Redlined Central Data Collection Agent User Requirement Specification text for P369 'National Grid Legal Separation changes to BSC'

This Modification proposes changes to the Contents, sections 2.0, 4.3, 4.4, 5.1, 5.11, 5.2, 5.24, 5.25, 6.1, 9 and Appendix B. We have redlined these changes against Version 16.0.

There is no impact on any other part of this document for this Modification.

Amend Table of Contents as follows:

Table Of Contents

Amend section 2 as follows:

2 Introduction

This document is the User Requirements Specification (URS) for the Central Data Collection Agent role within the Balancing and Settlement Code Services. It is one of a set of documents forming the baseline for requirements of the seven BSC central system services. This document set comprises:

- BMRA URS;

- CRA URS;

- SAA URS;

- ECVAA URS;

- CDCA URS;

- FAA URS;

- SVAA URS;

- Interface Definition and Design (IDD) specification (this forms the master definition of all interfaces both between BSC central system services, and from each of these services to external parties).

The objective of this document is to provide a complete specification of the requirements that the CDCA service must meet, from the users' point of view. For this purpose, the "users" include BSCCo Ltd, ~~National Grid~~the Transmission Company (as the balancing mechanism operator), BSC Service Users, and the CDCA Service Provider's own operators.

This User Requirements Specification forms the input to the System Specification for the CDCA Service. The System Specification constitutes the definition of the computer system requirements to be built in support of the CDCA Services.

Note that the current solution for the BSC central systems involves a bundled approach where the requirements of the SAA, CRA and CDCA services are met within the same computer system. As this URS is describing the requirements of the CDCA *service* in isolation, this document does not attempt to identify in detail where common requirements of these services are met by a shared function in the solution.

1.1 Amendment History

Date	Issue	Details of Change
24/06/2010	16.0	Document rebadged and amended for June 2010 Release (CP1324)

Further details of this document's amendment history are available from BSCCo on request.

Amend section 4.3 as follows:

4.3 Service Context

The following diagram illustrates the context of the CDCA service within the wider market of the Balancing and Settlement Code. This is a simplified view for clarity; section 6 describes the interfaces from the CDCA service to other parties in detail.
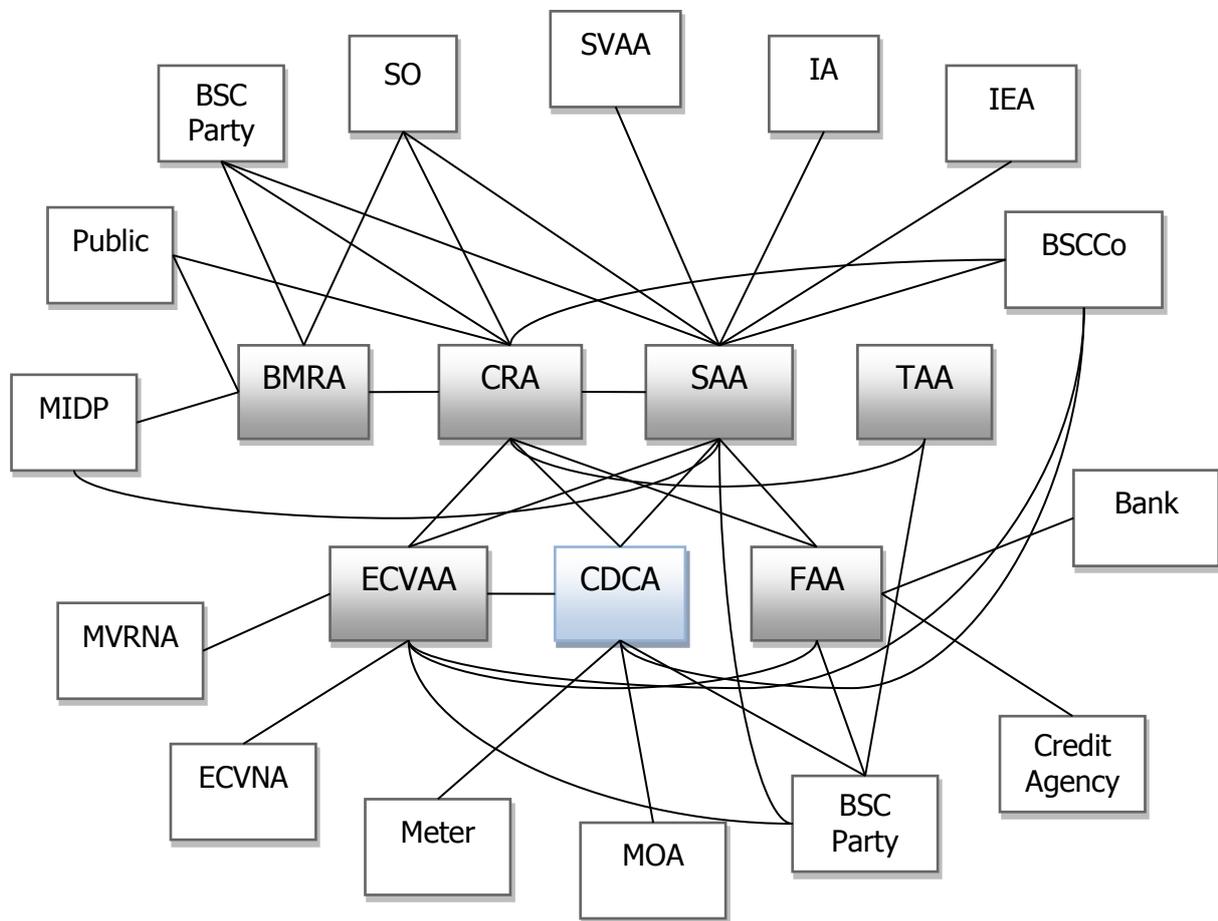
Item	Description
Bank	A bank which receives debit and credit instructions from the Funds Administration Agent.
BMRA	Balancing Mechanism Reporting Agent.

BSC Party	Any user of Balancing and Settlement Code services.
BSCCo Ltd	The Balancing and Settlement Code Company Limited.
CDCA	Central Data Collection Agent.
CRA	Central Registration Agent
Credit Agency	A credit agency which provides credit cover data on Traders.
ECVAA	Energy Contract Volume Aggregation Agent.
ECVNA	Energy Contract Volume Notification Agent.
FAA	Funds Administration Agent.
IA	Interconnector Administrator.
IEA	Interconnector Error Administrator
Meter	A physical meter registered within the Balancing and Settlement Code arrangements.
MIDP	Market Index Data Provider
MOA	Meter Operation Agent.
MVRNA	Metered Volume Reallocation Notifications Agent
Public	A member of the general public.
SAA	Settlement Administration Agent.
SO	~~System Operator~~Transmission Company
SVAA	Supplier Volume Aggregation Agent, equivalent to the current Initial Settlement and Reconciliation Agent (ISRA).
TAA	Technical Assurance Agent.
Transfer Coordinator	A role undertaken by BSCCo Ltd to coordinate transfers of metering between CVA (CRA & CDCA) and SVA in order to address the risk that Metering Systems are 'double counted' or 'omitted' from Settlements'.

Amend section 4.4 as follows:

4.4   Requirements Summary

The following table summarises the requirements of the CDCA service. These are then described in detail in section 5, including the source reference for each requirement.

Requirement ID.	User Requirement
Functional	
CDCA-F001	Validate meter technical details
CDCA-F002	Validate aggregation rules
CDCA-F003	Produce report of aggregation rules
CDCA-F004	Undertake proving tests
CDCA-F005	Collect metering system data
CDCA-F006	Manually collect metering system data
CDCA-F007	Validation of meter readings
CDCA-F008	Report meter reading exceptions
CDCA-F009	Meter reading estimation
CDCA-F010	Reporting of alternative methods of estimation
CDCA-F011	Reporting of estimations

Requirement ID.	User Requirement
CDCA-F012	Resolving metering system faults
CDCA-F013	Undertake Meter Advanced Reconciliation
CDCA-F014	Investigate MAR discrepancies
CDCA-F015	Inform BSCCo Ltd of MAR errors
CDCA-F016	Calculate Credit Cover BMU Meter Volume Data
CDCA-F017	Change of Meter and Outstation
CDCA-F018	Validation of Line Loss Factors
CDCA-F019	Application of Line Loss Factors to meter readings
CDCA-F021	Time keeping
CDCA-F022	Report raw meter readings to BSC Party
CDCA-F023	Report raw meter readings to Distribution Businesses
CDCA-F024	Report raw meter readings to ~~System Operator~~Transmission Company
CDCA-F025	Calculate aggregated Interconnector meter flow volume
CDCA-F026	Calculate aggregated BM Unit meter volumes
CDCA-F027	Calculate aggregated GSP Group Take volumes
CDCA-F028	Report aggregation exceptions
CDCA-F029	Meter communications management
CDCA-F030	Performance reporting
CDCA-F031	Receive settlement calendar
CDCA-F032	CDCA data to be archived
CDCA-F033	Settlement reporting
CDCA-F034	Metering protocols
CDCA-F035	Transfer from SMRS
CDCA-F036	Transfer to SMRS
CDCA-F037	Registration Assistance
CDCA-F038	Report Aggregated Volumes
CDCA-F039	PARMS Reporting
Interface	
CDCA-I001	Receive Aggregation Rules
CDCA-I002	Receive Registration Data
CDCA-I003	Receive Meter Technical Data
CDCA-I004	Notify new Meter Protocol
CDCA-I005	Load new Meter Protocol
CDCA-I006	Issue Meter Data for Proving Test to MOA
CDCA-I007	Proving Test Report/Exceptions
CDCA-I008	Obtain Metered Data from Metering Systems, including Interconnectors
CDCA-I009	Meter Period Data collected via site visit
CDCA-I010	Exception Report for missing and invalid meter period data
CDCA-I011	Dial readings from meter, for MAR
CDCA-I012	Report raw meter data to BSC Party
CDCA-I013	Agreement with Estimated data by BSC Party
CDCA-I014	Estimated Data Report and Notification of Estimation Method

Requirement ID.	User Requirement
CDCA-I015	Metering Equipment Faults from MOA
CDCA-I016	Information from TAA
CDCA-I017	Meter Reading Schedule for MAR
CDCA-I018	MAR Reconciliation Report
CDCA-I019	MAR Remedial Action Report
CDCA-I020	Site Visit Inspection Report from Site Visit Agent
CDCA-I021	Notification of Metering Equipment Work from MOA
CDCA-I022	Line Loss Factors
CDCA-I023	Missing Line Loss Factors
CDCA-I024	*Archived data [Interface deleted]*
CDCA-I025	Aggregation Rule Exceptions
CDCA-I026	Aggregated Meter Volume Exceptions
CDCA-I027	Aggregated Interconnector Meter Flow Volumes to SAA
CDCA-I028	Aggregated BM Unit Metered Volumes to SAA
CDCA-I029	Aggregated GSP Group Take Volumes to BSC Party
CDCA-I030	Meter Period Data for Distribution Area
CDCA-I031	*Meter Period Data for Total System* [Interface deleted; covered by CDCA-I012]
CDCA-I032	Data Collection and Aggregation Performance Report
CDCA-I033	File Receipt Acknowledgement
CDCA-I034	Settlement Calendar
CDCA-I035	Site Visit Report on Aggregation Rule compliance
CDCA-I036	GSP Group Take to SAA
CDCA-I037	Estimated Data Notification to BSC Party, MOA
CDCA-I038	Reporting Metering Equipment Faults
CDCA-I039	Information to TAA
CDCA-I040	BM Unit 'Credit Cover' Meter Volume Data Report
CDCA-I041	Interconnector Aggregation Report to BSC Party
CDCA-I042	BM Unit Aggregation Report to BSC Party
CDCA-I043	GSP Group Take to SVAA
CDCA-I044	Meter System Proving Validation from MOA
CDCA-I045	Meter Data from routine work and Metering Faults
CDCA-I046	Site Visit Inspection Report to MOA
CDCA-I047	Correspondence Receipt Acknowledgement
CDCA-I048	Report of Aggregation Rules
CDCA-I049	Total Demand per GSP
CDCA-I050	Data Exception Report from SAA
CDCA-I051	Report Meter Technical Details
CDCA-I054	Meter Status Report
CDCA-I055	Transfer from SMRS information
CDCA-I056	Transfer from SMRS report
CDCA-I057	Transfer to SMRS information
CDCA-I058	Transfer to SMRS report

Requirement ID.	User Requirement
CDCA-I059	Initial Meter Reading Report
CDCA-I060	SVA Agent Details
CDCA- I061	Receive System Parameters
CDCA-I062	*Not in use*
CDCA-I063	*Not in use*
CDCA-I064	MOA Proving Tests Report
CDCA-I065	MOA Fault Resolution Report
Service	
CDCA-S001	Volumetric Requirements
CDCA-S002	Data Quality

Note that there are a set of further Non-functional requirements of the CDCA Service - those requirements relating to such activities as security (both physical and user access related), audit, and system housekeeping (systems backups and archiving etc.). The majority of these are common to all of the services provided; hence unless specific to CDCA these requirements are listed in the CRA URS.

where requirements refer to Line Loss Factors, this also includes embedded generation scaling factors.

Amend section 5.1 as follows:

5.1   CDCA-F001: Validate meter technical details

Requirement ID: CDCA-F001	Status: M	Title: Validate meter technical details	BSC reference: CDCA SD 5.1, 5.2, 5.4 BPM 3.4, 4.20, CP637, CP753, CP751, CP1201
Man/auto: Manual	**Frequency:** On demand.	**Volumes:** Average of 20 per month	
Functional Requirement:			

Functional Requirement:

1. The CDCA shall receive, validate and maintain records of Metering Equipment Technical Details (including passwords where appropriate) associated with each Metering System for each Meter Point, associated data collector outstation and communications facility applicable to that Metering System, as received from the relevant MOA or Registrant. The details will have effective dates which may be retrospective. Location and other access details for the metering equipment are required. Other data required by CDCA may include schematics and network diagrams from MOAs or Registrant. The CDCA shall take account of any updates received from the MOA or Registrant.

2. The Metering Equipment Technical Details received from the MOA or Registrant shall be validated against other data held by the CDCA to ensure their accuracy and validity, including against registration data provided by the CRA.

3. The meter technical details shall include the Code of Practice (CoP) for the metering system, and the CDCA shall verify that the stated configuration is compliant with this code of practice.

4. The CDCA shall also support the procedure of Dispensations, where it is allowed that a given metering system to be non-compliant with the required CoP. Data such as meter multiplier may be adjusted by the MOA or Registrant in order to compensate for the discrepancy. The CDCA shall be capable of recording the following items of data against the metering system in cases where a dispensation applies:

   - Dispensation Reference;
   - Dispensation Effective From Date;
   - Dispensation Effective To Date;

- Reason for Dispensation.

  This data shall be supplied by the MOA or Registrant where applicable. There is currently no requirement for CDCA to actively monitor when these dates are reached. They will only be used as part of the manual process of validating new aggregation rules.

5. The CDCA shall identify meters registered with the CRA where no meter technical details have been received and liaise with the MOA or Registrant to ensure that they provide the required information.

6. In the event of validation failure, the CDCA shall liaise with the MOA or Registrant (as applicable) to inform them of the nature of the failure, and to agree the nature of the corrective action. This might be either constitute a re-send from the MOA or Registrant (as applicable) of the corrected data, or else agreement of changes of meter technical data to be made by the CDCA to their own database directly. In the latter case the CDCA shall confirm back to the MOA or Registrant (as applicable) the resulting meter technical data configuration.

7. In the event of validation failure specifically concerning the excessive width of the Meter Serial Number, the CDCA shall liaise with the associated MOA or Registrant (as applicable) and agree an abridged identifier. The mapping between the original Meter Serial Number and the abridged Meter Serial Number shall be recorded against the meter.

8. Where the registration is indicated as part of a transfer from SMRA, then
   If confirmation of the transfer has been received from the transfer coordinator:
      Enter the data ensuring the confirmed date is used as this may differ from that originally submitted.
      Send an extract of the entered data to the transfer coordinator and to the appropriate Distributor.
   Where confirmation has not been received:
      Carry out validation but do not enter the data.
      Send a copy of the request to the transfer coordinator and to the appropriate Distributor.

9. Once validated the meter technical details, as held in the CDCA, shall be reported to the MOA, Registrant, Distribution System Operator (if relevant) and ~~System Operator~~ Transmission Company.

Non Functional Requirement:

Interfaces:

The Metering Equipment Technical Details shall be received in accordance with interface specification CDCA-I003. They shall be sent to the MOA, Registrant, Distribution System Operator (if relevant) and ~~System Operator~~Transmission Company in accordance with interface specification CDCA-I051.

Issues:

Amend section 5.2 as follows:

5.2   CDCA-F002: Validate aggregation rules

Requirement ID: CDCA-F002	Status: M	Title: Validate aggregation rules	BSC reference: CDCA SD 4.1, 19.2, 22.1, 22.2 22.3, 22.4 BPM 3.2, 3.5, 4.12, CP753
Man/auto: Manual	**Frequency:** On demand.	**Volumes:** 20 per month	

Functional Requirement:

1. The CDCA shall receive, from the BSC Party, the following information in support of Aggregation Rules:
   a) Metering System identifier;
   b) Aggregation Rule(s) for each of Physical Meter, Metering System, Meter Point, Grid Supply Point, GSP Group and Interconnector;
   c) Other information, as may be required, to support the Aggregation Rules. This may include, but shall not be limited to the following:-
      network diagrams;
      schematics;
      ~~NGET~~NGESO connection agreement;
      installation documentation;

2. The CDCA shall provide a database which allows for the addition, modification and deletion of Aggregation Rules and other information and data provided by BSC Parties and Agents. Aggregation rules will have effective dates which will be in clock time (i.e. always apply from midnight local time) and may be retrospective

3. The CDCA shall validate all Aggregation Rules received from the relevant BSC Party, by comparing the Metering Systems involved in the aggregation with the registration information received from the CRA to determine the correctness of the Aggregation Rules.

4. The CDCA shall identify metering systems registered with the CRA for which no aggregation rules exist. Missing or invalid aggregation rules will be identified and reported to the BSC Party.

5. The CDCA shall use the data from the CRA to verify completeness of the aggregation rules across all BSC Parties, for instance to ensure that rules exist for all Grid Supply Points and Grid Supply Point Groups.

6. Where the registration is indicated as part of a transfer from SMRA, then
   If confirmation of the transfer has been received from the transfer coordinator:
       Enter the data ensuring the confirmed date is used as this may differ from that originally submitted.
       Send an extract of the entered data to the transfer coordinator and to the appropriate Distributor.
   Where confirmation has not been received:
       Carry out validation but do not enter the data.
       Send a copy of the request to the transfer coordinator and to the appropriate Distributor.

Non Functional Requirement:

The CDCA shall undertake a site visit, where necessary, in order to verify the validity of the Aggregation Rules.

Interfaces:

The details of the aggregation rules to be provided to the CDCA will be in accordance with interface specification CDCA-I001.

Missing or invalid aggregation rules are notified in accordance with the interface requirement   CDCA-I025.

Issues:

Amend section 5.11 as follows:

5.11   CDCA-F011: Reporting of estimations

Requirement ID: CDCA-F011	Status: M	Title: Reporting of estimations	BSC reference: CDCA SD 10.9 BPM 3.11, CR134
Man/auto: Automatic	**Frequency:** Daily	**Volumes:** High	

Functional Requirement:

1. The CDCA shall, where the meter period data has been estimated, provide an Estimated Data Report to BSCCo Ltd, the relevant BSC Party (the Registrant), the MOA, and the Distribution Business or TC . This report shall identify the dates and times for which the meter period data has been estimated and details of the estimation procedure.

2. The Report is sent to either the Distribution Business or the Transmission Company as appropriate, based on the registration data received from the CRA (TC are interested in sites directly connected to the Transmission network).

3. The report shall indicate whether the estimate has been agreed/not agreed between the CDCA and the BSC Party.

Non Functional Requirement:

Interfaces:
This report shall be in accordance with the interface specified in CDCA-I014.
Issues:

Amend section 5.24 as follows:

5.24 CDCA-F024: Report raw meter readings to ~~System Operator~~Transmission Company

Requirement ID: CDCA-F024	Status: M	Title: Report raw meter readings to ~~System Operator~~Transmission Company	BSC reference: CDCA SD 19.5
Man/auto: Automatic	**Frequency:** Daily	**Volumes:** 240000 period readings to all Parties in total (5000 * 48)	

Functional Requirement:

1. The CDCA shall forward the meter period data for all Grid Supply Point Metering Systems, Grid Entry Point Metering Systems, Metering Systems at points of connection between transmission networks and at points of connection between two Distribution Networks, to SO where required. Metering Systems at Embedded Sites connected to the Distribution network, specifically for embedded generation, shall also be included in this report. The data in this report is used to calculate Transmission Use of System charges, for Ancillary Services Business purposes, and System Operation purposes. This raw data report shall be provided on the day after the Settlement Day, including at weekends and bank holidays.

2. Where actual data is not available to this timetable, but is available later, the actual data shall be reported to the SO as soon as is practicable, for instance as part of the reporting run for the subsequent Settlement Day if possible.

3. The readings will include active and reactive energy data.

4. Raw data is at the channel level, including both main and check data.

5. The report will not include any estimated data.

6. All readings reported will not be line loss adjusted. The report will reference metered data in clock time rather than GMT (i.e. for a Settlement Day starting from midnight local time).

7. The report shall include a marker to indicate where data is missing because the meter could not be accessed. If there are zeroes read by the meter, these shall be included in the report.

Non Functional Requirement:
Interfaces:
This report is to in accordance with the interface requirement CDCA-I012.
Issues:

Amend section 5.25 as follows:

5.25 CDCA-F025: Calculate aggregated Interconnector meter flow volume

Requirement ID: CDCA-F025	Status: M	Title: Calculate aggregated Interconnector meter flow volume	BSC reference: CDCA SD 4.5, 22.5, 22.6, 22.13, 22.14 BPM 3.6.1, CP548, CP629
Man/auto: Automatic	Frequency: Once per settlement run	Volumes: Initially 96 (2 Interconnectors * 48 readings). The number of Interconnectors is expected to increase to 5 or 6.	

Functional Requirement:

1. The CDCA shall aggregate the collected or estimated metered data, taking into account any Line Loss adjustment factors, into the relevant External Interconnector for each settlement period. ~~An External Interconnector is a point of connection between Transmission Businesses.~~ Points of connection between distribution businesses are not relevant to this process.

2. Line Loss factors associated with External Interconnectors shall be supplied to the CDCA by BSCCo Ltd.

3. The CDCA shall in respect of all external Interconnectors, aggregate the relevant Metering Systems period data to produce Meter Point volumes. The CDCA shall aggregate all Meter Point volumes with respect to each external Interconnector to obtain a total Interconnector flow volume for each settlement period for that external Interconnector.

4. The CDCA shall ensure that, where the aggregation of data contains a value which has previously been estimated, the flag assigned at the time of estimation remains with the aggregated volume data throughout settlement.

5. The CDCA shall always use the latest meter and registration data available at the time an Aggregation Run is performed.

6. Aggregation shall only take place on active energy data.

7. The aggregation process shall take account of registration effective settlement dates for each meter point.

8. The aggregation process shall take place to meet the settlement timetable requirements.

9. Line Loss Factors must be applied where appropriate, as described in CDCA-F019.

Non Functional Requirement:

Interfaces:

Issues:

Amend section 6.1 as follows:

6.1   Overview

The CDCA Service shall provide an interface to the following external parties.

Other Service Providers:

- Central Registration Agent (CRA)

- Settlement Administration Agent (SAA)

- Energy Contract Volume Allocation Agent (ECVAA)

- Supplier Volume Allocation Agent (SVAA)

- Technical Assurance Agent (TAA) (manual only)

Other external parties:

- BSCCo Ltd

- BSC Party (Registrant)

- ~~System Operator~~<u>Transmission Company</u> (SO)

- Meter Operation Agent (MOA)

- Distribution business

In addition, the CDCA provides an interface to the physical metering equipment which collects meter reading data. This may be via an automated data capture device (e.g. MV-90), or via the procured services of a Site Visit Agent.

The CDCA Service shall provide inbound and outbound interfaces as summarised in the following table. Each interface requirement is described in detail below.

Details of the content of interfaces relevant to the CDCA are contained in the Interface Definition and Design (IDD). It is the intention that this URS and the IDD should be fully consistent. However, in the event that some inconsistency is found, the definition in the IDD should be assumed to take precedence until such time as the inconsistency can be corrected at the next document release.

Reqt No.	Interface Requirement	Inbound/ Outbound	Interface User	Mechanism
CDCA-I001	Receive Aggregation Rules	Inbound	BSC Party	Manual
CDCA-I002	Receive Registration Data	Inbound	CRA	Via shared database
CDCA-I003	Receive Meter Technical Data	Inbound	MOA/ Registrant	Manual
CDCA-I004	Notify new Meter Protocol	Outbound	MOA	Manual
CDCA-I005	Load new Meter Protocol	Inbound	MOA/protocol provider	Manual
CDCA-I006	Issue Meter Data for Proving Test	Outbound	MOA	Manual
CDCA-I007	Proving Test Report/Exceptions	Outbound	MOA, BSC Party	Automatic /Manual
CDCA-I008	Obtain Metered Data from Metering Systems, including Interconnectors	Inbound	Physical meters/ Data Capture Device (MV-90)	Automatic
CDCA-I009	Meter Period Data collected via site visit	Inbound	Hand Held Device/Data Capture Device (MV-90)	Manual
CDCA-I010	Exception Report for missing and invalid meter period data	Outbound	BSC Party, MOA	Automatic
CDCA-I011	Dial readings from meter, for MAR	Inbound	Hand Held Device/Data Capture	Manual

| Reqt No.	Interface Requirement	Inbound/ Outbound	Interface User	Mechanism
			Device (MV-90)	
CDCA-I012	Report raw meter data	Outbound	BSC Party, Distribution Business, ~~System Operator~~Transmission Company	Automatic
CDCA-I013	Agreement with Estimated data	Inbound	BSC Party	Manual
CDCA-I014	Estimated Data Report and Notification of Estimation Method	Outbound	BSCCo Ltd, BSC Party, MOA, Distributor, SO	Automatic
CDCA-I015	Metering Equipment Faults	Inbound	MOA	Manual
CDCA-I016	Information from TAA	Inbound	TAA	Manual
CDCA-I017	Meter Reading Schedule for MAR	Outbound	BSC Party, MOA	Manual
CDCA-I018	MAR Reconciliation Report	Outbound	BSC Party, MOA, BSCCo Ltd, Distributor	Manual
CDCA-I019	MAR Remedial Action Report	Outbound	BSC Party, MOA, Distributor, BSCCo Ltd	Manual
CDCA-I020	Site Visit Inspection Report from Site Visit Agent	Inbound	Site Visit Agent	Manual
CDCA-I021	Notification of Metering Equipment Work	Inbound	MOA	Manual
CDCA-I022	Line Loss Factors	Inbound	BSCCo Ltd	Automatic
CDCA-I023	Missing Line Loss Factors	Outbound	BSCCo Ltd	Manual
CDCA-I024	Archived data; [interface deleted]	N/A	Internal to CDCA	N/A
CDCA-I025	Aggregation Rule Exceptions	Outbound	BSC Party	Manual
CDCA-I026	Aggregated Meter Volume Exceptions	Outbound	BSC Party	Manual
CDCA-I027	Aggregated Interconnector Meter Flow Volumes	Outbound	SAA	Via shared database
CDCA-I028	Aggregated BM Unit Metered Volumes	Outbound	SAA	Via shared database
CDCA-I029	Aggregated GSP Group Take Volumes	Outbound	BSC Party, Distributor, SO	Automatic
CDCA-I030	Meter Period Data for Distribution Area	Outbound	Distributor, BSC Party	Automatic
CDCA-I031	*Meter Period Data for Total System [Interface Deleted - covered by CDCA-I012]*	*Outbound*	*~~System Operator~~Transmission Company*	*Automatic*

Reqt No.	Interface Requirement	Inbound/ Outbound	Interface User	Mechanism
CDCA-I032	Data Collection and Aggregation Performance Report	Outbound	BSCCo Ltd	Manual
CDCA-I033	File Receipt Acknowledgement	Outbound	BSC Party	Automatic
CDCA-I034	Settlement Calendar	Inbound	SAA	Manual
CDCA-I035	Site Visit Report on Aggregation Rule compliance	Inbound	Site Visit Agent	Manual
CDCA-I036	GSP Group Take to SAA	Outbound	SAA	Via shared database
CDCA-I037	Estimated Data Notification to BSC Party, MOA	Outbound	BSC Party, MOA	Manual
CDCA-I038	Reporting Metering Equipment Faults	Outbound	MOA, BSC Party	Manual
CDCA-I039	Information to TAA	Outbound	TAA	Manual
CDCA-I040	BM Unit 'Credit Cover' Meter Volume Data Report	Outbound	ECVAA	Automatic
CDCA-I041	Interconnector Aggregation Report to BSC Party	Outbound	BSC Party	Automatic
CDCA-I042	BM Unit Aggregation Report to BSC Party	Outbound	BSC Party, SO	Automatic
CDCA-I043	GSP Group Take to SVAA	Outbound	SVAA	Automatic
CDCA-I044	Meter System Proving Validation from MOA	Inbound	MOA	Manual
CDCA-I045	Meter Data from routine work and Metering Faults	Inbound	MOA/MV-90	Manual
CDCA-I046	Site Visit Inspection Report to MOA & BSC Party	Outbound	MOA, BSC Party	Manual
CDCA-I047	Correspondence Receipt Acknowledgement	Outbound	BSC Party, BSCCo Ltd	Manual
CDCA-I048	Report of Aggregation Rules	Outbound	BSC Party	Manual
CDCA-I049	Total Demand per GSP	Outbound	~~System Operator~~Transmission Company	Automatic
CDCA-I050	Data Exception Report from SAA	Inbound	SAA	Automatic/Manual
CDCA-I051	Report Meter Technical Details	Outbound	BSC Party, MOA, Distributor, ~~System Operator~~Transmission Company	Manual
CDCA-I054	Meter Status Report	Outbound	BSC Party, MOA, Distributor	Automatic
CDCA-I055	Transfer from SMRS information	Inbound	Transfer Coordinator, BSC Party	Manual
CDCA-I056	Transfer from SMRS report	Outbound	Transfer Coordinator	Manual

Reqt No.	Interface Requirement	Inbound/ Outbound	Interface User	Mechanism
CDCA-I057	Transfer to SMRS information	Inbound	Transfer Coordinator, BSC Party	Manual
CDCA-I058	Transfer to SMRS report	Outbound	Transfer Coordinator	Manual
CDCA-I059	Initial Meter Reading Report	Outbound	BSC Party	Manual
CDCA-I060	SVA Agent Details	Inbound	SVA Registrant, CVA Registrant	Manual
CDCA- I061	Receive System Parameters	Inbound	BSCCo Ltd	Manual
CDCA-I062	*Not in use*			
CDCA-I063	*Not in use*			
CDCA-I064	MOA Proving Tests Report	Outbound	BSCCo Ltd	Manual
CDCA-I065	MOA Fault Resolution Report	Outbound	BSCCo Ltd	Manual

The following diagrams illustrate the key interface requirements.
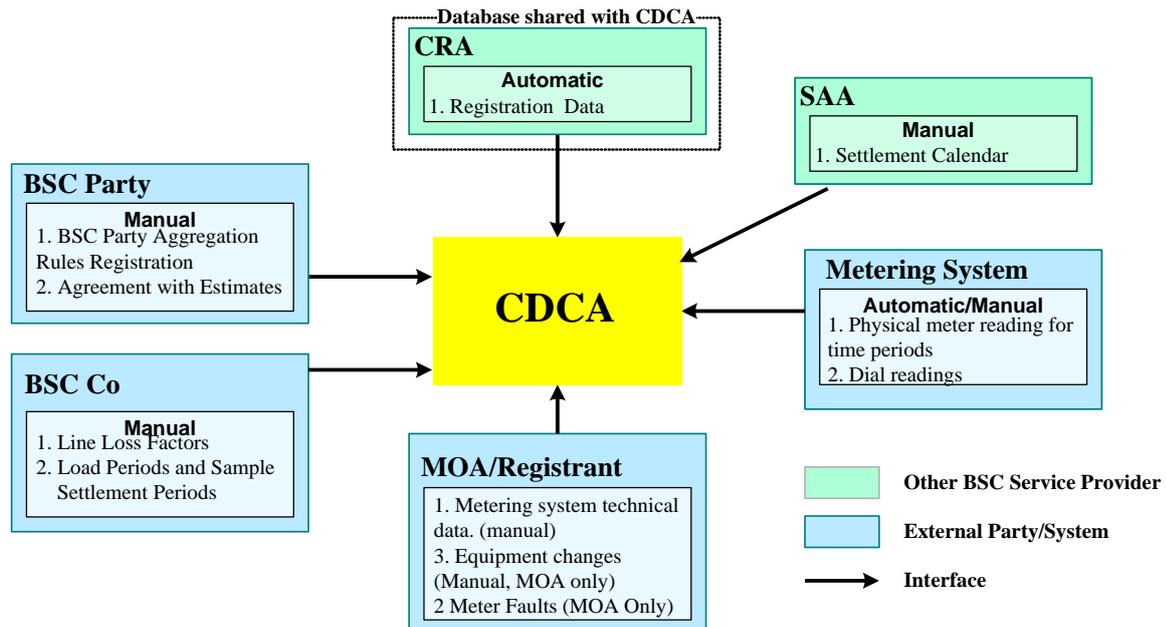
CDCA Service: Inbound Interface Requirements
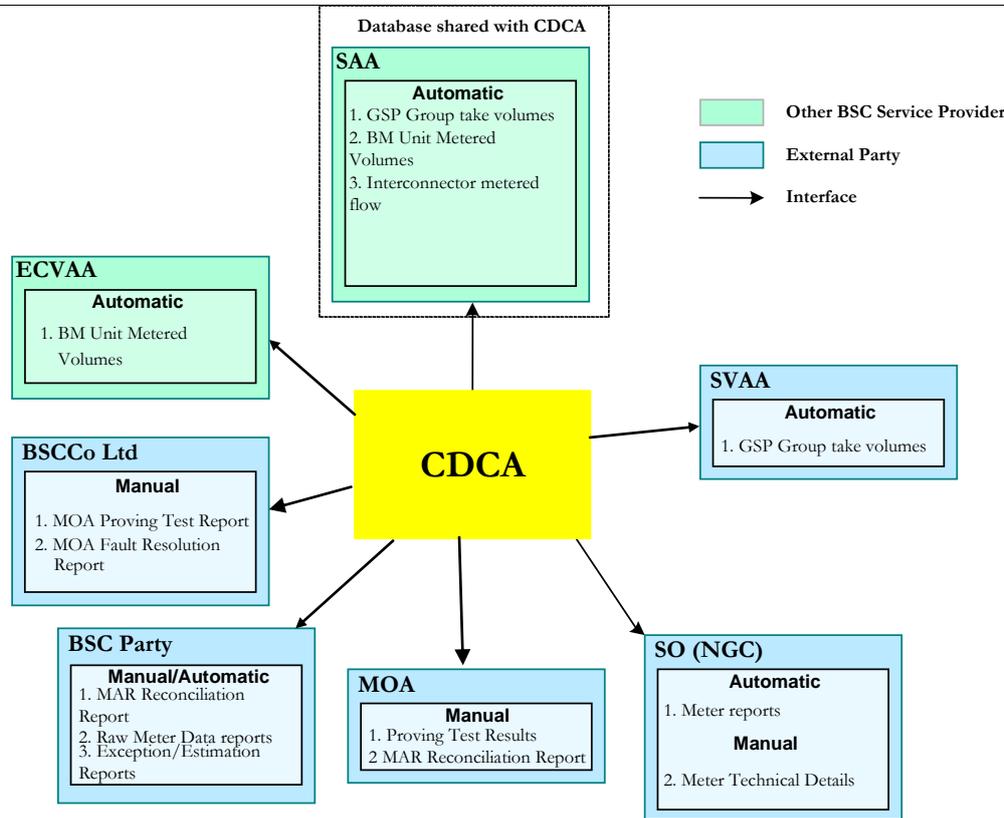
CDCA Service: Outbound Interface Requirements

Amend section 9 as follows:

9   User Roles and Activities

The user roles which will support the day to day operation of the CDCA service are common to those supporting the CRA Service, and so are described in the CRA URS.

These roles and activities will be refined and developed in more detail during detailed business process definition.

The following parties are associated specifically with the CDCA business processes in the wider context, and may thus be considered as "users" of the service. The detailed functional requirements and data interfaces necessary to support these parties are described earlier in this document.

Role	Summary of Activities related to CDCA
BSC Party	Receives detailed meter data reports daily from CDCA, and MAR reports approximately quarterly.
CRA	Provides registration data to the CDCA which defines the set of items such as the BM Units relevant to each trading period.
Distribution Business	Receives meter data reports

MOA	Receives metering equipment work approval, MAR reports and Site Visit Inspection reports from CDCA, as well as confirmation of new meter protocols as they come into operational use. Works with CDCA on proving tests for metering systems and any subsequent data validation or fault-related problems.
SAA	Receives daily reports of collected meter data from CDCA, as input to the Settlement process.
SVAA	Receives GSP Group Take Energy volumes daily as input to the stage 2 settlement process.
ECVAA	Receives daily reports of BM Unit meter volume data from CDCA as input to the Credit Check process.
~~System Operator~~Transmission Company	Receives meter data reports

Amend appendix B as follows:

Appendix B   Requirements Compliance Matrix

Service Description Compliance Matrix

The following table shows the mapping of requirements defined in this URS document to the requirements set out in the Service Description for Central Data Collection.

Note that general requirements (shown as "GEN-…") are described in the CRA URS.

Service Description Requirement Number	URS Requirement Reference Number	Notes
1	N/A	Performance standards referenced in 1.6 are addressed in the Service Level Agreements
2.1	N/A	Period of responsibility for provision of services therefore no mapping of requirements.
3.1	CDCA-F033	Service availability
4.1	CDCA-F002 CDCA-I001	Aggregation Rule Interface from BSC Parties and Agents
4.2	GEN-N001	Audit Trail of Aggregation rules
4.3	CDCA-F025 CDCA-F026 CDCA-F027	Registration date check for meter inclusion in settlement
4.4	GEN-N001	Audit trail of all registration data changes
4.5	CDCA-I002	Meter point details validation from BSC Parties
4.6	CDCA-F003 CDCA-I048	Provision of read only database of registration details
4.7	CDCA-I002	Registration data from CRA
4.8	CDCA-I002	BSC Party details from CRA
4.9	CDCA-I002	Interconnector Administrator details from CRA
4.10	CDCA-I002	MOA details from CRA
4.11	CDCA-I002	Metering System details from CRA
4.12	CDCA-I002	Boundary Point details from CRA
4.13	CDCA-I002	Meter Point details from CRA
4.14	CDCA-I002	BM Unit details from CRA
4.15	N/A	Trading Unit details from CRA - no longer required, as per ITT Erratum 3

Service Description Requirement Number	URS Requirement Reference Number	Notes
5.1	CDCA-F001 CDCA-I003	Meter Technical details from MOA
5.2	CDCA-F001	Updates of meter technical details from MOA
5.3	GEN-N001	Audit trail of meter technical details
5.4	CDCA-F001	Validation of meter technical details
6.1	CDCA-F034	Use of all metering protocols
6.2	CDCA-F034	Provide approval service for new metering protocols
6.3	CDCA-F034 CDCA-I004 CDCA-I005	Inform MOAs of new meter protocol
7.1	CDCA-F004	Undertake proving test in new / changed meter hardware
7.2	CDCA-F004	Communications checks
7.3	CDCA-F004	Ensure that only valid data used in settlements
7.4	CDCA-F004	Request validation of proving test results from MOA
7.5	CDCA-F004 CDCA-I006	Send meter data to MOA for proving test
7.6	CDCA-F004 CDCA-I007	Send proving test report/exceptions to MOA [URS Review added BSC Party]
7.7	CDCA-F039	Provide PARMS reports on proving tests
8.1	CDCA-F005 CDCA-I008	Obtain metered data from metering systems including Interconnectors
8.2	CDCA-F005	Perform data collection for active and reactive energy
8.3	CDCA-F005	Collect meter data from main and check meters
8.4	CDCA-F005	Collect data by initial settlement timescales
8.5	CDCA-F006 CDCA-I009	Period energy data from meter via handheld's file where comms is not available
8.6	CDCA-F008 CDCA-I010	Exception reports for missing and invalid data to BSC Party and MOA
8.7	CDCA-F005 CDCA-I008 CDCA-I011	Period data from meter, and also dial readings from meter, for MAR
8.8	CDCA-I012	Report raw meter data
9.1	CDCA-F007	Period meter validation rules
9.2	CDCA-F007	Additional validation rules
9.3	CDCA-F007 CDCA-I008	Load original data including alarm flags from meter or outstation
10.1	CDCA-F009	When to estimate
10.2	GEN-N001	Retention of original values
10.3	CDCA-F009	Flagging estimated
10.4	CDCA-F009	Estimation rules for generation
10.5	CDCA-F009	Estimation rules of demand data
10.6	CDCA-F009	Estimation
10.7	CDCA-F010 CDCA-I014 CDCA-I037	Notify BSC Party and MOA of estimation method [and BSCCo Ltd]
10.8	CDCA-F009	Estimation timing
10.9	CDCA-F011 CDCA-I037 CDCA-I014	Estimated Data Report to SAA and BSC Party [URS review changed SAA to BSCCo Ltd]
10.10	GEN-N001	Retention of original data and alarm flags
10.11	CDCA-F009 CDCA-I013	Obtain agreement on estimate from BSC Party cf 10.4
10.12	CDCA-F007	Check missing or suspect SVA meter data with HHDC
11.1	CDCA-F012 CDCA-I015	Metering Equipment faults from MOA
11.2	CDCA-F012	Check MOA identity
11.3	CDCA-F012	Confirm fault with MOA and act
11.4	CDCA-F012 CDCA-I015	Report metering faults to MOA
11.5	CDCA-F012	Carry out site inspections where necessary
11.6	CDCA-F012 CDCA-I016 CDCA-I039	Exchange of information with TAA Inbound Outbound

Service Description Requirement Number	URS Requirement Reference Number	Notes
11.7	CDCA-F039	Provide PARMS reports on metering faults
12.1	CDCA-I017	Meter Reading Schedule for MAR, to BSC Party and MOA
12.2	CDCA-F013 CDCA-I011	Dial Readings for MAR
12.3	CDCA-F013	Authorisation access
12.4	CDCA-F013	MAR comparison
12.5	CDCA-F013	Account for meter time in MAR process
12.6	CDCA-F013 CDCA-I018	MAR Reconciliation Report to BSC Party MAR Reconciliation Report to MOA MAR Reconciliation Report to SAA - SAA workshop said this was not needed MAR Reconciliation Report to BSCCo Ltd added from URS Workshop
12.7	CDCA-F014	Investigate MAR discrepancy with MOA
12.8	CDCA-F014	Take account of estimations in MAR
12.9	CDCA-F014 CDCA-I019	Notify BSC Party of remedial action following MAR
12.10	CDCA-I018	Provide MAR Exception report [Note that URS Review changed this to go to BSCCo Ltd, not SAA]
12.11	CDCA-F013 CDCA-I020	Site Visit Inspection report from site visit agent
12.12	CDCA-I019	Provide reconciliation report
12.13	CDCA-F012	Carry out visual inspections
12.14	CDCA-F007	Carry out mini-MARs where appropriate
12.15	CDCA-I038	Report mini-MAR results
13.1	CDCA-I021 CDCA-I046	Receive notification of metering equipment work from MOA
13.2	CDCA-I021	Receive request to remotely interrogate meter
13.3	CDCA-I021	Receive meter readings before meter work
14.1	CDCA-F017 CDCA-I021	Meter/Outstation Change plans from MOA
14.2	CDCA-F004	Provision of Proving test
15.1	CDCA-F018 CDCA-I022 CDCA-I023	Line Loss Factors from BSCCo Ltd Missing Loss Factors to BSCCo Ltd (as defined by URS Workshop)
15.2	CDCA-F018	Validation of line loss factors
15.3	CDCA-F019	Line loss factor application
15.4	CDCA-F019	Apply default line loss factors
15.5	CDCA-F019	Apply retrospective line loss factors
15.6	CDCA-F019	Apply line loss factors prior to aggregation
16.1	CDCA-F020	On line Data retention
16.2	CDCA-F032 GEN-S004	Recoverable archives
16.3	CDCA-F032 GEN-S004	Requirements for data archiving
16.4	GEN-S004	Archiving periodicity
16.5	GEN-S004	Data availability
17.1	CDCA-F021	System clock timing
17.2	CDCA-F021	Meter clock synchronisation
17.3	CDCA-F021	Hand held meter clock synchronisation
18.1	CDCA URS Section 12.2	Input/ output data flow as per Appendix A
19.1	CDCA-F022 CDCA-I012	Raw meter period data to BSC Party [Clarification also adds instance to ~~System Operator~~Transmission Company]
19.2	CDCA-F002 CDCA-F008 CDCA-F013 CDCA-F028 CDCA-I010 CDCA-I025 CDCA-I026 CDCA-I018	Exception Reports to BSC Party: Collected meter data Aggregation Rules Aggregated meter volumes exceptions MAR

Service Description Requirement Number	URS Requirement Reference Number	Notes
19.3		Aggregated meter data reports to SAA and BSC Party:
	CDCA-I027	Interconnector Meter Flow Volumes to SAA
	CDCA-I041	Interconnector Meter Flow Volumes to BSC Party
	CDCA-I028	BM Unit Metered Volumes to SAA
	CDCA-I042	BM Unit Metered Volumes to BSC Party
	CDCA-I036	GSP Group Take to SAA
	CDCA-I029	GSP Group Take to BSC Party
19.4	CDCA-F023 CDCA-I030	Meter data reports to Distribution business
19.5	CDCA-F024 CDCA-I012	Meter data reports to SO - as BM ~~System Operator~~Transmission Company, TUoS charging, Ancillary Services Business
19.6	CDCA-F030 CDCA-I032	Data Collection and aggregation performance reports to BSCCo Ltd
19.7	CDCA-F012 CDCA-I039 CDCA-I016	Support to the Technical Assurance Agent
19.8	CDCA-F016 CDCA-I040	Credit Qualifying BMU metered volumes to ECVAA
20.1	CDCA-F029	Procurement and administration of communication lines
20.2	CDCA-F029	Data format for communication with BSC Party
20.3	CDCA-I033	Acknowledge receipt of all data from BSC Party
20.4	COMMS URS	Checking receiver of data
21.1	CDCA-F031 CDCA-I034 CDCA-I002	Settlement Calendar from SAA Accredited MOA details from CRA
21.2	CDCA-F031 CDCA-I002	Report problems with Settlement Calendar or Accredited MOAs
21.3	COMMS URS	Market data receipt validation
22.1	CDCA-F002	Aggregate according to BSC Party rules
22.2	CDCA-F002	Aggregation rules from BSC Party
22.3	CDCA-F002	Validation of aggregation rules
22.4	CDCA-F002 CDCA-I035	Site Visit Report on Aggregation Rule compliance, from Site Visit Agent
22.5	CDCA-F025 CDCA-F026	Perform aggregation
22.9	CDCA-F026	Apply loss factors for BM Unit volumes
22.10	CDCA-F027	Includes GSP Group Take to SAA
22.11	CDCA-F027	Implies send GSP Group Take volumes to BSC Party
22.12	CDCA-F025 CDCA-F026 CDCA-F027	Identification of estimates in aggregations
22.13	CDCA-F025 CDCA-F026 CDCA-F027	Report revised data to SAA
22.14	CDCA-F035	Validate aggregation rules on SMRS/CMRS transfers
22.15	CDCA-F016	Perform credit run
23.1	CDCA-F033	Data transfer timings
24	CDCA-F035 CDCA-F036	Transfer between CMRS and SMRS
25.1	GEN-S008	Data retention requirements

Data Collection Performance Standards

Appendix C of the Service Description describes requirements for Data Collection Performance Standards. These are addressed within the Service Level Agreements. See also CDCA-S001, CDCA-F030 and CDCA-I032.