

SECTION L – SMART METERING KEY INFRASTRUCTURE AND DCC KEY INFRASTRUCTURE

L3 THE SMKI SERVICES

The SMKI Services

L3.1 For the purposes of this Section L3, the “**SMKI Services**” means all of the activities undertaken by the DCC in its capacity as:

- (a) the Device Certification Authority;
- (b) the Organisation Certification Authority; or
- (c) the IKI Certification Authority,

in each case in accordance with the applicable requirements of the Code.

Authorised Subscribers

General Provisions

L3.2 For the purposes of this Section L3:

- (a) any Party which has successfully completed the SMKI and Repository Entry Process Tests for the purposes of Section H14.22(a) in respect of any of the Certificate Policies;
- (b) any RDP which has successfully completed the SMKI and Repository Entry Process Tests for the purposes of Section H14.22(a) in respect of the Organisation Certificate Policy; and
- (c) SECCo in respect of the IKI Certificate Policy,

may apply to become an Authorised Subscriber in accordance with, and by following the relevant procedures set out in, that Certificate Policy and the SMKI RAPP.

L3.3 The DCC shall authorise SECCo, any Party or any RDP to submit a Certificate Signing Request, and so to become an Authorised Subscriber, where SECCo, that Party or that RDP has successfully completed the relevant procedures and satisfied the

criteria set out in the relevant Certificate Policy and the SMKI RAPP.

- L3.4 The DCC shall provide any SMKI Services that may be requested by an Authorised Subscriber where the request is made by that Authorised Subscriber in accordance with the applicable requirements of the SMKI SEC Documents.
- L3.5 The DCC shall ensure that in the provision of the SMKI Services it acts in accordance with Good Industry Practice.

Registration Data Providers

- L3.6 Where a Registration Data Provider (other than an Electricity Network Party or Gas Network Party which is deemed to be an RDP, acting in its capacity as such) has become an Authorised Subscriber, the Network Party that nominated that Registration Data Provider shall ensure that the RDP complies with all of its obligations in that capacity under this Section L.
- L3.7 Where a Registration Data Provider has been nominated as such by more than one Network Party:
- (a) that RDP shall not, by virtue of acting in the capacity of an RDP for different Network Parties, be required to become a Subscriber for different Organisation Certificates;
 - (b) to the extent to which that RDP can be clearly identified as acting on behalf of one Network Party, that Network Party shall be subject to the requirements of Section L3.6 in respect of the actions of the RDP;
 - (c) to the extent to which that RDP cannot be clearly identified as acting on behalf of one Network Party, each of the Network Parties which nominated that RDP shall be subject to the requirements of Section L3.6 in respect of the actions of the RDP.

Determinations by the Panel

- L3.8 Where the DCC has notified SECCo, a Party or an RDP that has applied to become an Authorised Subscriber that the DCC does not consider that it has satisfied the criteria set out in the relevant Certificate Policy and the SMKI RAPP for that purpose,

SECCo, that Party or that RDP (as the case may be) may refer the matter to the Panel for determination.

L3.9 Following any reference made to it under Section L3.8, the Panel:

- (a) shall determine whether the relevant applicant satisfies the criteria set out in the relevant Certificate Policy and the SMKI RAPP; and
- (b) where the Panel determines that the relevant applicant meets those criteria, it shall notify the DCC, and the applicant shall (subject to any other requirements of the relevant Certificate Policy or the SMKI RAPP) become an Authorised Subscriber.

L3.10 Subject to the provisions of Section L3.11, any such determination of the Panel shall be final and binding.

L3.11 Nothing in Sections L3.8 to L3.10 shall be taken to prevent SECCo, any Party or any RDP from making a new application to DCC to become an Authorised Subscriber, in accordance with Section L3.2, at any time.

Changes in Circumstance

L3.12 Where SECCo, a Party or an RDP which is an Authorised Subscriber becomes aware of a change in circumstance which would be likely, if it were to make a new application to the DCC to become an Authorised Subscriber, to affect whether it would satisfy the criteria set out in the relevant Certificate Policy and the SMKI RAPP for that purpose, it shall as soon as is reasonably practicable notify the DCC of that change in circumstance.

L3.13 Where the DCC receives a notification from an Authorised Subscriber in accordance with Section L3.12, or otherwise becomes aware of a change in circumstance of the nature referred to in that Section, it shall:

- (a) assess whether that Authorised Subscriber continues to satisfy the relevant criteria to be an Authorised Subscriber as set out in the relevant Certificate Policy and the SMKI RAPP; and
- (b) where it determines that the Authorised Subscriber does not continue to satisfy

the relevant criteria, notify the Authorised Subscriber which, subject to Section L3.14, shall cease to be an Authorised Subscriber in accordance with the Certificate Policy.

L3.14 Where the DCC has notified an Authorised Subscriber in accordance with Section L3.13(b):

- (a) the provisions of Section L3.8 to L3.11 shall apply as if the person notified had made an unsuccessful application to become an Authorised Subscriber in respect of the relevant Certificate Policy; and
- (b) where the relevant Certificate Policy is the Organisation Certificate Policy, the DCC shall, subject to any determination made by the Panel in accordance with Section L3.9, revoke any Organisation Certificates for which that person is the Subscriber;
- (c) where the relevant Certificate Policy is the IKI Certificate Policy, the DCC shall, subject to any determination made by the Panel in accordance with Section L3.9, take such steps in relation to any IKI Certificates for which that person is the Subscriber as may be set out in that Certificate Policy or in the SMKI RAPP.

Eligible Subscribers

L3.15 An Authorised Subscriber:

- (a) shall be known as an “**Eligible Subscriber**” in respect of a Certificate if it is entitled to become a Subscriber for that Certificate; and
- (b) will be entitled to become a Subscriber for a Certificate only if it is identified as an Eligible Subscriber in respect of that Certificate in accordance with the following provisions of this Section L3.

Device Certificates

L3.16 A Party which is an Authorised Subscriber in accordance with the Device Certificate Policy will be an Eligible Subscriber in respect of a Device Certificate only where that Subject of that Device Certificate is one that is identified with that Party in the table

immediately below.

<u>Party</u>	<u>Subject</u>
The DCC	Either: (a) a Communications Hub Function; or (b) a Gas Proxy Function.
An Import Supplier	Either: (a) an Electricity Smart Meter; or (b) a Type 1 Device.
A Gas Supplier	Either: (a) a Gas Smart Meter; (b) a Gas Proxy Function; or (c) a Type 1 Device.
Any other Party	Either: (a) an Electricity Smart Meter (b) a Gas Smart Meter; or (c) a Type 1 Device, but only in so far as the SMI Status of that Device is not set to ‘commissioned’ or ‘installed not commissioned’.
The DCC acting as the Production Proving Function	Any Production Proving Device.

DCA Certificates

L3.17 Where the DCC (acting in its capacity as Root DCA or Issuing DCA) is an Authorised Subscriber in accordance with the Device Certificate Policy:

- (a) it (and only it) will be an Eligible Subscriber in respect of DCA Certificates;
- (b) (save for the purposes of the replacement of the Root DCA Certificate) it will be an Eligible Subscriber only in respect of a single Root DCA Certificate.

Organisation Certificates

L3.18 Where the DCC, a Network Party or another Party which is (or is to become) a User, or any RDP, is an Authorised Subscriber in accordance with the Organisation Certificate Policy, that person will be an Eligible Subscriber in respect of an Organisation Certificate only where:

- (a) if the Subject of that Certificate is:
 - (i) either the DCC (acting pursuant to its powers or duties under the Code) or a DCC Service Provider, that person is the DCC; or
 - (ii) not the DCC, that person is the Subject of the Certificate; and
- (b) if the value of the X520OrganizationalUnitName field in that Certificate is a Remote Party Role corresponding to that listed in the table immediately below, either:
 - (i) that person is the DCC, and it is identified with that Remote Party Role in the second column of that table and the Certificate Signing Request originates from the individual System referred in the paragraph of the definition of DCC Live Systems identified in the fourth column of that table; or
 - (ii) that person is identified with that Remote Party Role in the second column of that table, and the value of the subjectUniqueID field in the Certificate is a User ID or RDP ID associated with any such User Role or with an RDP as may be identified in the third column of that table.

<u>Remote Party Role</u>	<u>Party</u>	<u>User Role or RDP</u>	<u>DCC Live Systems definition</u>
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			<u>paragraph</u>
root	The DCC	[Not applicable]	(d)
recovery	The DCC	[Not applicable]	(f)
transitionalCoS	The DCC	[Not applicable]	(c)
wanProvider	The DCC	[Not applicable]	(a)
accessControlBroker	The DCC	[Not applicable]	(a)
issuingAuthority	The DCC	[Not applicable]	(a)
networkOperator	A Network Party	Either: (a) Electricity Distributor; or (b) Gas Transporter.	[Not applicable]
supplier	A Supplier Party	Either: (a) Import Supplier; or (b) Gas Supplier.	[Not applicable]
other	An RDP or any Party other than the DCC	Either: Other User; Registered Supplier Agent; Registration Data Provider; or Export Supplier.	[Not applicable]

pPPXmlSign	The DCC	[Not Applicable]	(g)
pPRDPFileSign	The DCC	[Not Applicable]	(g)
s1SPxmlSigning	The DCC	[Not Applicable]	(gh)
commissioningPartyFileSigning	The DCC	[Not Applicable]	[Only relevant during SMETS1 Migration]
requestingPartyFileSigning	The DCC	[Not Applicable]	[Only relevant during SMETS1 Migration]
s1SPMigrationSigning	The DCC	[Not Applicable]	[Only relevant during SMETS1 Migration]
commissioningPartyXmlSigning	The DCC	[Not Applicable]	[Only relevant during SMETS1 Migration]
<u>loadController</u>	<u>None</u>	<u>None</u>	<u>[Not applicable]</u>

OCA Certificates

L3.19 Where the DCC (acting in its capacity as Root OCA or Issuing OCA) is an Authorised Subscriber in accordance with the Organisation Certificate Policy:

- (a) it (and only it) will be an Eligible Subscriber in respect of OCA Certificates;
- (b) (save for the purposes of the replacement of the Root OCA Certificate) it will be an Eligible Subscriber only in respect of a single Root OCA Certificate.

IKI Certificates

L3.20 Where SECCo or any Party or RDP is an Authorised Subscriber in accordance with

the IKI Certificate Policy, it will be an Eligible Subscriber in respect of an IKI Certificate in the circumstances set out in the IKI Certificate Policy.

ICA Certificates

L3.21 Where the DCC (acting in its capacity as Root ICA or Issuing ICA) is an Authorised Subscriber in accordance with the IKI Certificate Policy:

- (a) it (and only it) will be an Eligible Subscriber in respect of ICA Certificates;
- (b) (save for the purposes of the replacement of the Root ICA Certificate) it will be an Eligible Subscriber only in respect of a single Root ICA Certificate.

Certificates for Commissioning of Devices

L3.22 The DCC shall:

- (a) prior to the commencement of Interface Testing, or by such later date as may be specified by the Secretary of State, establish and lodge in the SMKI Repository; and
- (b) subsequently maintain,

such of its Certificates as are necessary to facilitate the installation at premises of Devices that are capable of being Commissioned.

L3.23 For the purposes of Section L3.22, the DCC shall ensure that the Certificates which are established, lodged in the SMKI Repository and subsequently maintained include at least the following:

- (a) the Root OCA Certificate;
- (b) the Issuing OCA Certificate;
- (c) the Root DCA Certificate;
- (d) the Issuing DCA Certificate;
- (e) the Recovery Certificate;

- (f) the DCC (accessControlBroker) - digitalSignature Certificate;
- (g) the DCC (accessControlBroker) – keyAgreement Certificate;
- (h) the DCC (wanProvider) Certificate; and
- (i) the DCC (transitionalCoS) Certificate.

L3.24 For the purposes of Sections L3.23(e) - (i), the Certificates which are referred to in those paragraphs mean Organisation Certificates in respect of which, in each case:

- (a) the value of the KeyUsage field is that identified in relation to the Certificate in the second column of the table immediately below;
- (b) the value of the X520OrganizationalUnitName field corresponds to the Remote Party Role identified in relation to the Certificate in the third column of that table; and
- (c) the Certificate is used for the purposes of discharging the obligations of the DCC in the role identified in relation to it in the fourth column of that table.

<u>Certificate</u>	<u>keyUsage</u> <u>Value</u>	<u>Remote Party Role</u>	<u>DCC Role</u>
Recovery Certificate	digitalSignature	recovery	The role of the DCC under the SMKI Recovery Procedure.
DCC (Access Control Broker) - digitalSignature Certificate	digitalSignature	accessControlBroker	AccessControlBroker
DCC (Access Control Broker) – keyAgreement Certificate	keyAgreement	accessControlBroker	AccessControlBroker

DCC (wanProvider) Certificate	digitalSignature	wanProvider	wanProvider
DCC (transitionalCoS) Certificate	digitalSignature	transitionalCoS	The role of the DCC as CoS Party.

Unique Identifiers

Certificate Signing Requests

L3.25 Where the DCC (acting in its capacity as Registration Authority under the Organisation Certificate Policy) receives a Certificate Signing Request of the type described in Section L3.26(a), and the circumstances described in Section L3.26(b) apply, the DCC shall reject the Certificate Signing Request.

L3.26 For the purposes of Section L3.25:

- (a) a Certificate Signing Request is of the type described in this sub-paragraph (a) if it is:
 - (i) made by a Supplier Party;
 - (ii) in respect of an Organisation Certificate having a keyUsage value of digitalSignature; and
 - (iii) of a type that, if approved, would result in the Issue of an Organisation Certificate containing one or more Unique Identifiers;
- (b) the circumstances described in this sub-paragraph (b) are that, at the time at which the Certificate Signing Request referred to in Section L3.25 is made:
 - (i) an Organisation Certificate has already been Issued by the DCC (acting in its capacity as Issuing OCA) to a Supplier Party other than the Party making the Certificate Signing Request;

- (ii) that Organisation Certificate contains at least one Unique Identifier that is also contained in the Certificate Signing Request; and
- (iii) that Organisation Certificate has neither expired nor been revoked.

Eligible Subscribers

L3.27 Where a Party has been an Eligible Subscriber in respect of any type of Organisation Certificate, but then ceases to be an Eligible Subscriber in respect of Organisation Certificates of that type, the DCC (acting in its capacity as Issuing OCA) shall as soon as reasonably practicable revoke every Organisation Certificate previously Issued to that Party for which it is no longer an Eligible Subscriber.

Determinations by the Panel

L3.28 A Supplier Party (A) may apply to the Panel for the revocation of any Organisation Certificate Issued to another Supplier Party (B) which:

- (a) has a keyUsage value of digitalSignature;
- (b) includes one or more Unique Identifiers with which, in the opinion of Supplier Party A, Supplier Party B should not be associated; and
- (c) at the time of the application has neither expired nor been revoked.

L3.29 Following an application made to the Panel by Supplier Party A under Section L3.28:

- (a) Supplier Parties A and B shall provide the Panel with such information and assistance as it may reasonably request;
- (b) the Panel shall, applying such criteria as it considers suitable for the purpose, determine whether it is appropriate for Supplier Party B to be associated with each Unique Identifier which is the subject of the application by Supplier Party A; and
- (c) the Panel shall notify both Supplier Parties A and B of its determination.

L3.30 Where the Panel has determined that it is not appropriate for Supplier Party B to be associated with any Unique Identifier, it shall at the same time determine to require

the revocation of each Organisation Certificate Issued to Supplier Party B which:

- (a) has a keyUsage value of digitalSignature;
- (b) includes that Unique Identifier; and
- (c) at the time of the determination has not already expired or been revoked.

L3.31 The Panel shall notify the SMKI PMA of any determination made by it under Section L3.30.

L3.32 Where it is notified of any determination made by the Panel under Section L3.30, the SMKI PMA shall direct the DCC (acting in its capacity as Issuing OCA) to revoke each Organisation Certificate Issued to Supplier Party B which falls within the scope of that determination.

L3.33 Any determination made by the Panel in accordance with Section L3.29 or L3.30 may be appealed to the Authority by either Supplier Party A or B, and the decision of the Authority shall be final and binding for the purposes of this Code.

Definitions

~~L3.25~~L3.34 For the purposes of this Section L3:

- (a) **“keyUsage”** means the field referred to as such in the Organisation Certificate Policy;
- (b) **“X520OrganizationalUnitName”** and **“subjectUniqueID”** mean those fields which are identified as such in the Organisation Certificate Profile at Annex B of the Organisation Certificate Policy; ~~and~~
- (c) **“accessControlBroker”** and **“wanProvider”**, when used in relation to the roles of the DCC, mean those roles which are identified as such, and have the meanings given to them, in the GB Companion Specification~~;~~
- (d) **“Unique Identifier”** means a unique identifier by which a Supplier Party may be identified in the Party Details.