

## **CP1263 - Attachment A – redline changes to the Communications Requirement Document v14.0**

Changes are proposed to the CRD v14.0 Sections 2.1, 2.2, 4.5, 4.6.1, 4.6.2, 4.6.3, 4.7.3, 4.11, 4.13.

### **2 Acronyms and Definitions**

#### **2.1 List of Acronyms**

The following is a list of acronyms used in this document:

[ADSL – Asymmetric Digital Subscriber Line](#)

BMRA - Balancing Mechanism Reporting Agent

BPITs – Business Process Integration Tests

BSC - Balancing and Settlement Code

CCP – Credit Cover Percentage

CDCA - Central Data Collection Agent

CIR - Committed Information Rate

CPU – Central Processing Unit

CRA - Central Registration Agent

DNS - Domain Name System

DR - Disaster Recovery

ECVAA - Energy Contract Volume Aggregation Agent

ECVNA - Energy Contract Volume Notification Agent

EWS – ECVAA Web Service

FAA - Funds Administration Agent

FTP - File transfer protocol

GSP – Grid Supply Point

IA – Interconnector Administrator

ISDN - Integrated Services Digital Network

ISP - Internet Service Provider

LAN - Local Area Network

LDSO- Licensed Distribution System Operator

MOA – Meter Operator Agent

MIDP – Market Index Data Provider

[MPLS – Multi Protocol Label Switching](#)

MVRNA – Metered Volume Reallocation Notification Agent

NAT – Network Address Translation

NATs - Network Access Tests

~~[NETA – New Electricity Trading Arrangements](#)~~

NTP - Network Time Protocol

PartID – Participant ID  
 PCIG – Participant Communications Installation Guide  
[OpenPGP – Open Source Pretty Good Privacy](#)  
~~PKI – Public Key Infrastructure~~  
 PVC - Permanent Virtual Circuit  
 RVD - Rendezvous Daemon  
 RVRD - Rendezvous Routing Daemon  
 SAA - Settlement Administration Agent  
 SMRA – Supplier Meter Registration Agent  
 SVA –Supplier Volume Allocation  
 TAA – Technical Assurance Agent  
 TCP/IP - Transmission Control Protocol/Internet Protocol  
 UTC - Co-ordinated Universal Time  
 XSec – Participant Security Package

## 2.2 List of Definitions

Unless the context otherwise requires and save where otherwise defined in this document, terms and expressions defined in the Code shall have the same meaning in this document.

Communication Requirements Document Specific Definition(s)

<b>Normal Business Hours</b>	9.00 a.m. to 5.00 p.m. <sup>1</sup> Monday to Friday on a Working Day.
<b>Participant</b>	Parties, Party Agents and others that communicate or intend to communicate with BSC Agents.
<b>Qualification</b>	Recognition that a BSC Party or Party Agent has satisfied the communication requirements specified under Section O of the BSC, and that these systems have been tested according to this document.
<b>Qualification Statement</b>	Certificate of Qualification issued by BSCCo on completion of Qualification.
<b>Qualification Tests/Qualification Test</b>	Tests undertaken by a Qualifying Participant. The tests provide the appropriate level of assurance that the necessary communication links between the Qualifying Participant and BSC Agents will function correctly under operational conditions.
<b>Receipt of Data</b>	Data received by the CRA, SAA and CDCA BSC Services (other than meter readings) outside of Normal Working Hours are deemed

<sup>1</sup> Please note that certain ~~NETA-BSC~~ Central Services do operate outside of these core hours.

to have been received at 08:00 on the next day.

<b>Service Provider</b>	The Company who provides the electronic communications service medium through which Parties and Party Agents communicate with the BMRA, CRA, CDCA, ECVAA and SAA.
<b>Service Security Office</b>	A Service Provider designated Office which is responsible for managing the security of the system. Contact details of the Service Security Office are published in BSCCo circulars.
<b>User Licence</b>	A licence allocated to an individual in a Party not to a Party.
<b>Waiver</b>	Recognition that a Qualifying Participant is sharing facilities with another Participant who has previously satisfied the Qualification requirements, and as such that Qualification Tests would be duplicated if undertaken by the Qualifying Participant.
<b>XSec</b>	Security software provided by the Service Provider.

#### 4.5 Security

The network is designed to prevent external unauthorised penetration, in accordance with commercial security standards, including the use of firewalls at the Service Provider site.

Both grades of service provide Participant data confidentiality and originator authentication for file transfer between Participant site and Service Provider site.

This is accomplished using the security utility (XSec) provided by the Service Provider that supports ~~a~~OpenPGP PKI~~encryption~~. The management of the security keys is handled through the Service Provider.

The passwords used when connecting with the system must be changed at regular intervals to comply with security standards, as determined by the Service Provider. Currently, XSec keys are scheduled to expire after five years.

If Participants become aware of a security breach or wish to change their keys and passwords before the scheduled expiry time, they should immediately contact the Service Provider's Helpdesk or Service Security Office. Participants and the Service Provider must make all reasonable endeavours to maintain the security of the system, and correct any weaknesses revealed. The Service Provider may decide to take additional security measures and transmit security instructions to Participants, as necessary. The contact details for the Service Security Office will be published in BSCCo circulars from time to time.

## 4.6 Technical Specification – High Grade Service

### 4.6.1 Network Communications

~~A typical~~The High Grade Service consists of a number of frame-relayMPLS connection options and are detailed as follows: ~~with a 256 Kbs line access rate. PVCs will be configured to use this connection as follows:~~

<u>Technical Specification</u>	<u>Line Options</u>								
	<u>HG1a</u>	<u>HG1b</u>	<u>HG2a</u>	<u>HG2b</u>	<u>HG3a</u>	<u>HG3b</u>	<u>HG4</u>	<u>DR1</u>	<u>DR2</u>
<b><u>Primary Line Rental:</u></b>									
<u>256Kb Lease Line</u>	✓	✓	x	x	x	x	x	x	✓
<u>512Kb Lease Line</u>	x	x	✓	✓	x	x	x	x	x
<u>1Mb Lease Line</u>	x	x	x	x	✓	✓	x	x	x
<u>2Mb ADSL</u>	x	x	x	x	x	x	✓	✓	x
<b><u>Backup Line Rental:</u></b>									
<u>ISDN Backup</u>	x	✓	x	✓	x	✓	✓	x	x
<u>2Mb ADSL Backup</u>	✓	x	✓	x	✓	x	x	x	x
<b><u>Support:</u></b>									
<u>5 Hour Fix on Primary Line</u>	✓	✓	✓	✓	✓	✓	x	x	✓
<u>24 Hour Fix on Primary Line</u>	x	x	x	x	x	x	✓	✓	x
<u>1-1 Contention Ratio</u>	✓	✓	✓	✓	✓	✓	x	x	✓
<u>20-1 Contention Ratio</u>	x	x	x	x	x	x	✓	✓	x

- ~~2 x 128 Kbs CIR PVCs (main and backup, so only one will be in use at a time) to the BSC Agents' main site; and~~
- ~~1 x 128 Kbs CIR PVC to the BSC Agents' DR site.~~

In addition to protect against loss of the connection to the frame-relayMPLS network a backup ADSL or Basic Rate ISDN line ~~with 128 Kbs capacity~~ will be provided.

Variations to this standard specification to support, for example, multiple participants using the same High Grade Service will be handled by the BSSCCo, in conjunction with the Service Provider, on a case by case basis.

The geographic scope of supply for communication lines is the United Kingdom. Participants who wish the connection termination to be outside the United Kingdom are required to contact BSSCCo to make specific arrangements with the Service Provider.

The service includes the provision of a router with the following characteristics:

- the router will support TCP/IP;
- the interface presented on the Participant side of the private network router will be Ethernet 10/100 BaseT; and
- the router will support Network Address Translation (NAT), and the Service Provider will liaise with the Participant to ensure that the correct IP address space translations are configured.

- Participants shall order TIBCo software through BSCCo with signed Licences being returned to the Service Provider.<sup>2</sup>

#### 4.6.2 Software

The software is:

- Participant Security Package, XSec.
- TIBCo Software<sup>3</sup>. ~~This consists of:~~
  - ~~a single TIB Rendezvous RVRD Single CPU server licence; and~~
  - ~~a maximum of 5 TIB Rendezvous RVD User Licences.~~

#### 4.6.3 Responsibilities

The Participant is responsible for placing a service order with BSCCo who will then instruct the Service Provider.

The Service Provider will then provide to the Participant:

- Participant Security Package; and
- Router and communications lines.

The Participant may also acquire:

- The TIBCo Software.

However, if a Participant is already in possession of an adequate number of the appropriate TIBCo Software licences then they do not need to take this item.

The Participant is responsible for:

- provision of one or more workstations for accessing the High Grade Web Service (optional) to the minimum specification as defined from time to time by the Service Provider;
- provision of LAN, including connection to the router;
- provision of FTP client software (mandatory) and FTP server software (mandatory only for High Grade Push); each High Grade Participant must select either 'push' or 'pull' mode for receipt of files from the Service Provider. Full details of directories, user identification etc. are provided by the Service Provider;
- all cabling on the Participant side of the supplied router;
- synchronising their machine clocks with an NTP server (the Service Provider supplies an NTP service to High Grade users. Optionally the participant can instead choose to synchronise with a UTC source of their choice. The Service Provider can suggest appropriate sources);
- provision of a suitable environment for the supplied telecoms equipment, including ~~uninterruptable~~uninterruptible power, suitable environmental

<sup>2</sup> Participants may also use any existing TIBCO licences available to their organisation to access the ~~NETA-BSC Central System~~ TIBCO service.

<sup>3</sup> The TIBCo Software is optional and will be at an additional charge.

conditions and reasonable provision of site access when required by the Service Provider;

- provision of IP addressing information for configuration of the router in liaison with the Service Provider as to suitable addressing ranges;
- provision of software which is capable of producing and responding to flows as defined in the [NETA-BSC Central Systems](#) IDD.

Further, it is not mandatory but strongly recommended that the Participant:

- obtain a contract with an ISP for Internet connectivity to allow the Participant to use the Low Grade Service, ordered from BSCCo, as a backup mechanism and provide any necessary hardware, cabling and software to support the link; and
- provide and configure a firewall to protect the Participant's LAN.

#### 4.7.3 Responsibilities

The Participant is responsible for placing a service order with BSCCo who will then instruct the Service Provider.

The Service Provider will then provide the Participant with:

- Participant Security Package, [XSec](#).

The Participant is responsible for:

- provision of a workstation and operating system software to the minimum specification as defined from time to time by the Service Provider;
- provision of FTP client software. When using FTP to send files, Internet-connected Participants must always 'push' files to the BSC Agents. Across the Internet, Participants must always 'pull' files from the BSC Agents. Full details of directories, user identification etc. are provided by the Service Provider;
- obtaining a contract with an ISP for Internet connectivity; provision of any necessary hardware, cabling and software to support the link; [and](#)
- synchronising the workstation with an Internet NTP server (the Service Provider will supply suitable DNS information, if one is not supplied by the Participant's ISP); [and-](#)
- provision of software which is capable of producing and responding to flows as defined in the [NETA-BSC Central Systems](#) IDD.

Further, it is not mandatory but strongly recommended that the Participant:

- provide and configure a firewall to protect the Participant's workstation, if this is required.

#### 4.11 Termination

On termination of High Grade Service the Participant shall be responsible for allowing the Service Provider to remove all communication lines and routers and returning all software and documentation, other than that required for the Low Grade Service.

In the event of withdrawal or expulsion from participation under the Code, a Party shall permit the Service Provider to remove all communication lines and routers and shall return to the Service Provider all software and documentation, and OpenPGPPKI encryption details.

Termination of the service will be immediate upon receipt by the Service Provider of notice from BSCCo. Communication lines and routers will be removed as soon as practical thereafter.

#### ~~4.13 Alternative Software Options for High Grade Service~~

~~There are a number of alternative software options relating to the TIBCo Software. These are:~~

- ~~• A single TIB Rendezvous RVRD 2-4 CPU server licence and a maximum of 5 TIB Rendezvous RVD User Licences for production usage.~~
- ~~• A single TIB Rendezvous RVRD Single CPU server licence and a maximum of 5 TIB Rendezvous RVD User Licences for development usage.~~
- ~~• A single TIB Rendezvous RVRD 2-4 CPU server licence and a maximum of 5 TIB Rendezvous RVD User Licences for development usage.~~

~~Costs associated with this software are detailed in Section D of the Code.~~