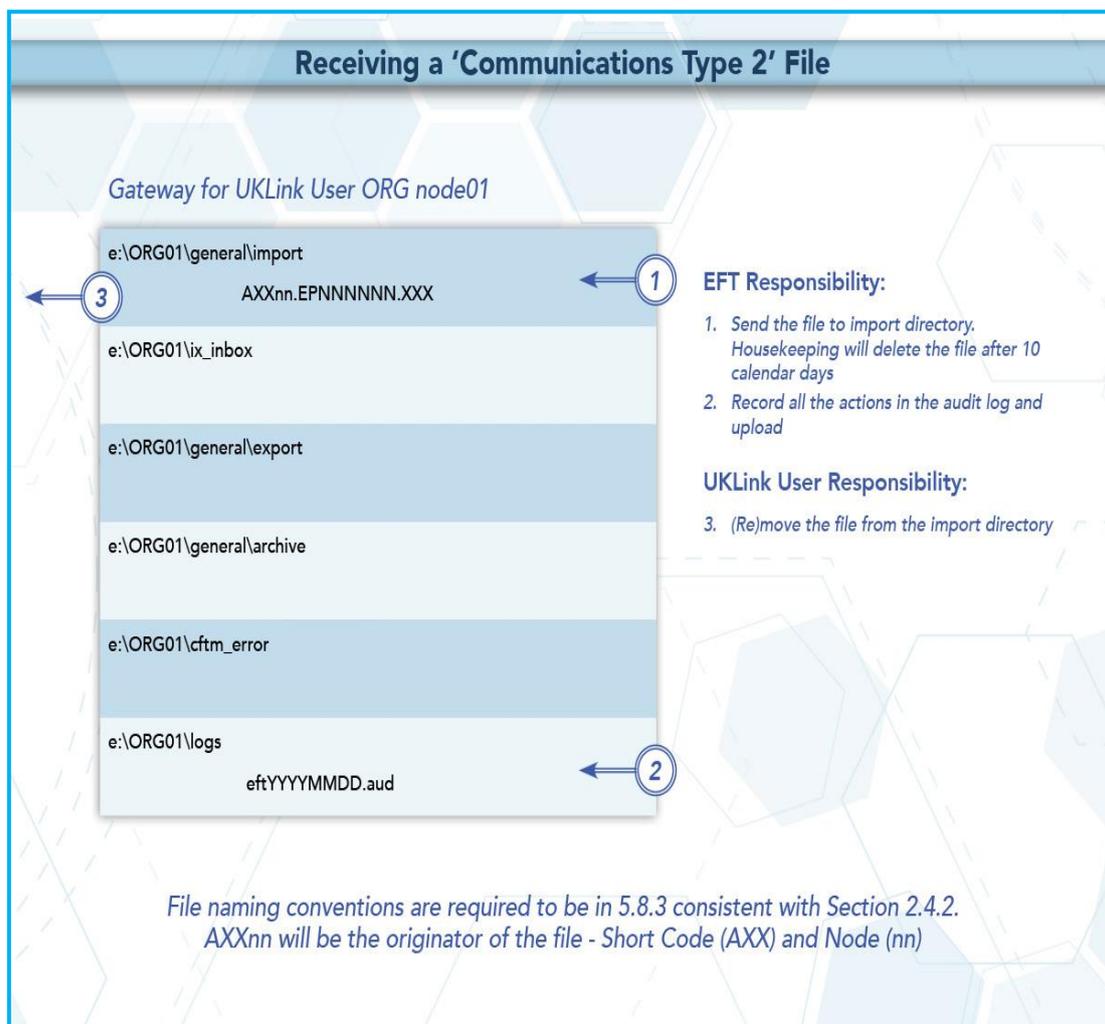


Figure 6: Receiving a Communication Type 2 File

5. Disaster Recovery Processes

The Disaster Recovery Process may be invoked if a UK Link User experiences a loss of the file transfer service. This is only applicable to those UK Link Users who have arranged for access to a secondary User 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 UK Link User, or if agreed with the CDSP, located at another premises where a User Gateway is installed – this could also be another UK Link User's or a User Agent's premises.

5.1 Requirements when registering Disaster Recovery Arrangements

When a UK Link User specifies that it has Disaster Recovery arrangements, that UK Link 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 must be available 24 hours a day / 7 days a week.

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

It is the UK Link 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 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 UK Link User, a representative of that UK Link User must raise a call with the **CDSP Service Desk**.
 - If the UK Link User raises a call, the CDSP Service Desk will advise if the UK Link 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.
- In the event that DR Arrangements are invoked and the CDSP DM is unable to contact the 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 UK Link User experiences a loss of the file transfer service please contact the CDSP Service Desk. Contact details are defined in the UK Link Description Document.

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 User Gateway, which are labelled as follows:

- **'EFTYYYYMMDD.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

UK Link 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 updates 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 UK Link 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 User Gateway. UK Link 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:

EPNNNNNN.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:

EPNNNNNN.SFX.YYYYMMDD.HHMMSS

The error log will represent the file name as generated by the originating UK Link User.

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.

8. Help

If UK Link 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 Description Document.

Appendix A Treatment specific to User Organisation Type

A1 - User Organisation Type – Shipper Users

Shipper Users may receive the following exception files:

<file type>	From	To	Folder	Format	File Description
BBR	DMSP	Shipper	BGT01/import	5.8.3	Within Day Daily Meter Readings File

Shipper Users may send the following exception files:

A2 - User Organisation Type – Trader Users

No exception file types are registered.

A3 - User Organisation Type – DN Operators

No exception file types are registered.

A4 - User Organisation Type – 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

No exception file types are registered.

A8 - User Organisation Type – Meter Asset Managers

No exception file types are registered.

A9 - User Organisation Type – 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.

Appendix B Key to Variables

Field	Description.
<IP_address>	IP address of User's Gateway
<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 Description Document.)
<password>	*****
<local_file_name>, <transient_file_name>	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>).
<ORG>	Three character User shortcode.
<level_1>	Destination service name - " ORGnn ".
<level_2>	Unique file name (reference section 2.4)
<level_3>	3-character file suffix , e.g. " NOM " for the input site nominations

Appendix C File Name Values

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

Environment (E)	T	Test environment prefix
Environment (E)	X	Alternate Test environment prefix
Production (E)	P	Production environment
Priority (P)	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

9. 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 UK Link Users LAN and the User 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.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 UKLBD1 – UK Link Security Operating Framework.

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

Two methods are suggested for UK Link Users who have connected the UK Link 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.

ftp> put PN123456.NOM /ORG01/ix_inbox/PN123456.NOM
200 PORT command successful
150 Opening ASCII mode data connection for /ORG01/ix_inbox/PN123456.NOM
226 Transfer complete
x bytes sent in x seconds (x Kbytes/sec)

ftp> rename /ORG01/ix_inbox/PN123456.NOM /ORG01/bgt01/export/PN123456.NOM
350 File exists, ready for destination name
250 RNTD command successful.

ftp> bye
221
C:\>
```

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

Two methods are suggested here for UK Link Users that have connected their User 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 UK Link 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.

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 UK Link 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 User Gateway. The UK Link 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 UK Link User's local environment as required for storage of the files.