Review of Indicative Table of Contents for the Smart Energy Code

Installation / Maintenance
DCG SG3 Teleconference
9th December 2010

Prospectus Extract

"Meter installation, removal and exchange obligations and procedures – implementation of rollout obligations

This section would set out practical arrangements between the parties to enable rollout of smart meters and their subsequent maintenance and replacement."

Assumptions:

SEC will set out general duties underpinned by supplementary detailed procedures

Data Access and security, interoperability, functionality will be covered in other sections of the Smart Energy Code

Installation – general duties

- Roles & Responsibilities
    - Pre-DCC/Post DCC? (if SEC is in place before DCC)
    - procuring SMS components, including comms
- Smart Metering System
    - compliant with functional and technical requirements – signpost to these (where?)
    - complete installation – what is ‘completion’?
    - Interaction with HAN and WAN
    - ‘Lead Supplier’ – duty of co-operation
    - Non-coincident IHD provision – is this an SEC matter?
- When DCC engaged in process?

Maintenance – general duties

- Roles & Responsibilities
  - Pre-DCC/Post DCC?

Consider across Smart Meter System. Code subsidiary procedures for rectification for Meter, WAN, HAN, IHD?

NB Prospectus notes the supplier

- will be responsible for installation of the WAN communications modules and their replacements if they develop faults.
- responsibility to maintain and replace IHDs for at least one year after installation of the smart metering system.

Faults – including comms and battery issues?

Customer reported faults – which Supplier (or its agent) will attend?

Assurance/Technical Audits

2 year inspection

Recerts

Removal – general duties

Assume if component exchanged (i.e. removed and replaced), follow installation processes?

Circumstances where a complete smart meter system is removed without replacement?

- permanent disconnection
- any others?

Installation/maintenance/exchanges – interdependencies

Interaction with other codes/procedures

- Metering governance – see following slides
- Registration data updates – see ‘For Discussion’ slides
- Smart Meter System information updates
  - from and to agents & DCC
  - to Networks
  - between suppliers for shared SMS data?
- Comms processes for fault fixing/replacement etc?

Metering Governance – Electricity

Legal Obligations

The Electricity Act 1989

Meters must be approved by a Notified Body under the Measuring Instruments Directive (2006 S.I. 1679)

Safety

ESQCR

Distribution Businesses are responsible for the safety of individual operatives working on their networks

DSO / MOP interface - MOCOPA

Electricity Settlement

BSC

Meters must comply with Codes of Practice

Metering Governance – Electricity

BSC Section K (Registration of Metering Systems)

Section L (Metering)

Codes of Practice

BSCPs:

27 – Technical Assurance (of HH Metering Systems)

32 – Metering Dispensations

502/504 – Data Collection

508 – Supplier Volume Allocation Agent

537 – Qualification

601 – Approval of HH Meters

MOCOPA

- Authorises meter operators to install and connect meters to the electricity network by clarifying that the equipment being provided, installed and maintained meets appropriate technical requirements and that work is carried out to adequate safety standards.
- Relationship between Network/MO's regarding the safety, technical and business interface requirements
- Meter Operators are responsible for assessing that meter installers are competent and issue their own certificate
- Coverage includes
  - Requirements Applicable To MOCOPA® Operators At The Company Level
  - Requirements Applicable To Meter Operatives At The Site Level
  - Obligations And Rights Of The Distribution Business
  - On-Site Interface Considerations

Metering Governance – Gas

The Gas Act 1986

Gas Supply Licence - Standard Condition 22

Standards required for gas meter installers – "approved persons"

Safety

-Gas Safety (installation and use) Regulations 1994

-Legislation – meters must be installed by a person who is "approved" by the director general of gas supply

- IGE/GM/5 – the installation and use of Electronic Gas Meter Volume Conversion Scheme

- IGE/GM/7 – Electrical Connections to Gas meters

Responsibilities

-RGMI – must comply with the Code (MAMCOP)

- responsible for selection and installation of an appropriate meter in accordance with IGE/GM/6

-OFGEM – operating a registration system for persons performing meter work + approval of pattern, construction, manner of making and stamping of meters as required by the gas act

-Provision

- Suppliers – have a responsibility for provision of meter if requested to by domestic customers
- PGT's – have an obligation to install and fit meters if requested to do so by suppliers via the relevant shipper

- PGT – is responsible for approving design proposals and the completed installation

Metering Governance – Gas

-OFGEM administer “Registered gas meter installer” scheme (OAMI)

- they approve persons to install (and/or inspect) meters. Meter installers assessed against the requirements of the Code of Practice
- Gas Safe – appointed (previously Corgi) to administer the scheme

MAMCOP

-COP/1a – low pressure diaphragm and electronic meter installation with badged meter capacities not exceeding 6m3/hr

-COP/1b – low pressure diaphragm and rotary meter displacement installation with badged meter capacities exceeding 6m3/hr but not exceeding 1076 m3/hr

- COP 1c – high pressure and all other low pressured meter installation not covered by COP/1a or COP/1b

-Temporary disconnection/reconnection to allow safe working downstream of the meter subject to Gas Safety (installation and use) Regulations 1994 = outside scope of MAMCOP

Supplier responsibilities Prospectus Extract

"Responsibilities of suppliers with respect to meter system operation

Suppliers would be responsible for meter system maintenance and meter configuration. It is also proposed they would have responsibility for the WAN communications module."

Supplier responsibilities

Supply Point

Existing principle that Supplier responsibility for 'supply point' endures until CoS or Disconnection. Consider how this plays out where a Smart Metering System is in place:

- Electricity Meter
- Gas Meter
- Lead Supplier for HAN/Wan components

Smart Metering System

- Compliance (including assurance)
- Co-operation with associated Supplier and possibly his agents (eg data collection)
- Security & safety
- Meter disablement/re-enablement
- Ensure access routines terminated on CoS

DCC

- Use of DCC services at install/maintain/remove events
- Use of DCC for day to day SMS services – poss under Service Lines?

Change of Tenancy

- Meter configuration

Pre-payment

Assume Pay As You Go is a supplier service – any duties for the code

Network responsibilities – Prospectus extract

Responsibilities of networks with respect to meter system operation

DNOs and GTs would carry responsibilities under the Code as well as having rights to receive consumption and other data subject to any privacy restrictions, in return for payment for DCC services.

Network responsibilities

Emergency services

Planned and unplanned network outages

Remote energisation/de-energisaton – eg safety/rotary disconnections

Provision of network-related data

Access to Smart Meter Systems

Smart Grid

Gas to follow from ENA

For discussion

? For this section or Service Descriptions?

Registration by Existing Registration Agents

The Network Operator Registration Agent shall be responsible for providing an initial extract of all Metered Exit Points, and Unmetered Exit Point MPANs and related registration data to the DCC.

The Networks Operator Registration Agent shall be responsible for providing an update on each Working Day of all changes to Metered Exit Points, and Unmetered Exit Point MPANs and related registration data to the DCC.

On request by the DCC the Networks Operator Registration Agent shall provide a refresh extract of all Metered Exit Points, and Unmetered Exit Point MPANs and related registration data.

DCC Registration

New Connections

Where a Network Operator undertakes physical work to create a new Metered Connection Exit Point the Network Operator will record the new Exit Point on the Registration System.

When a request is received for a New Connection that requires no physical work to be undertaken by the Network Operator, the Network Operator shall validate the request. If a valid request, the Network Operator will record the new Exit Point on the Registration System.

When a request is received from a UMSO for a new Unmetered Supply Logical Connection the Electricity Network Operator shall validate the request. If a valid request, the Electricity Network Operator will record the new Exit Point on the Registration System.

For discussion

? For this section or Service Descriptions?

Network Use of System Charge Codes

The Network Operator shall provide non site specific Use of System Charge Code information to the Registration System Operator to enable the correct non site specific Use of System Charge Code to be calculated.

The Network Operator shall provide a Site Specific Use of System Charge Code to the Registration System Operator where a non site specific Use of System Charge Code is not to be applied.

Electricity Network Line Loss Factor Codes

The Electricity Network Operator shall provide Line Loss Factor Code information to the Registration System Operator to enable the correct non site specific Line Loss Factor Code to be calculated.

The Electricity Network Operator shall provide a Site Specific Line Loss Factor Code to the Registration System Operator where a non site specific Line Loss Factor Code is not to be used.

Maintenance of Registration Data Items

The Network Operator is responsible for updating the data items owned by the Network Operator in the Registration System.

Disconnection

Where a Network Operator undertakes physical work to remove a Metered Connection Exit Point the Network Operator will record the Disconnected Exit Point on the Registration System.

When a request is received to Disconnect Connect a Metered Exit Point that requires no physical work to be undertaken by the Network Operator the Network Operator shall validate the request. If a valid request, the Network Operator will record the Disconnected Exit Point on the Registration System.

When a request is received from an UMSO to Disconnect an Unmetered Supply Logical Connection the Electricity Network Operator shall validate the request. If a valid request, the Network Operator will record the disconnected Exit Point on the Registration System.

Other

Any other licence conditions that could be discharged through this section of the SEC?

Dispensations and/or exceptions?

Any involvement of agents and ‘authorised data users’ in install/maintain events?

Are legal accuracy requirements sufficient for smart metering systems?

Meter commissioning process needed?

Consider Meter ‘proving’ process (‘Meter to bank’)?