
Consumer Consent Service Energy Market Data Specification

Introduction

This Annex sets out the proposed content that will be included within the Energy Market Data Specification (EMDS) as part of the CCS change proposal. The existing EMDS ([Data Specification Catalogue](#)) defines data items and market messages used across a number of industry codes in a standard format. The new data items and market messages required to support the CCS Arrangements will be added to the EMDS as part of the CCS REC Change Proposal (R0318).

The EMDS sits alongside the CCS API Technical Specification, which defines the interfaces, data models, protocols, security requirements, and operational behaviours of the CCS API, enabling consistent integration and interoperability between connected systems and applications. This is supported by technical design artefacts available through the CCS developer portal ([Consumer Consent | Open](#)) including YAML files that define the physical representation of CCS market messages, enabling CCS Users to implement their technical solutions.

The CCS design is primarily based on open standards, with CCS-specific elements covering the specific Permission payload, CCS event notifications (underpinned by the Shared Signals Framework) and interactions with the CCS Directory. Throughout this document references are made to relevant open standards and specifications, including applicable RFCs and OpenID specifications. Where a CCS interaction uses an open-standard component, developers will need to apply the relevant referenced specification alongside the CCS API Technical Specification and associated CCS technical artefacts.

Many of the technical components within CCS do not readily lend themselves to representation within the EMDS format in its current form. For example, JSON Web Tokens (JWTs), may need to be represented in a manner that does not fully reflect their physical structure. Accordingly, the EMDS focuses on the logical content and provides plain English explanations of data exchanges, with the detailed physical representations available through the CCS developer portal.

This Annex provides an illustrative view of how CCS and its relevant market messages will be incorporated into the REC through the formal REC change process. More detailed assessments of the market messages, scenario variants and data items will continue in parallel with the CCS drafting consultation. We are seeking views from consultation respondents on the approach applied and the data item and market message content to feed into this final review.

This annex is separated into two distinct parts:

- Part A - defines the core market messages used to interact with the CCS SSF Transmitter, CCS Authorisation Server and CCS Directory, Part A is further divided into two sections: Part 1 covers permission and token interactions, shared signals configuration and event notifications; Part 2 covers CCS Directory interactions, together with relevant status and verification checks.
- Part B - sets out the proposed data item catalogue, including the consolidated list of enumerations where applicable.

Consumer Consent Service Market Message Catalogue

Part A – Market Message Catalogue

The Market Message Catalogue sets out each market message required to support interactions with the CCS SSF Transmitter, CCS Authorisation Server and CCS Directory. It provides information on the required data items for each message, the description of the message, and any scenario variants on the use of that message.

Each market message contains the following elements:

- **Market Message Table** - providing a full description of the market message. This includes a unique reference using the format MMCCS[n], a simple description of what the market message is used for, the message version number and a notes field for any additional contextual information.
- **Scenario Variants Table** - outlining the potential scenarios associated with the market message, including the name of the message, source, recipient and owner, along with a defined route and method.
- **Scenario Message Structure** - outlining how the data items within the message are structured and at what level of the market message each data item can be found. Where a market message has no associated payload, the message structure includes an explanation of the messaging approach.

The following information is contained within the scenario message structure:

- **Group Id** – a unique identifier for each individual group of data items within the specific scenario variant.
- **Group Description** – a descriptive title for each group of data items within the specific scenario variant.
- **Range** – identifies whether the group is mandatory and how many instances of a group will be included within an individual market message.
- **Condition** – an optional condition applicable to the group e.g. to reference that population of a specific group is mandatory where certain conditions are met.
- **Levels 1 – 8** – these columns reflect the hierarchy of data within the group. A 1, 0 or C is included within the relevant column for each data item where 1 is mandatory, 0 is optional and C is conditional. The position of the 1, 0 or C reflects the relationship between the relevant data item and the preceding data item.
- **Data Item Name** – identifies each individual data item within the message.
- **Value Rule** – an optional rule applicable to the relevant data items e.g. to reference that population of a specific data item is mandatory where certain conditions apply.

Market Message Catalogue - Part 1

MMCCS001 - Get SSF Transmitter Configuration Request

Market Message

Market Message Reference	MM Description	Legacy Reference	Version	Notes
MMCCS001	Requests the CCS Shared Signals Framework configuration details so a CCS User can discover the supported delivery method and stream-management endpoints.	N/A	001	

Scenario Variants

Scenario Variant	Name	Source	Target	Owner	Route	Method
SVCCS001	SSF Transmitter Configuration Request	CCS User	CCS SSF Transmitter	Retail Energy Code Company	/.well-known/ssf-configuration	GET

SVCCS001 – Get SSF Transmitter Configuration Request – Message Structure

To retrieve the SSF Transmitter Configuration, send an empty {} JSON body to the GET /.well-known/ssf-configuration endpoint.

MMCCS002 - SSF Transmitter Configuration Response

Market Message

Market Message Reference	MM Description	Legacy Reference	Version	Notes
MMCCS002	Returns the CCS Shared Signals Framework configuration details, including its identifiers, signing-key location, supported events, and stream-management endpoints.	N/A	001	

Scenario Variants

Scenario Variant	Name	Source	Target	Owner	Route	Method
SVCCS002	SSF Transmitter Configuration Response	CCS Transmitter	CCS User	Retail Energy Code Company	/well-known/ssf-configuration	GET

SVCCS002 - SSF Transmitter Configuration Response - Message Structure

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	Data Item Name	Value Rule
ccsdata	SSF Transmitter configuration body	1-1		G							
					1					SSF Specification Version	
					1					SSF Issuer	
					1					CCS JWKS URI	
					1					SSF Supported Delivery Methods	
					1					SSF Management Endpoint	
					1					SSF Status Endpoint	
					1					SSF Verification Endpoint	
ccsdata	The authorisation methods the CCS accepts for access to the SSF management API.	1-1			G					Authorisation Schemes	
						1				Authorisation Schemes Specification URN	
					1					SSF Default Subjects	
					1					SSF Events Supported	
					1					Supported Revocation Reasons	

MMCCS003 - SSF Stream Creation Request

Market Message

Market Message Reference	MM Description	Legacy Reference	Version	Notes
MMCCS003	Asks the CCS to create a shared signals event stream, including where events should be delivered and which event types are requested.	N/A	001	

Scenario Variants

Scenario Variant	Name	Source	Target	Owner	Route	Method
SVCCS003	SSF Stream Creation Request	CCS User	CCS Transmitter	Retail Energy Code Company	/ssf/stream	POST

SVCCS003 - SSF Stream Creation Request - Message Structure

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	SSF stream creation request body	1-1		G									
ccsdata	The delivery method and endpoint used to send shared signals events to the CCS User.	1-1			G							SSF Delivery	
						1						SSF Delivery Method	
						1						SSF CCS User Delivery Endpoint	
					0							SSF Events Requested	
					0							SSF Stream Description	

MMCCS004 - SSF Stream Creation Response

Market Message

Market Message Reference	MM Description	Legacy Reference	Version	Notes
MMCCS004	Confirms that the shared signals event stream has been created and returns the complete stream configuration held by the CCS.	N/A	001	

Scenario Variants

Scenario Variant	Name	Source	Target	Owner	Route	Method
SVCCS004	SSF Stream Creation Response	CCS Tarnsmmitter	CCS User	Retail Energy Code Company	/ssf/stream	POST

SVCCS004 - SSF Stream Creation Response - Message Structure

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	SSF stream configuration body	1-1		G									
					1							SSF Stream ID	
					1							Issuer Claim	
					1							Stream Audience	
ccsdata	The delivery method and endpoint used to send shared signals events to the CCS User.	1-1		G								SSF Delivery	
						1						SSF Delivery Method	
						1						SSF CCS User Delivery Endpoint	
					1							SSF Events Delivered	
					0							SSF Events Supported	
					C							SSF Events Requested	Included when this data item was included in the request.
					0							SSF Minimum Verification Interval	
					0							SSF Inactivity Timeout	
					C							SSF Stream Description	Included when this data item was included in the request.

MMCCS005 - SSF Verification Request

Market Message

Market Message Reference	MM Description	Legacy Reference	Version	Notes
MMCCS005	Asks the CCS to send a verification event so the CCS User can confirm that its CCS SSF stream is working.	N/A	001	

Scenario Variants

Scenario Variant	Name	Source	Target	Owner	Route	Method
SVCCS005	SSF Verification Request	CCS User	CCS Transmitter	Retail Energy Code Company	/ssf/verify	POST

SVCCS005 - SSF Verification Request - Message Structure

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	SSF verification request body	1-1		G									
					1							SSF Stream ID	
					0							Correlation State	

MMCCS006 - SSF Verification Response

Market Message

Market Message Reference	MM Description	Legacy Reference	Version	Notes
MMCCS006	Sends a verification event on a CCS User's shared signals event stream so the CCS User can confirm that the stream is working.	N/A	001	

Scenario Variants

Scenario Variant	Name	Source	Target	Owner	Route	Method
SVCCS006	SSF Verification Response	CCS Transmitter	CCS User	Retail Energy Code Company	{delivery.endpoint_url}	POST

SVCCS006 – SSF Verification Response – Message Structure

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	SSF verification response body	1-1		G									
					1							Issuer Claim	

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
					1							JWT Identifier Claim	
					1							Issued At Time Claim	
					1							Audience Claim	
ccsdata	The identifier of the subject that the Shared Signals event concerns.	1-1			G							Event Subject Identifier	
						1						Subject Identifier Format	
						1						Subject Identifier	
ccsdata	The details of the Shared Signals event included in the message.	1-1			G							Security Event	
						1						Verification Event	
							C					Correlation State	Included when this data item was included in the request.

MMCCS007 - Pushed Authorization Request

Market Message

Market Message Reference	MM Description	Legacy Reference	Version	Notes
MMCCS007	Enables the submission of a signed authorisation request to the relevant recipient to begin a Permission journey or an Account Holder Verification journey.	N/A	001	The signed request object and client assertion are transmitted as compact JWTs. Their decoded claims are shown in the message structure for clarity.

Scenario Variants

Scenario Variant	Name	Source	Target	Owner	Route	Method
SVCCS007a	Pushed Authorization Request for Permission Record Creation	ATP	CCS Authorisation Server	Retail Energy Code Company	/request	POST

Scenario Variant	Name	Source	Target	Owner	Route	Method
SVCCS007b	Pushed Authorization Request for Account Holder Verification	CCS Authorisation Server	Energy Supplier	Retail Energy Code Company	[Energy Supplier PAR endpoint]	POST

SVCCS007a - Pushed Authorization Request Permission Journey - Message Structure

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	Permission Pushed Authorization Request body	1-1		G									
					1							Client Identifier	
ccsdata	The decoded signed request object JWT.	1-1			G							Signed request object	
						1						Issuer Claim	
						1						Audience Claim	
						1						Response Type	
						1						Client Identifier	
						1						Redirect URI	
						0						Scope	
						0						Correlation State	
						1						Code Challenge	
						1						Code Challenge Method	
ccsdata	The consumer identity information the ATP asks the CCS to return in an ID token.	0-1				G						Requested Identity Claims	
ccsdata	The identity claims requested for inclusion in the ID token.	0-1					G					ID Token Claim Requests	
ccsdata	The identity claims requested by the ATP for inclusion in the ID token.	0-1						G				Permission Requested Claims	
									0			Essential Claim Indicator	

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	The Permission details requested by the ATP.	1-*				G						Permission Authorisation Details	
							1					Permission Data Type	
							1					Permission Type	
							1					Purpose	
							0					Start Date Time	
							0					End Date Time	
							0					Linked Permission	
ccsdata	The information needed for the dataset selected in Permission Data Type.	0-*	Included when dataset details are required for a Permission Data Type in Permission Authorisation Details.				G					Dataset Details	
ccsdata	The half-hourly metered data details covered by the Permission.	0-1	Included when Permission Data Type is half_hourly_metered_data.					G				Half-hourly Metered Data	
									1			Fuel Type	
									1			Metering Point Energy Flow	
									0			Data Period From	
									0			Data Period To	
									1			EDH Server ID	
ccsdata	The Tariff Interoperability details covered by the Permission.	0-1	Included when Permission Data Type is tariff_interoperability.					G				Tariff Interoperability	
									1			Fuel Type	
									1			Metering Point Energy Flow	
									0			TI Event Notifications	
									1			EDH Server ID	

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	Optional information supplied by the ATP to help reduce consumer friction in the Permission journey.	0-1					G					Consumer Information Hints	
								0				Consumer First Name Hint	
								0				Consumer Last Name Hint	
								0				Consumer Address Hint	
								0				Consumer Email Hint	
								0				Consumer Mobile Number Hint	
						1						Expiry Time Claim	
						1						Request Object Not Before Claim	
						0						Issued At Time Claim	
					1							Client Assertion Type	
ccsdata	The decoded client assertion JWT payload, the claims inside the client assertion JWT used to authenticate the ATP.	1-1			G							Client Assertion	
						1						Issuer Claim	
						1						Subject Claim	
						1						Audience Claim	
						1						JWT Identifier Claim	
						0						Issued At Time Claim	
						1						Expiry Time Claim	

SVCCS007b - Pushed Authorization Request Account Holder Verification Journey - Message Structure

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	Account Holder Pushed Authorization Request body	1-1		G									

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
					1							Client Identifier	
ccsdata	The decoded signed request object JWT.	1-1			G								
						1						Issuer Claim	
						1						Audience Claim	
						1						Response Type	
						1						Client Identifier	
						1						Redirect URI	
						0						Scope	
						0						Correlation State	
						1						Code Challenge	
						1						Code Challenge Method	
ccsdata	The claims the CCS asked the Energy Supplier to return in the ID token.	0-1				G						Requested Identity Claims	
ccsdata	The identity claims requested for inclusion in the ID token.	0-1					G					ID Token Claim Requests	
ccsdata	The Account Holder claim requested by the CCS.	0-1						G				Account Holder Verification Requested Claim	
									1			Essential Claim Indicator	
						1						Expiry Time Claim	
						1						Request Object Not Before Claim	
						0						Issued At Time Claim	
					1							Client Assertion Type	
ccsdata	The decoded client JWT payload used to authenticate the CCS to the Energy Supplier.	1-1			G							Client Assertion	
						1						Issuer Claim	
						1						Subject Claim	

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
						1						Audience Claim	
						1						JWT Identifier Claim	
						0						Issued At Time Claim	
						1						Expiry Time Claim	

MMCCS008 - Pushed Authorization Request Response

Market Message

Market Message Reference	MM Description	Legacy Reference	Version	Notes
MMCCS008	Confirms that the recipient accepted the Pushed Authorization Request and returns the short-lived request URI used to redirect the Energy Data Subject to the authorisation journey.	N/A	001	The consumer is subsequently redirected using the request URI. The later browser redirect returns either an authorisation code or an error and is not a separate market message in this document.

Scenario Variants

Scenario Variant	Name	Source	Target	Owner	Route	Method
SVCCS008a	Pushed Authorization Response for Permission Record Creation	CCS Authorisation Server	ATP	Retail Energy Code Company	/request	POST
SVCCS008b	Pushed Authorization Response for Account Holder Verification	Energy Supplier	CCS Authorisation Server	Retail Energy Code Company	[Energy Supplier PAR endpoint]	POST

SVCCS008a - Pushed Authorization Response Permission Journey - Message Structure

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	Permission Pushed Authorisation Request response body	1-1		G									
					1							Request URI	
					1							Expires In	

SVCCS008b - Pushed Authorization Response Account Holder Verification Journey - Message Structure

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	Account Holder Pushed Authorisation Request response body	1-1		G									
					1							Request URI	
					1							Expires In	

MMCCS009 - Token Request

Market Message

Market Message Reference	MM Description	Legacy Reference	Version	Notes
MMCCS009	Enables the sender to exchange the authorization code for tokens.	N/A	001	

Scenario Variants

Scenario Variant	Name	Source	Target	Owner	Route	Method
SVCCS009a	Token Request Permission Journey	ATP	CCS Authorisation Server	Retail Energy Code Company	/token	POST
SVCCS009b	Token Request Account Holder Verification	CCS Authorisation Server	Energy Supplier	Retail Energy Code Company	[Energy Supplier token endpoint]	POST

SVCCS09a - Token Request Permission Journey - Message Structure

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	Permission token request body	1-1		G									
					1							Authorization Code Grant Type	
					1							Authorization Code	
					1							Redirect URI	

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
					1							Code Verifier	
					1							Resource Indicator	
					1							Client Identifier	
					1							Client Assertion Type	
ccsdata	The decoded client assertion JWT payload used to authenticate the ATP.	1-1			G							Client Assertion	
						1						Issuer Claim	
						1						Subject Claim	
						1						Audience Claim	
						1						JWT Identifier Claim	
						0						Issued At Time Claim	
						1						Expiry Time Claim	

SVCCS09b - Token Request Account Holder Verification Journey - Message Structure

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	Account Holder token request body	1-1		G									
					1							Authorization Code Grant Type	
					1							Authorization Code	
					1							Redirect URI	
					1							Code Verifier	
					1							Resource Indicator	
					1							Client Identifier	
												Client Assertion Type	
ccsdata	The decoded client assertion JWT payload used to authenticate	1-1			G								

	the CCS to the Energy Supplier.												
						1						Issuer Claim	
						1						Subject Claim	
						1						Audience Claim	
						1						JWT Identifier Claim	
						0						Issued At Time Claim	
						1						Expiry Time Claim	

MMCCS010 - Token Response

Market Message

Market Message Reference	MM Description	Legacy Reference	Version	Notes
MMCCS010	Returns the required tokens and associated authorisation details.	N/A	001	Encoded access and ID tokens are shown with their decoded payloads to make the data they contain visible in the EMDS.

Scenario Variants

Scenario Variant	Name	Source	Target	Owner	Route	Method
SVCCS010a	Token Response Permission Journey	CCS Authorisation Server	ATP	Retail Energy Code Company	/token	POST
SVCCS010b	Token Response Account Holder Verification	Energy Supplier	CCS Authorisation Server	Retail Energy Code Company	[Energy Supplier token endpoint]	POST

SVCCS010a - Token Response Permission Response - Message Structure

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	Permission token response body	1-1		G									
ccsdata	The access token and the claims contained in its decoded JWT.	1-1			G							Access Token	

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
						1						Issuer Claim	
						1						Subject Claim	
						1						Audience Claim	
						1						Client Identifier	
						0						JWT Identifier Claim	
						1						Issued At Time Claim	
						1						Expiry Time Claim	
ccsdata	The client certificate to which the access token is bound.	1-1				G						Certificate Confirmation	
							1					Certificate SHA-256 Thumbprint	
						1						Grant ID	
ccsdata	The Permission details carried in the access token for the selected EDH.	1-*				G						Permission Authorisation Details	
							1					Permission Data Type	
							1					Permission Type	
							1					Start Date Time	
							1					End Date Time	
	The details for the selected dataset.						G					Dataset Details	
ccsdata	The half-hourly metered data details carried in the token.	0-1	Included when Permission Data Type is half_hourly_metered_data.					G				Half-Hourly Metered Data	
									1			Fuel Type	
									1			Metering Point Energy Flow	
									1			Data Period From	
									1			Data Period To	
									1			EDH Server ID	

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	The Tariff Interoperability details carried in the token.	0-1	Included when Permission Data Type is tariff_interoperability.					G				Tariff Interoperability	
									1			Fuel Type	
									1			Metering Point Energy Flow	
									1			TI Event Notifications	
									1			EDH Server ID	
ccsdata	The information added by the CCS after IDV and MPxN matching.	1-1					G					CCS Enrichment	
								C				Verified MPAN	Included when the Permission covers electricity.
								C				Verified MPRN	Included when the Permission covers gas.
					1							Token Type	
					1							Expires In	
					1							Refresh Token	
ccsdata	The ID token and the claims contained in its decoded JWT payload.	0-1	Included only when the request object scope includes openid.		G								
						1						Issuer Claim	
						1						Subject Claim	
						1						Audience Claim	
						1						Expiry Time Claim	
						1						Issued At Time Claim	
						C						Consumer Given Name	Returned only when requested by the ATP and agreed to by the consumer.
						C						Consumer Family Name	Returned only when requested by the ATP and agreed to by the consumer.

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	The address where the CCS has verified that the Energy Data Subject is the occupier.	0-1	Included only when requested by the ATP and agreed to by the consumer.			G						Managed Addresses	
							1					Verified Address	Returned only when requested by the ATP and agreed to by the consumer.
							1					Verified Postcode	Returned only when requested by the ATP and agreed to by the consumer.
							0					Managed Address Identifier	Returned only when requested by the ATP and agreed to by the consumer.
					0							Scope	

SVCCS010b - Token Response Account Holder Verification - Message Structure

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	Account Holder token response body	1-1		G									
					1							Access Token	
					1							Token Type	
					1							Expires In	
ccsdata	The ID token and the claims returned by the Energy Supplier in its decoded JWT payload.	1-1			G							ID Token	
						1						Issuer Claim	
						1						Subject Claim	
						1						Audience Claim	
						1						Expiry Time Claim	
						1						Issued At Time Claim	
ccsdata	The addresses and metering points for which the authenticated consumer is the Account Holder.	1-*				G						Account Holder MPxNs	
ccsdata	The supply address associated with the account.	1-1					G					Property Address	
								1				Supply Address	
								1				Supply Postcode	

ccsdata	The electricity metering points at the supply address.	0-*					G					Account Holder MPANs	
								1				Account Holder MPAN	
								1				Metering Point Direction	
								1				Supplier MPID	
ccsdata	The gas metering points at the supply address.	0-*					G					Account Holder MPRNs	
								1				Account Holder MPRN	
								1				Supplier MPID	
					0							Scope	

MMCCS011 - Permission Revocation Notification

Market Message

Market Message Reference	MM Description	Legacy Reference	Version	Notes
MMCCS011	Notifies the relevant ATP and EDH (as required) that a Permission grant has been revoked and must no longer be honoured.	N/A	001	The revocation reason is included only in the notification sent to the ATP.

Scenario Variants

Scenario Variant	Name	Source	Target	Owner	Route	Method
SVCCS011	Permission Revocation Notification	CCS Transmitter	CCS User	Retail Energy Code Company	{delivery.endpoint_url}	POST

SVCCS011 - Permission Revocation Notification - Message Structure

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	Permission revocation notification body	1-1		G									
					1							Issuer Claim	
					1							JWT Identifier Claim	

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
					1							Issued At Time Claim	
					1							Audience Claim	
					1							SET Transaction Identifier	
ccsdata	The identifier of the subject that the Shared Signals event concerns.	1-1			G							Event Subject Identifier	
						1						Subject Identifier Format	
						1						Subject Identifier	
ccsdata	The details of the Shared Signals event included in the message.	1-1			G							Security Event	
						1						Permission Revoked Event	
							1					Event Timestamp	
							C					Revocation Reason	Included only in the notification sent to the ATP. It is omitted from the notification sent to the EDH.

MMCCS012 - Permission Query Notification

Market Message

Market Message Reference	MM Description	Legacy Reference	Version	Notes
MMCCS012	Notifies the relevant ATP and EDH (as required) that an Energy Data Subject has queried a Permission and the associated grant must no longer be honoured.	N/A	001	The query reason is included only in the notification sent to the ATP to support with investigation.

Scenario Variants

Scenario Variant	Name	Source	Target	Owner	Route	Method
SVCCS012	Permission Query Notification	CCS Transmitter	CCS User	Retail Energy Code Company	{delivery.endpoint_url}	POST

SVCCS012 - Permission Query Notification - Message Structure

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	Permission query notification body	1-1		G									
					1							Issuer Claim	
					1							JWT Identifier Claim	
					1							Issued At Time Claim	
					1							Audience Claim	
					1							SET Transaction Identifier	
ccsdata	The identifier of the subject that the Shared Signals event concerns.	1-1			G							Event Subject Identifier	
						1						Subject Identifier Format	
						1						Subject Identifier	
ccsdata	The details of the Shared Signals event included in the message.	1-1			G							Security Event	
						1						Permission Queried Event	
							1					Event Timestamp	

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
							C					Query Reason	Included only in the notification sent to the ATP. It is omitted from the notification sent to the EDH.

MMCCS013 - Permission Verification Required Notification

Market Message

Market Message Reference	MM Description	Legacy Reference	Version	Notes
MMCCS013	Notifies the ATP that a Permission requires investigation. The grant remains valid, but the ATP must follow the verification process defined for this event.	N/A	001	

Scenario Variants

Scenario Variant	Name	Source	Target	Owner	Route	Method
SVCCS013	Permission Verification Required Notification	CCS Tarnsmmitter	ATP	Retail Energy Code Company	{delivery.endpoint_url}	POST

SVCCS013 - Permission Verification Required Notification - Message Structure

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	Permission verification required notification body	1-1		G									
					1							Issuer Claim	
					1							JWT Identifier Claim	

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
					1							Issued At Time Claim	
					1							Audience Claim	
					1							SET Transaction Identifier	
ccsdata	The identifier of the subject that the Shared Signals event concerns.	1-1			G							Event Subject Identifier	
						1						Subject Identifier Format	
						1						Subject Identifier	
ccsdata	The details of the Shared Signals event included in the message.	1-1			G							Security Event	
						1						Permission Verification Required Event	
							1					Event Timestamp	

MMCCS014 - Token Revocation Request

Market Message

Market Message Reference	MM Description	Legacy Reference	Version	Notes
MMCCS014	Allows an ATP to revoke a Refresh Token and immediately end the associated Permission grant, with a reason for the revocation.	N/A	001	The response to this message is a standard HTTP acknowledgement in accordance with the CCS API Technical Specification.

Scenario Variants

Scenario Variant	Name	Source	Target	Owner	Route	Method
SVCCS014	Token Revocation Request	ATP	CCS Authorisation Server	Retail Energy Code Company	/token/revocation	POST

SVCCS014 - Token Revocation Request - Message Structure

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	Token revocation request body	1-1		G									
					1							Token	
					0							Token Type Hint	
					1							Revocation Reason	
					1							Client Identifier	
					1							Client Assertion Type	
					1							Client Assertion	
ccsdata	The claims in the decoded client assertion JWT payload used to authenticate the ATP.	1-1			G								
						1						Issuer Claim	
						1						Subject Claim	
						1						Audience Claim	
						1						JWT Identifier Claim	
						0						Issued At Time Claim	
						1						Expiry Time Claim	

MMCCS015 - Refresh Token Request

Market Message

Market Message Reference	MM Description	Legacy Reference	Version	Notes
MMCCS015	Uses an existing Refresh Token to request a new Access Token for a specified Energy Data Holder while the Permission remains valid.	N/A	001	

Scenario Variants

Scenario Variant	Name	Source	Target	Owner	Route	Method
SVCCS015	Refresh Token Request	ATP	CCS Authorisation Server	Retail Energy Code Company	/token	POST

SVCCS015 - Refresh Token Request - Message Structure

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	Refresh token request body	1-1		G									
					1							Refresh Token Grant Type	
					1							Refresh Token	
					1							Resource Indicator	
					1							Client Identifier	
					1							Client Assertion Type	
					1							Client Assertion	
ccsdata	The claims in the decoded client assertion JWT payload used to authenticate the ATP.	1-1			G								
						1						Issuer Claim	
						1						Subject Claim	
						1						Audience Claim	
						1						JWT Identifier Claim	

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
						0						Issued At Time Claim	
						1						Expiry Time Claim	

MMCCS016 - Refresh Token Response

Market Message

Market Message Reference	MM Description	Legacy Reference	Version	Notes
MMCCS016	Returns a new Access Token and the current Permission details after the CCS confirms that the underlying Permission is still valid.	N/A	001	No new Refresh Token is returned. The ATP continues to use its existing Refresh Token until the Permission ends.

Scenario Variants

Scenario Variant	Name	Source	Target	Owner	Route	Method
SVCCS016	Refresh Token Response	CCS Authorisation Server	ATP	Retail Energy Code Company	/token	POST

SVCCS016 - Refresh Token Response - Message Structure

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	Refresh token response body	1-1		G									
ccsdata	The access token and the claims contained in its decoded JWT.	1-1			G							Access Token	
						1						Issuer Claim	
						1						Subject Claim	
						1						Audience Claim	
						1						Client Identifier	
						0						JWT Identifier Claim	

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
						1						Issued At Time Claim	
						1						Expiry Time Claim	
ccsdata	The client certificate to which the access token is bound.	1-1				G						Certificate Confirmation	
							1					Certificate SHA-256 Thumbprint	
						1						Grant ID	
ccsdata	The Permission details carried in the access token for the selected EDH.	1-*				G						Permission Authorisation Details	
							1					Permission Data Type	
							1					Permission Type	
							1					Start Date Time	
							1					End Date Time	
	The details for the selected dataset.						G					Dataset Details	
ccsdata	The half-hourly metered data details carried in the token.	0-1	Included when Permission Data Type is half_hourly_metered_data.					G				Half-Hourly Metered Data	
									1			Fuel Type	
									1			Metering Point Energy Flow	
									1			Data Period From	
									1			Data Period To	
									1			EDH Server ID	

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	The Tariff Interoperability details carried in the token.	0-1	Included when Permission Data Type is tariff_interoperability.					G				Tariff Interoperability	
									1			Fuel Type	
									1			Metering Point Energy Flow	
									1			TI Event Notifications	
									1			EDH Server ID	
ccsdata	The information added by the CCS after IDV and MPxN matching.	1-1					G					CCS Enrichment	
								C				Verified MPAN	Included when the Permission covers electricity.
								C				Verified MPRN	Included when the Permission covers gas.
					1							Token Type	
					1							Expires In	
ccsdata	The ID token and the claims contained in its decoded JWT payload.	0-1	Included only when the request object scope includes openid.		G								
						1						Issuer Claim	
						1						Subject Claim	
						1						Audience Claim	
						1						Expiry Time Claim	
						1						Issued At Time Claim	
						C						Consumer Given Name	Returned only when requested by the ATP and agreed to by the consumer.
						C						Consumer Family Name	Returned only when requested by the ATP and agreed to by the consumer.

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	The address where the CCS has verified that the Energy Data Subject is the occupier.	0-1	Included only when requested by the ATP and agreed to by the consumer.			G						Managed Addresses	
							1					Verified Address	Returned only when requested by the ATP and agreed to by the consumer.
							1					Verified Postcode	Returned only when requested by the ATP and agreed to by the consumer.
							0					Managed Address Identifier	Returned only when requested by the ATP and agreed to by the consumer.
					0							Scope	

Market Message Catalogue - Part 2

MMCCS017 - Get Directory Participants Request

Market Message

Market Message Reference	MM Description	Legacy Reference	Version	Notes
MMCCS017	Requests an up-to-date list of organisations registered as participants in the CCS ecosystem.	N/A	001	

Scenario Variants

Scenario Variant	Name	Source	Target	Owner	Route	Method
SVCCS017	Get Directory Participants Request	CCS User	CCS Directory	Retail Energy Code Company	/participants	GET

SVCCS017 – Get Directory Participants Request – Message Structure

To retrieve the CCS Directory participant list, send an empty {} JSON body to the GET /participants endpoint.

MMCCS018 - Directory Participant Discovery Response

Market Message

Market Message Reference	MM Description	Legacy Reference	Version
MMCCS018	Returns the registered participant organisations and their published authorisation-server, API, certification, and authority-claim information.	N/A	001

Scenario Variants

Scenario Variant	Name	Source	Target	Owner	Route	Method
SVCCS018	Directory Participant Discovery Response	CCS Directory	CCS User	Retail Energy Code Company	/participants	GET

SVCCS018 - Directory Participant Discovery Response - Message Structure

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	Directory participants discovery response body	1-*		G									
					0							Organisation ID	
					0							Participant Registration Status	
					0							Organisation Name	
					0							Created On	
					0							Legal Entity Name	
					0							Country of Registration	
					0							Company Register	
					0							Organisation Tag	
					0							Organisation Size	
					0							Registration Number	
					0							Organisation Registration ID	
					0							Registered Name	
					0							Address Line 1	
					0							Address Line 2	
					0							City	
					0							Postcode	
					0							Country	
					0							Parent Organisation Reference	
ccsdata	The authorisation servers registered for the organisation.	0-1		G								Authorisation Servers	
						0						Authorisation Server ID	
						0						Organisation ID	
						0						Auto Registration Supported	

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
						0						Supports CIBA	
						0						Supports DCR	
ccsdata	The API resources published by the authorisation server.	0-1				G						API Resources	
							0					API Resource ID	
							0					API Version	
ccsdata	The endpoints through which the API resource can be accessed.	0-1				G						API Discovery Endpoints	
								0				API Discovery ID	
								0				API Endpoint	
							0					Family Complete	
							0					API Certification URI	
							0					Participant API Resource Certification Status	
							0					Certification Start Date	
							0					Certification Expiration Date	
							0					API Family Type	
ccsdata	The certifications recorded for the authorisation server.	0-1				G						Authorisation Server Certifications	
							0					Certification Start Date	
							0					Certification Expiration Date	
							0					Certification Identifier	
							0					Authorisation Server ID	
							0					Participant Authorisation Server Certification Status	
							0					Participant Certification Profile Variant	
							0					Profile Version	
							0					Certification URI	
						0						Customer Friendly Description	
						0						Customer Friendly Logo URI	

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
						0						Customer Friendly Name	
						0						Developer Portal URI	
						0						Terms of Service URI	
						0						OpenID Discovery Document	
						0						Issuer	
						0						Payload Signing Certificate Location URI	
						0						Parent Authorisation Server ID	
ccsdata	The organisation's registered claims for an authorisation domain.	0-1			G							Org domain claims	
						0						Organisation Authority Domain Claim ID	
						0						Authorisation Domain Name	
						0						Authority ID	
						0						Authority Name	
						0						Organisation Registration ID	
						0						Resource Status	
ccsdata	The roles the organisation holds within its authorisation domains.	0-1			G							Org domain role claims	
						0						Organisation ID	
						0						Organisation Authority Claim ID	
						0						Authority ID	
						0						Resource Status	
						0						Authorisation Domain	
						0						Role	
ccsdata	The countries and statuses for which the authority role is authorised.	0-1				G						Country authorisations	
							0					Resource Status	

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
							0					Member State	
						0						Organisation Registration ID	

MMCCS019 - Get CCS Authorisation Server Metadata Request

Market Message

Market Message Reference	MM Description	Legacy Reference	Version	Notes
MMCCS019	Requests the metadata a CCS User needs to interact securely with the CCS Authorisation Server.	N/A	001	

Scenario Variants

Scenario Variant	Name	Source	Target	Owner	Route	Method
SVCCS019	Get CCS Authorisation Server Metadata Request	CCS User	CCS Authorisation Server	Retail Energy Code Company	/.well-known/openid-configuration	GET

SVCCS019 – Get CCS Authorisation Server Metadata Request - Message Structure

To retrieve the CCS Authorisation Server metadata, send an empty {} JSON body to the GET /.well-known/openid-configuration endpoint.

MMCCS020 - CCS Authorisation Server Metadata Response

Market Message

Market Message Reference	MM Description	Legacy Reference	Version
MMCCS020	Returns the CCS Authorisation Server endpoints, supported grant and security settings, scopes, claims, and mTLS endpoint aliases.	N/A	001

Scenario Variants

Scenario Variant	Name	Source	Target	Owner	Route	Method
SVCCS020	CCS Authorisation Server Metadata Response	CCS Authorisation Server	CCS User	Retail Energy Code Company	/well-known/openid-configuration	GET

SVCCS020 - CCS Authorisation Server Metadata Response - Message Structure

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	CCS Authorisation Server metadata response body	1-1		G									
					1							Issuer	
					1							Authorisation Endpoint	
					1							Pushed Authorization Request Endpoint	
					1							Token Endpoint	
					1							Revocation Endpoint	
					1							Grant Endpoint	
					1							CCS JWKS URI	
					1							Response Types Supported	
					1							Grant Types Supported	
					1							Code Challenge Methods Supported	
					1							Token Endpoint Auth Methods Supported	
					1							Token Endpoint Authentication Signing Algorithms Supported	
					1							Require Pushed Authorization Requests	
					1							Request Parameter Supported	
					1							Request URI Parameter Supported	
					1							Require Signed Request Object	
					1							Request Object Signing Algorithms Supported	
					1							Permission Data Types Supported	
					1							TLS Client Certificate Bound Access Tokens	
					1							Scopes Supported	
					1							Claims Supported	

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
					0							Grant Management Actions Supported	
					0							Grant Management Action Required Indicator	
					1							Claims Parameter Supported	
ccsdata	The equivalent endpoints used when a client certificate is presented.	1-1			G							mTLS endpoint aliases	
						1						mTLS Token Endpoint Alias	
						1						mTLS Revocation Endpoint Alias	
						1						mTLS Pushed Authorisation Request Endpoint Alias	
						1						mTLS Grant Endpoint Alias	

MMCCS021 - Get CCS JSON Web Key Set Request

Market Message

Market Message Reference	MM Description	Legacy Reference	Version	Notes
MMCCS021	Requests the CCS public signing keys so a CCS User can verify tokens and other signed artefacts issued by the CCS.	N/A	001	

Scenario Variants

Scenario Variant	Name	Source	Target	Owner	Route	Method
SVCCS021	Get CCS JSON Web Key Set Request	CCS User	CCS Authorisation Server	Retail Energy Code Company	/jwks	GET

SVCCS021 – Get CCS JSON Web Key Set Request - Message Structure

To retrieve the CCS JSON Web Key Set, send an empty {} JSON body to the GET /jwks endpoint.

MMCCS022 - CCS JSON Web Key Set Response

Market Message

Market Message Reference	MM Description	Legacy Reference	Version	Notes
MMCCS022	Returns the CCS public signing keys used by CCS Users to verify signatures on tokens and other signed artefacts.	N/A	001	

Scenario Variants

Scenario Variant	Name	Source	Target	Owner	Route	Method
SVCCS022	CCS JSON Web Key Set Response	CCS Authorisation Server	CCS User	Retail Energy Code Company	/jwks	GET

SVCCS022 - CCS JSON Web Key Set Response - Message Structure

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	CCS JSON web key set response body	1-1		G									
ccsdata	The public signing keys currently published by the CCS.				G							JSON Web Keys	
						1						JSON Web Key Type	
						1						JSON Web Key Identifier	
						1						Key Use	
						1						Cryptographic Algorithm	
						0						RSA Modulus	
						0						RSA Exponent	

MMCCS023 - Grant Status Request

Market Message

Market Message Reference	MM Description	Legacy Reference	Version	Notes
MMCCS023	Requests the current status and details of a specific Permission identified by its grant ID.	N/A	001	

Scenario Variants

Scenario Variant	Name	Source	Target	Owner	Route	Method
SVCCS023	Grant Status Request	ATP	CCS Authorisation Server	Retail Energy Code Company	/grants/{grant_id}	GET

SVCCS023 - Grant Status Request - Message Structure

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	Grant status request body	1-1		G									
					1							Grant ID	

MMCCS024 - Grant Status Response

Market Message

Market Message Reference	MM Description	Legacy Reference	Version	Notes
MMCCS024	Returns the current status, key dates, scope, and granted Permission details held by the CCS for the requested grant.	N/A	001	

Scenario Variants

Scenario Variant	Name	Source	Target	Owner	Route	Method
SVCCS024	Grant Status Response	CCS Authorisation Server	ATP	Retail Energy Code Company	/grants/{grant_id}	GET

SVCCS024 - Grant Status Response - Message Structure

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	Grant status response body	1-1		G								Grant Status Response Body	
					1							Grant ID	
					1							Grant Status	
					1							Grant Created At	
					1							Grant Last Updated At	
					1							Grant Expires At	
					1							Grant Updated By	
ccsdata	The scopes the grant covers.	1-*			G							Grant scopes	
						1						Scope	
					C							Grant Identity Claims	Included when the Permission Authorisation Details contained identity claims that the consumer agreed to.
ccsdata	The details of the Permission granted by the CCS.	1-*			G							Permission Authorisation Details	
						1						Permission Data Type	
						1						Permission Type	
						1						Purpose	
						1						Start Date Time	
						1						End Date Time	

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
						C						Linked Permission	Included when a linked grant ID was provided in Permission Authorisation Details during the grant journey.
ccsdata	The details of the half-hourly metered data covered by the Permission.	0-1	Included when Permission Data Type is half_hourly_metered_data.			G						Half-hourly metered data	
							1					Fuel Type	
							1					Metering Point Energy Flow	
							1					Data Period From	
							1					Data Period To	
							1					EDH Server ID	
ccsdata	The details of the tariff data covered by the Permission.	0-1	Included when Permission Data Type is tariff_interoperability.			G						Tariff Interoperability	
							1					Fuel Type	
							1					Metering Point Energy Flow	
							C					TI Event Notifications	Included when TI event notifications were requested in Permission Authorisation Details during the grant journey.
							1					EDH Server ID	
ccsdata	The information added by the CCS after identity, address and metering point checks.	0-1				G						CCS Enrichment	
							C					Verified MPAN	Included when the Permission covers electricity.
							C					Verified MPRN	Included when the Permission covers gas.

MMCCS025 - Client Credentials Token Request

Market Message

Market Message Reference	MM Description	Legacy Reference	Version	Notes
MMCCS025	Requests an Access Token for a CCS User acting in its own capacity to use CCS Authorisation Server or CCS Directory administrative services, without Energy Data Subject data or a Permission grant.	N/A	001	

Scenario Variants

Scenario Variant	Name	Source	Target	Owner	Route	Method
SVCCS025	Client Credentials Token Request	CCS User	CCS Authorisation Server	Retail Energy Code Company	/token	POST

SVCCS025 - Client Credentials Token Request - Message Structure

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	Client credentials token request body	1-1		G									
					1							Client Credentials Grant Type	
					0							Scope	
					1							Client Identifier	
					1							Client Assertion Type	
					1							Client Assertion	
ccsdata	The claims in the decoded client assertion JWT payload used to authenticate the ATP.	1-1			G								
						1						Issuer Claim	
						1						Subject Claim	
						1						Audience Claim	
						1						JWT Identifier Claim	

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
						0						Issued At Time Claim	
						1						Expiry Time Claim	

MMCCS026 - Client Credentials Token Response

Market Message

Market Message Reference	MM Description	Legacy Reference	Version	Notes
MMCCS026	Returns the Access Token a CCS User uses for authorised administrative interactions with the CCS Authorisation Server or CCS Directory.	N/A	001	This token contains no Energy Data Subject data and is not linked to a Permission grant.

Scenario Variants

Scenario Variant	Name	Source	Target	Owner	Route	Method
SVCCS026	Client Credentials Token Response	CCS Authorisation Server	CCS User	Retail Energy Code Company	/token	POST

SVCCS026 - Client Credentials Token Response - Message Structure

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	Client credentials token response body	1-1		G									
					1							Access Token	
ccsdata	The claims contained in the decoded access token JWT.	1-1			G								
						1						Issuer Claim	
						1						Subject Claim	
						1						Audience Claim	

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
						1						Client Identifier	
						0						JWT Identifier Claim	
						1						Issued At Time Claim	
						1						Expiry Time Claim	
ccsdata	The client certificate to which the access token is bound.	1-1				G						Certificate Confirmation	
							1					Certificate SHA-256 Thumbprint	
					1							Token Type	
					1							Expires In	
					0							Scope	

MMCCS027 - Organisation Admin User Request

Market Message

Market Message Reference	MM Description	Legacy Reference	Version	Notes
MMCCS027	Requests the CCS Directory record for a specific administration user within an organisation.	N/A	001	Standard request headers and technical error responses are defined in the CCS API Technical Specification and are not repeated in this document.

Scenario Variants

Scenario Variant	Name	Source	Target	Owner	Route	Method
SVCCS027	Organisation Admin User Request	CCS User	CCS Directory	Retail Energy Code Company	/organisations/{OrganisationId}/adminusers/{UserID}	GET

SVCCS027 - Organisation Admin User Request - Message Structure

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	Organisation admin user request body	1-1		G									
					1							Organisation ID	
					1							User ID	

MMCCS028 - Organisation Admin User Response

Market Message

Market Message Reference	MM Description	Legacy Reference	Version	Notes
MMCCS028	Returns the administration user's identifier, status, email address, and roles within authorisation domains.	N/A	001	

Scenario Variants

Scenario Variant	Name	Source	Target	Owner	Route	Method
SVCCS028	Organisation Admin User Response	CCS Directory	CCS User	Retail Energy Code Company	/organisations/{OrganisationId}/adminusers/{UserId}	GET

SVCCS028 - Organisation Admin User Response - Message Structure

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	Organisation admin user response body	1-1		G									
					0							User ID	
					0							Resource Status	
					0							User Email Address	
ccsdata	The administration user's roles within registered authorisation domains.	0-1			G							Domain Role Details	
						0						Authorisation Domain Name	
						0						Authorisation Domain Role Name	
						0						Resource Status	
						0						Contact Role	
						0						User Type ID	

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
						0						System	

MMCCS029 - Organisation Authorisation Servers Request

Market Message

Market Message Reference	MM Description	Legacy Reference	Version	Notes
MMCCS029	Requests the authorisation servers registered for an organisation, with optional paging and filters.	N/A	001	Standard request headers and technical error responses are defined in the CCS API Technical Specification and are not repeated in this document.

Scenario Variants

Scenario Variant	Name	Source	Target	Owner	Route	Method
SVCCS029	Organisation Authorisation Servers Request	CCS User	CCS Directory	Retail Energy Code Company	/organisations/{OrganisationId}/authorisationservers	GET

SVCCS029 - Organisation Authorisation Servers Request - Message Structure

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	Organisation authorisation servers request body	1-1		G									
					1							Organisation ID	
					0							Page Number	
					0							Page Size	
					0							Sort	
					0							Contains OpenID Discovery Document Filter	
					0							Omit From Ecosystem Filter	
					0							Authorisation Server Status Filter	
					0							Search Filter	

MMCCS030 - Organisation Authorisation Servers Response

Market Message

Market Message Reference	MM Description	Legacy Reference	Version	Notes
MMCCS030	Returns the authorisation servers registered for the organisation, including their published settings, API resources, flags, and certifications.	N/A	001	The API permits either a direct array or a paged response. The response-item group represents the same authorisation-server record in both forms.

Scenario Variants

Scenario Variant	Name	Source	Target	Owner	Route	Method
SVCCS030	Organisation Authorisation Servers Response	CCS Directory	CCS User	Retail Energy Code Company	/organisations/{OrganisationId}/authorisationservers	GET

SVCCS030 - Organisation Authorisation Servers Response - Message Structure

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	Organisation authorisation servers response body	1-1		G									
ccsdata	The paged authorisation server response, including paging details and records.	0-1	Included only in a paged response.		G								
						0						Total Pages	
						0						Total Results	
ccsdata	The paging information for the requested or returned page of results.	0-1				G						Pagination Details	
							0					Page Number	
ccsdata	The field or fields used to order the returned results.	0-1					G					Sort	
								0				Sorted Indicator	
ccsdata	The rules used to order the returned records.	0-1						G				Sort Order	

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
									0			Sort Property	
									0			Sort Direction	
									0			Ignore Case Indicator	
									0			Ascending Sort Indicator	
							0					Page Size	
							0					Page Offset	
							0					Sorted Indicator	
							0					Unpaged Indicator	
							0					Pagination Mode	
						0						Number of Results	
						0						Page Size	
						0						Page Offset	
						0						Empty Page Indicator	
						0						Page Number	
ccsdata	The records returned in the response. In a paged response they appear under content. In an unpaged response they form the response body.	1-*				G						Response Content	
							1					Auto Registration Supported	
							0					Auto Registration Notification Webhook	
							1					Customer Friendly Description	
							1					Customer Friendly Logo URI	
							1					Customer Friendly Name	
							0					Developer Portal URI	
							0					Terms of Service URI	
							0					Notification Webhook	
							0					Issuer	
							0					OpenID Discovery Document	
							0					Payload Signing Certificate Location URI	
							0					Parent Authorisation Server ID	
							0					Deprecated Date	
							0					Retirement Date	
							0					Superseded By Authorisation Server ID	
							0					Omit From Ecosystem	
							0					Authorisation Server ID	
							0					Notification Webhook Added Date	
							0					Notification Webhook Status	
							0					Supports CIBA	
							0					Supports DCR	
							0					Supports Redirect	
							0					Created At	
							0					Resource Status	

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	The directory flags attached to the record.	0-1					G					Flags	
								0				Flag ID	
								0				Created At	
								0				Updated At	
ccsdata	The information that defines a directory flag.	0-1					G						
									0			Flag Name	
									0			Resource Description	
									0			Flag Type	
									0			Flag Value	
									0			Resource Status	
									0			Access Level	
ccsdata	The API resources published by the authorisation server.	0-1					G					API Resources	
ccsdata	The endpoints through which the API resource can be accessed.	0-1						G				API Discovery Endpoints	
									0			API Discovery ID	
									0			API Endpoint	
								0				API Metadata	
ccsdata	The metadata recorded for the API resource.	0-1						G					
									0			API Resource ID	
									0			API Version	
									0			API Family ID	
									0			Family Complete	
									0			API Certification URI	
									0			Certification Status	
									0			Certification Start Date	
									0			Certification Expiration Date	
									0			API Family Type	
									0			Resource Status	
ccsdata	The certifications recorded for the authorisation server.	0-1					G					Authorisation Server Certifications	
								0				Certification Start Date	
								0				Certification Expiration Date	
								0				Certification Identifier	
								0				Authorisation Server ID	
								0				Certification Status	

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
								0				Directory Certification Profile Variant	
								0				Profile Type	
								0				Profile Version	
								0				Certification URI	
								0				Resource Status	
ccsdata	The authorisation server records returned in an unpaged response.	0-*	Included only in an unpaged response.		G								
							1					Auto Registration Supported	
							0					Auto Registration Notification Webhook	
							1					Customer Friendly Description	
							1					Customer Friendly Logo URI	
							1					Customer Friendly Name	
							0					Developer Portal URI	
							0					Terms of Service URI	
							0					Notification Webhook	
							0					Issuer	
							0					OpenID Discovery Document	
							0					Payload Signing Certificate Location URI	
							0					Parent Authorisation Server ID	
							0					Deprecated Date	
							0					Retirement Date	
							0					Superseded By Authorisation Server ID	
							0					Omit From Ecosystem	
							0					Authorisation Server ID	
							0					Notification Webhook Added Date	
							0					Notification Webhook Status	
							0					Supports CIBA	
							0					Supports DCR	
							0					Supports Redirect	
							0					Created At	
							0					Resource Status	
ccsdata	The directory flags attached to the record.	0-1					G					Flags	
								0				Flag ID	
								0				Created At	
								0				Updated At	
ccsdata	The information that defines a directory flag.	0-1						G					
									0			Flag Name	
									0			Resource Description	
									0			Flag Type	
									0			Flag Value	

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
									0			Resource Status	
									0			Access Level	
ccsdata	The API resources published by the authorisation server.	0-1					G					API Resources	
ccsdata	The endpoints through which the API resource can be accessed.	0-1						G				API Discovery Endpoints	
									0			API Discovery ID	
									0			API Endpoint	
								0				API Metadata	
ccsdata	The metadata recorded for the API resource.	0-1						G					
									0			API Resource ID	
									0			API Version	
									0			API Family ID	
									0			Family Complete	
									0			API Certification URI	
									0			Certification Status	
									0			Certification Start Date	
									0			Certification Expiration Date	
									0			API Family Type	
									0			Resource Status	
ccsdata	The certifications recorded for the authorisation server.	0-1					G					Authorisation Server Certifications	
								0				Certification Start Date	
								0				Certification Expiration Date	
								0				Certification Identifier	
								0				Authorisation Server ID	
								0				Certification Status	
								0				Directory Certification Profile Variant	
								0				Profile Type	
								0				Profile Version	
								0				Certification URI	
								0				Resource Status	

MMCCS031 - Organisation Authorisation Server ID Request

Market Message

Market Message Reference	MM Description	Legacy Reference	Version	Notes
MMCCS031	Requests a specific authorisation server registered for an organisation.	N/A	001	Standard request headers and technical error responses are defined in the CCS API Technical Specification and are not repeated in this document.

Scenario Variants

Scenario Variant	Name	Source	Target	Owner	Route	Method
SVCCS031	Organisation Authorisation Server ID Request	CCS User	CCS Directory	Retail Energy Code Company	/organisations/{OrganisationId}/authorisationservers/{Auth orisationServerId}	GET

SVCCS031 - Organisation Authorisation Server ID Request - Message Structure

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	Organisation authorisation server ID request body	1-1		G									
					1							Organisation ID	
					1							Authorisation Server ID	

MMCCS032 - Organisation Authorisation Server ID Response

Market Message

Market Message Reference	MM Description	Legacy Reference	Version	Notes
MMCCS032	Returns the full CCS Directory record for the requested authorisation server, including its settings, API resources, flags, and certifications.	N/A	001	

Scenario Variants

Scenario Variant	Name	Source	Target	Owner	Route	Method
SVCCS032	Organisation Authorisation Server ID Response	CCS Directory	CCS User	Retail Energy Code Company	/organisations/{OrganisationId}/authorisationservers/{Auth orisationServerId}	GET

SVCCS032 - Organisation Authorisation Server ID Response - Message Structure

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	Organisation authorisation server ID response body	1-1		G									
					1							Auto Registration Supported	
					0							Auto Registration Notification Webhook	
					1							Customer Friendly Description	
					1							Customer Friendly Logo URI	
					1							Customer Friendly Name	
					0							Developer Portal URI	
					0							Terms of Service URI	
					0							Notification Webhook	
					0							Issuer	
					0							OpenID Discovery Document	
					0							Payload Signing Certificate Location URI	
					0							Parent Authorisation Server ID	
					0							Deprecated Date	
					0							Retirement Date	
					0							Superseded By Authorisation Server ID	
					0							Omit From Ecosystem	
					0							Authorisation Server ID	
					0							Notification Webhook Added Date	
					0							Notification Webhook Status	
					0							Supports CIBA	
					0							Supports DCR	
					0							Supports Redirect	
					0							Created At	
					0							Resource Status	
ccsdata	The directory flags attached to the record.	0-1			G							Flags	
						1						Flag Name	
						0						Resource Description	
						1						Flag Type	
						1						Flag Value	
						1						Resource Status	

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
						1						Access Level	
						0						Flag ID	
						0						Created At	
						0						Updated At	
ccsdata	The API resources published by the authorisation server.	0-1			G							API Resources	
						0						API Resource ID	
						0						API Version	
						0						API Family ID	
						0						Family Complete	
						0						API Certification URI	
						0						Certification Status	
						0						Certification Start Date	
						0						Certification Expiration Date	
						0						API Family Type	
						0						Resource Status	
ccsdata	The endpoints through which the API resource can be accessed.	0-1				G						API Discovery Endpoints	
							0					API Discovery ID	
							0					API Endpoint	
						0						API Metadata	
ccsdata	The certifications recorded for the authorisation server.	0-1			G							Authorisation Server Certification	
						0						Certification Start Date	
						0						Certification Expiration Date	
						0						Certification Identifier	
						0						Authorisation Server ID	
						0						Certification Status	
						0						Directory Certification Profile Variant	
						0						Profile Type	
						0						Profile Version	
						0						Certification URI	
						0						Resource Status	

MMCCS033 - Authorisation Server API Resources Request

Market Message

Market Message Reference	MM Description	Legacy Reference	Version	Notes
MMCCS033	Requests the API resources registered against a specified organisation's authorisation server, with optional paging and status filtering.	N/A	001	Standard request headers and technical error responses are defined in the CCS API Technical Specification and are not repeated in this document.

Scenario Variants

Scenario Variant	Name	Source	Target	Owner	Route	Method
SVCCS033	Authorisation Server API Resources Request	CCS User	CCS Directory	Retail Energy Code Company	/organisations/{OrganisationId}/authorisationservers/{AuthorisationServerId}/apiresources	GET

SVCCS033 - Authorisation Server API Resources Request - Message Structure

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	Authorisation server API resources request body	1-1		G									
					1							Organisation ID	
					1							Authorisation Server ID	
					0							Page Number	
					0							Page Size	
					0							Sort	
					0							API Resource Status Filter	

MMCCS034 - Authorisation Server API Resources Response

Market Message

Market Message Reference	MM Description	Legacy Reference	Version	Notes
MMCCS034	Returns the API resources registered against the specified authorisation server, including discovery endpoints and any published metadata.	N/A	001	

Scenario Variants

Scenario Variant	Name	Source	Target	Owner	Route	Method
SVCCS034	Authorisation Server API Resources Response	CCS Directory	CCS User	Retail Energy Code Company	/organisations/{OrganisationId}/authorisationservers/{AuthorisationServerId}/apiresources	GET

SVCCS034 - Authorisation Server API Resources Response - Message Structure

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	Authorisation server API resources response body	1-*		G									
					0							API Resource ID	
					0							API Version	
					0							API Family ID	
					0							Family Complete	
					0							API Certification URI	
					0							Certification Status	
					0							Certification Start Date	
					0							Certification Expiration Date	
					0							API Family Type	
					0							Resource Status	
ccsdata	The endpoints through which the API resource can be accessed.	0-1			G							API Discovery Endpoints	
						0						API Discovery ID	
						0						API Endpoint	
					0							API Metadata	

MMCCS035 - Authorisation Server Certifications Request

Market Message

Market Message Reference	MM Description	Legacy Reference	Version	Notes
MMCCS035	Requests the certification records held for a specified organisation's authorisation server, with optional paging.	N/A	001	Standard request headers and technical error responses are defined in the CCS API Technical Specification and are not repeated in this document.

Scenario Variants

Scenario Variant	Name	Source	Target	Owner	Route	Method
SVCCS035	Authorisation Server Certifications Request	CCS User	CCS Directory	Retail Energy Code Company	/organisations/{OrganisationId}/authorisationservers/{Auth orisationServerId}/certifications	GET

SVCCS035 - Authorisation Server Certifications Request - Message Structure

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	Authorisation server certifications request body	1-1		G									
					1							Organisation ID	
					1							Authorisation Server ID	
					0							Page Number	
					0							Page Size	
					0							Sort	

MMCCS036 - Authorisation Server Certifications Response

Market Message

Market Message Reference	MM Description	Legacy Reference	Version	Notes
MMCCS036	Returns the certification records held for the specified authorisation server.	N/A	001	The API permits either a direct array or a paged response. The response-item group represents the same certification record in both forms.

Scenario Variants

Scenario Variant	Name	Source	Target	Owner	Route	Method
SVCCS036	Authorisation Server Certifications Response	CCS Directory	CCS User	Retail Energy Code Company	/organisations/{OrganisationId}/authorisationservers/{Auth orisationServerId}/certifications	GET

SVCCS036 - Authorisation Server Certifications Response - Message Structure

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	Authorisation server certifications response body	1-1		G									
ccsdata	The certification records returned in an unpagged response.	0-*	Included only in an unpagged response.		G								
						0						Certification Start Date	
						0						Certification Expiration Date	
						0						Certification Identifier	
						0						Authorisation Server ID	
						0						Certification Status	
						0						Directory Certification Profile Variant	
						0						Profile Type	
						0						Profile Version	
						0						Certification URI	
						0						Resource Status	
ccsdata	The paged certification response, including paging details and records.	0-1	Included only in a paged response.		G							Authorisation Server Certifications Page	
						0						Total Pages	
						0						Total Results	
ccsdata	The paging information for the requested or returned page of results.	0-1			G							Pagination Details	
						0						Page Number	
ccsdata	The field or fields used to order the returned results.	0-1				G						Sort	
							0					Sorted Indicator	
ccsdata	The rules used to order the returned records.	0-1					G					Sort Order	
								0				Sort Property	
								0				Sort Direction	
								0				Ignore Case Indicator	
								0				Ascending Sort Indicator	
						0						Page Size	
						0						Page Offset	
						0						Sorted Indicator	
						0						Unpagged Indicator	
						0						Pagination Mode	
					0							Number of Results	
					0							Page Size	
					0							Page Offset	
					0							Empty Page Indicator	
					0							Page Number	

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	The records returned in the response. In a paged response they appear under content. In an unpagged response they form the response body.	0-*				G						Response Content	
							0					Certification Start Date	
							0					Certification Expiration Date	
							0					Certification Identifier	
							0					Authorisation Server ID	
							0					Certification Status	
							0					Directory Certification Profile Variant	
							0					Profile Type	
							0					Profile Version	
							0					Certification URI	
							0					Resource Status	

MMCCS037 - Organisation Software Statements Request

Market Message

Market Message Reference	MM Description	Legacy Reference	Version	Notes
MMCCS037	Requests the software statements registered for an organisation, with optional paging, status, and text filters.	N/A	001	Standard request headers and technical error responses are defined in the CCS API Technical Specification and are not repeated in this document.

Scenario Variants

Scenario Variant	Name	Source	Target	Owner	Route	Method
SVCCS037	Organisation Software Statements Request	CCS User	CCS Directory	Retail Energy Code Company	/organisations/{OrganisationId}/softwarestatements	GET

SVCCS037 - Organisation Software Statements Request - Message Structure

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	Organisation software statements request body	1-1		G									
					1							Organisation ID	

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
					0							Page Number	
					0							Page Size	
					0							Sort	
					0							Software Statement Status Filter	
					0							Search Filter	

MMCCS038 - Organisation Software Statements Response

Market Message

Market Message Reference	MM Description	Legacy Reference	Version	Notes
MMCCS038	Returns the software statements registered for the organisation, including client settings, related flags, and certifications.	N/A	001	The API permits either a direct array or a paged response. The response-item group represents the same software-statement record in both forms.

Scenario Variants

Scenario Variant	Name	Source	Target	Owner	Route	Method
SVCCS038	Organisation Software Statements Response	CCS Directory	CCS User	Retail Energy Code Company	/organisations/{OrganisationId}/softwarestatements	GET

SVCCS038 - Organisation Software Statements Response - Message Structure

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	Organisation software statements response body	1-1		G									
ccsdata	The organisation's software statement records returned in a paged response, including paging details.	0-1	Included only in a paged response.		G								
						0						Total Pages	
						0						Total Results	

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	The paging information for the requested or returned page of results.	0-1				G						Pagination Details	
							0					Page Number	
ccsdata	The field or fields used to order the returned results.	0-1				G						Sort	
								0				Sorted Indicator	
ccsdata	The rules used to order the returned records.	0-1						G				Sort Order	
									0			Sort Property	
									0			Sort Direction	
									0			Ignore Case Indicator	
									0			Ascending Sort Indicator	
							0					Page Size	
							0					Page Offset	
							0					Sorted Indicator	
							0					Unpaged Indicator	
							0					Pagination Mode	
						0						Number of Results	
						0						Page Size	
						0						Page Offset	
						0						Empty Page Indicator	
						0						Page Number	
ccsdata	The records returned in the response. In a paged response they appear under content. In an unpagged response they form the response body.	0-1				G						Response Content	
							0					Software Statement Status	
							0					Client ID	
							0					Client Name	
							0					Resource Description	
							0					Environment	
							0					Organisation ID	
							0					Software Statement ID	
							0					Software Statement Mode	
							0					RTS Client Created Indicator	
							0					On Behalf Of	
							0					Policy URI	
							0					Client URI	

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
							0					Logo URI	
							0					Redirect URI	
							0					Post Logout Redirect URIs	
							0					API Webhook URI	
							0					Terms of Service URI	
							0					Notification Webhook	
							0					Notification Webhook Status	
							0					Software Version	
							0					Software Statement Locked Indicator	
							0					Update Failed Indicator	
							0					Update Failed Reason	
							0					Additional Software Metadata	
							0					OpenID Federation Enabled Indicator	
							0					OpenID Federation Entity Management Type	
							0					Require Signed Request Object	
							0					ID Token Signed Response Algorithm	
							0					Token Endpoint Auth Method	
							0					Client Secret	
							0					Created At	
							0					Origin URI	
							0					TLS Client Certificate Bound Access Tokens	
							0					Related Authorisation Server ID	
ccsdata	The directory flags attached to the record.	0-1					G					Flags	
								0				Flag ID	
								0				Created At	
								0				Updated At	
	The information that defines a directory flag.	0-1						G					
									1			Flag Name	
									0			Resource Description	
									1			Flag Type	
									1			Flag Value	
									1			Resource Status	
									1			Access Level	
							0					Homepage URI	
							0					Backchannel Client Notification Endpoint	
ccsdata	The certification records linked to the software statement.	0-1					G					Software Statement Certifications	
								0				Certification Start Date	
								0				Certification Expiration Date	
								0				Certification Identifier	
								0				Software Statement ID	

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
								0				Resource Status	
								0				Directory Certification Profile Variant	
								0				Profile Type	
								0				Profile Version	
								0				Certification URI	
								0				Certification Status	
ccsdata	The organisation's software statement records returned in an unpagged response.	0-1	Included only in an unpagged response.		G								
						0						Software Statement Status	
						0						Client ID	
						0						Client Name	
						0						Resource Description	
						0						Environment	
						0						Organisation ID	
						0						Software Statement ID	
						0						Software Statement Mode	
						0						RTS Client Created Indicator	
						0						On Behalf Of	
						0						Policy URI	
						0						Client URI	
						0						Logo URI	
						0						Redirect URI	
						0						Post Logout Redirect URIs	
						0						API Webhook URI	
						0						Terms of Service URI	
						0						Notification Webhook	
						0						Notification Webhook Status	
						0						Software Version	
						0						Software Statement Locked Indicator	
						0						Update Failed Indicator	
						0						Update Failed Reason	
						0						Additional Software Metadata	
						0						OpenID Federation Enabled Indicator	
						0						OpenID Federation Entity Management Type	
						0						Require Signed Request Object	
						0						ID Token Signed Response Algorithm	
						0						Token Endpoint Auth Method	
						0						Client Secret	
						0						Created At	
						0						Origin URI	
						0						TLS Client Certificate Bound Access Tokens	
						0						Related Authorisation Server ID	

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	The directory flags attached to the record.	0-1				G						Flags	
							0					Flag ID	
							0					Created At	
							0					Updated At	
	The information that defines a directory flag.	0-1				G							
								1				Flag Name	
								0				Resource Description	
								1				Flag Type	
								1				Flag Value	
								1				Resource Status	
								1				Access Level	
						0						Homepage URI	
						0						Backchannel Client Notification Endpoint	
ccsdata	The certification records linked to the software statement.	0-1				G						Software Statement Certifications	
							0					Certification Start Date	
							0					Certification Expiration Date	
							0					Certification Identifier	
							0					Software Statement ID	
							0					Resource Status	
							0					Directory Certification Profile Variant	
							0					Profile Type	
							0					Profile Version	
							0					Certification URI	
							0					Certification Status	

MMCCS039 - Software Authority Claim Request

Market Message

Market Message Reference	MM Description	Legacy Reference	Version	Notes
MMCCS039	Requests a specific authority claim linked to a software statement.	N/A	001	Standard request headers and technical error responses are defined in the CCS API Technical Specification and are not repeated in this document.

Scenario Variants

Scenario Variant	Name	Source	Target	Owner	Route	Method
SVCCS039	Software Authority Claim Request	CCS User	CCS Directory	Retail Energy Code Company	/organisations/{OrganisationId}/softwarestatements/{SoftwareStatementId}/authorityclaims/{SoftwareAuthorityClaimId}	GET

SVCCS039 - Software Authority Claim Request - Message Structure

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	Software authority claim request body	1-1		G									
					1							Organisation ID	
					1							Software Statement ID	
					1							Software Authority Claim ID	

MMCCS040 - Software Authority Claim Response

Market Message

Market Message Reference	MM Description	Legacy Reference	Version	Notes
MMCCS040	Returns the requested software authority claim, including its organisation role claim, domain, role, status, and directory identifiers.	N/A	001	

Scenario Variants

Scenario Variant	Name	Source	Target	Owner	Route	Method
SVCCS040	Software Authority Claim Response	CCS Directory	CCS User	Retail Energy Code Company	/organisations/{OrganisationId}/softwarestatements/{SoftwareStatementId}/authorityclaims/{SoftwareAuthorityClaimId}	GET

SVCCS040 - Software Authority Claim Response - Message Structure

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	Software authority claim response body	1-1		G									
					0							Organisation Authorisation Domain Role Claim ID	
					1							Resource Status	
					0							Software Authority Claim ID	
					0							Authority Name	
					0							Authorisation Domain Name	
					0							Authorisation Domain Role Name	

MMCCS041 - Software Statement Certifications Request

Market Message

Market Message Reference	MM Description	Legacy Reference	Version	Notes
MMCCS041	Requests the certification records linked to a specified software statement, with optional paging.	N/A	001	Standard request headers and technical error responses are defined in the CCS API Technical Specification and are not repeated in this document.

Scenario Variants

Scenario Variant	Name	Source	Target	Owner	Route	Method
SVCCS041	Software Statement Certifications Request	CCS User	CCS Directory	Retail Energy Code Company	/organisations/{OrganisationId}/softwarestatements/{SoftwareStatementId}/certifications	GET

SVCCS041 - Software Statement Certifications Request - Message Structure

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	Software statement certifications request body	1-1		G									
					1							Organisation ID	
					1							Software Statement ID	
					0							Page Number	
					0							Page Size	
					0							Sort	

MMCCS042 - Software Statement Certifications Response

Market Message

Market Message Reference	MM Description	Legacy Reference	Version	Notes
MMCCS042	Returns the certification records linked to the specified software statement.	N/A	001	

Scenario Variants

Scenario Variant	Name	Source	Target	Owner	Route	Method
SVCCS042	Software Statement Certifications Response	CCS Directory	CCS User	Retail Energy Code Company	/organisations/{OrganisationId}/softwarestatements/{SoftwareStatementId}/certifications	GET

SVCCS042 - Software Statement Certifications Response - Message Structure

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	Software statement certifications response body	1-*		G									
ccsdata	The software statement certification records returned in an unpagged response.	0-1	Included only in an unpagged response.		G								
					0							Certification Start Date	
					0							Certification Expiration Date	
					0							Certification Identifier	
					0							Software Statement ID	
					0							Resource Status	
					0							Directory Certification Profile Variant	
					0							Profile Type	
					0							Profile Version	
					0							Certification URI	
					0							Certification Status	

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	The software statement certification records returned in a paged response, including paging details.	0-1	Included only in a paged response.		G								
						0						Total Pages	
						0						Total Results	
ccsdata	The paging information for the requested or returned page of results.	0-1				G						Pagination Details	
							0					Page Number	
ccsdata	The field or fields used to order the returned results.	0-1					G					Sort	
								0				Sorted Indicator	
ccsdata	The rules used to order the returned records.	0-1						G				Sort Order	
									0			Sort Property	
									0			Sort Direction	
									0			Ignore Case Indicator	
									0			Ascending Sort Indicator	
							0					Page Size	
							0					Page Offset	
							0					Sorted Indicator	
							0					Unpaged Indicator	
							0					Pagination Mode	
						0						Number of Results	
						0						Page Size	
						0						Page Offset	
						0						Empty Page Indicator	
						0						Page Number	
ccsdata	The records returned in the response. In a paged response they appear under content. In an unpaged response they form the response body.	0-1				G						Response content	
							0					Certification Start Date	
							0					Certification Expiration Date	
							0					Certification Identifier	
							0					Software Statement ID	
							0					Resource Status	

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
							0					Directory Certification Profile Variant	
							0					Profile Type	
							0					Profile Version	
							0					Certification URI	
							0					Certification Status	

MMCCS043 - Organisation Certificates Request

Market Message

Market Message Reference	MM Description	Legacy Reference	Version	Notes
MMCCS043	Requests the certificate and key records registered for an organisation, with optional paging.	N/A	001	Standard request headers and technical error responses are defined in the CCS API Technical Specification and are not repeated in this document.

Scenario Variants

Scenario Variant	Name	Source	Target	Owner	Route	Method
SVCCS043	Organisation Certificates Request	CCS User	CCS Directory	Retail Energy Code Company	/organisations/{OrganisationId}/certificates	GET

SVCCS043 - Organisation Certificates Request - Message Structure

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	Organisation certificates request body	1-1		G									
					1							Organisation ID	
					0							Page Number	
					0							Page Size	
					0							Sort	

MMCCS044 - Organisation Certificates Response

Market Message

Market Message Reference	MM Description	Legacy Reference	Version	Notes
MMCCS044	Returns the certificate and public-key records registered for the organisation.	N/A	001	The API permits either a direct array or a paged response. The response-item group represents the same certificate or key record in both forms.

Scenario Variants

Scenario Variant	Name	Source	Target	Owner	Route	Method
SVCCS044	Organisation Certificates Response	CCS Directory	CCS User	Retail Energy Code Company	/organisations/{OrganisationId}/certificates	GET

SVCCS044 - Organisation Certificates Response - Message Structure

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	Organisation certificates response body	1-1		G									
ccsdata	The organisation certificate records returned in an unpagd response.	0-1	Included only in an unpagd response.		G								
						0						Organisation ID	
						0						Software Statement IDs	
						0						Client Name	
						0						Certificate or Key Status	
						0						Valid From Date Time	
						0						Revoked Date Time	
						0						Expiry Date Time	
						0						RSA Exponent	
						0						Key Type	
						0						JSON Web Key Identifier	
						0						JSON Web Key Type	
						0						RSA Modulus	
						0						Elliptic Curve X Coordinate	
						0						Elliptic Curve Y Coordinate	
						0						Elliptic Curve Name	

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
						0						Public Key Value	
						0						Cryptographic Algorithm	
						0						Key Use	
						0						X.509 Certificate Chain	
						0						X.509 Certificate SHA-1 Thumbprint	
						0						X.509 Certificate SHA-256 Thumbprint	
						0						X.509 Certificate URL	
						0						Signed Certificate Path	
						0						JWK Path	
						0						Organisation JWK Path	
						0						Resource Description	
ccsdata	The organisation certificate records returned in a paged response, including paging details.	0-1	Included only in a paged response.		G								
						0						Total Pages	
						0						Total Results	
ccsdata	The paging information for the requested or returned page of results.	0-1			G							Pagination Details	
							0					Page Number	
ccsdata	The field or fields used to order the returned results.	0-1					G					Sort	
								0				Sorted Indicator	
ccsdata	The rules used to order the returned records.	0-1						G				Sort Order	
									0			Sort Property	
									0			Sort Direction	
									0			Ignore Case Indicator	
									0			Ascending Sort Indicator	
						0						Page Size	
						0						Page Offset	
						0						Sorted Indicator	
						0						Unpaged Indicator	
						0						Pagination Mode	
						0						Number of Results	
						0						Page Size	
						0						Page Offset	
						0						Empty Page Indicator	
						0						Page Number	

Group ID	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Data Item Name	Value Rule
ccsdata	The records returned in the response. In a paged response they appear under content. In an unpagged response they form the response body.	0-1				G						Response content	
							0					Organisation ID	
							0					Software Statement IDs	
							0					Client Name	
							0					Certificate or Key Status	
							0					Valid From Date Time	
							0					Revoked Date Time	
							0					Expiry Date Time	
							0					RSA Exponent	
							0					Key Type	
							0					JSON Web Key Identifier	
							0					JSON Web Key Type	
							0					RSA Modulus	
							0					Elliptic Curve X Coordinate	
							0					Elliptic Curve Y Coordinate	
							0					Elliptic Curve Name	
							0					Public Key Value	
							0					Cryptographic Algorithm	
							0					Key Use	
							0					X.509 Certificate Chain	
							0					X.509 Certificate SHA-1 Thumbprint	
							0					X.509 Certificate SHA-256 Thumbprint	
							0					X.509 Certificate URL	
							0					Signed Certificate Path	
							0					JWK Path	
							0					Organisation JWK Path	
							0					Resource Description	

Consumer Consent Service

Data Item Catalogue

Part B - Data Item Catalogue

The Data Item Catalogue sets out each data item contained within the CCS market messages. It provides a CCS specific reference, a plain English description, high-level format information, references to the applicable market message(s) and confirmation of whether the data item has a defined set of enumerations. For ease of review, the actual enumerations have been included in a separate consolidated list below the core data item table.

The fields included within the Data Item Catalogue are defined below:

- Data Item Reference - provides the unique reference of each data item in the Data Item Catalogue. Each data item has been given a new CCS reference. Following consultation, new data items will be added to the existing EMDS and assigned an enduring reference. Where data items relate to existing data items in the EMDS, these will be aligned with the existing definition post consultation.
- Data Item Name – each data item has been assigned a plain English name. Where existing data items have been used within CCS market messages, these will be aligned with the existing name post consultation.
- Item Description - plain English description of the data item.
- Logical Length - the number of characters or digits required to represent the value of the data. In the majority of cases there are no defined lengths and instead a maximum length has been defined. In some cases there are no length restrictions; in these instances, the length is recorded as n/a.
- Physical Length - the total space assigned to the data item which includes decimal points and positive / negative characters.
- Data Type – defines the generic data types applicable to data items within the EMDS. These are defined in the Standards Definition Document ([Energy-Market-Data-Specification-Standards-Definition-Document v3.1.docx](#)).
- Datatype Format - defines what structure the data item must take and how it is stored and displayed. A full list of the Datatype Formats is also included in the Standards Definition Document.
- YAML Name - the YAML / JSON name of the data item as reflected in the CCS developers portal. A variety of naming conventions and case formats are used for the YAML names; there is no CCS naming standard applied across all YAML fields. This is driven by a variety of different API specifications and open standards being incorporated, which all use varying naming conventions.
- Market Messages – identifies the CCS market messages in which the data item is used.
- Data Item Notes - any contextual information useful to understanding the Data Item.

Data Item Catalogue

Data Item Reference	Data Item Name	Description	Data Type	Format	Logical Length	Physical Length	Enumeration Yes or No	YAML Name	Market Messages	Notes
DICCS001	SSF Specification Version	The version of the OpenID Shared Signals Framework implemented by the CCS.	String	General character string	N/A	N/A	No	spec_version	MMCCS002	
DICCS002	SSF Issuer	The CCS Issuer Identifier published in the CCS SSF transmitter configuration.	String	URI	N/A	N/A	No	issuer	MMCCS002	
DICCS003	CCS JWKS URI	The endpoint where the CCS publishes the public keys used to verify tokens it has signed.	String	URI	N/A	N/A	No	jwtks_uri	MMCCS002; MMCCS020	
DICCS004	SSF Supported Delivery Methods	The methods the CCS supports for sending shared signals event notifications.	String	General character string	17	17	Yes	delivery_methods_supported	MMCCS002	
DICCS005	SSF Management Endpoint	The endpoint CCS Users use to create, view, update, replace, or delete a CCS SSF stream.	String	URI	N/A	N/A	No	configuration_endpoint	MMCCS002	
DICCS006	SSF Status Endpoint	The endpoint CCS Users use to view or change the status of a CCS SSF stream.	String	URI	N/A	N/A	No	status_endpoint	MMCCS002	
DICCS007	SSF Verification Endpoint	The endpoint CCS Users use to request a CCS SSF stream verification event.	String	URI	N/A	N/A	No	verification_endpoint	MMCCS002	
DICCS008	Authorisation Schemes	The authorisation methods the CCS accepts for access to the CCS SSF management API.	Object	N/A	N/A	N/A	No	authorization_schemes	MMCCS002	This object groups the related data items shown beneath it within a market message. It does not have a value of its own, but its YAML name appears in the message.

Data Item Reference	Data Item Name	Description	Data Type	Format	Logical Length	Physical Length	Enumeration Yes or No	YAML Name	Market Messages	Notes
DICCS009	Authorisation Schemes Specification URN	The standard that defines the authorisation method.	String	General character string	17	17	Yes	spec_urn	MMCCS002	For the CCS, this is Mutual TLS (mTLS).
DICCS010	SSF Default Subjects	The subjects covered by a CCS SSF stream. A CCS SSF stream covers all of that CCS User's grants from the point each grant is created.	String	General character string	3	3	Yes	default_subjects	MMCCS002	
DICCS011	SSF Events Supported	The event types the CCS supports through the CCS SSF.	String	General character string	N/A	N/A	No	events_supported	MMCCS002; MMCCS004	
DICCS012	Supported Revocation Reasons	The revocation reason codes the CCS may include in a Permission revocation event.	String	General character string	N/A	N/A	No	revocation_reasons_supported	MMCCS002	
DICCS013	SSF Delivery	How and where shared signals events are sent to the CCS User.	Object	N/A	N/A	N/A	No	delivery	MMCCS003; MMCCS004	This object groups the related data items shown beneath it within a market message. It does not have a value of its own, but its YAML name appears in the message.
DICCS014	SSF Delivery Method	The method used to send shared signals events to the CCS User.	String	General character string	17	17	Yes	method	MMCCS003; MMCCS004	
DICCS015	SSF CCS User Delivery Endpoint	The endpoint where the CCS User receives shared signals event notifications.	String	URI	N/A	N/A	No	endpoint_url	MMCCS003; MMCCS004	
DICCS016	SSF Events Requested	The types of shared signals events the CCS User asks to receive.	String	General character string	N/A	N/A	No	events_requested	MMCCS003; MMCCS004	
DICCS017	SSF Stream Description	A description of the CCS SSF stream provided by the CCS User.	String	General character string	N/A	N/A	No	description	MMCCS003; MMCCS004	

Data Item Reference	Data Item Name	Description	Data Type	Format	Logical Length	Physical Length	Enumeration Yes or No	YAML Name	Market Messages	Notes
DICCS018	SSF Stream ID	The unique identifier the CCS assigns to a CCS SSF stream.	String	UUID	N/A	N/A	No	stream_id	MMCCS004; MMCCS005	
DICCS019	Issuer Claim	The identifier of the party that issued the relevant token, assertion or event.	String	General character string	N/A	N/A	No	iss	MMCCS004; MMCCS006; MMCCS007; MMCCS009; MMCCS010; MMCCS011; MMCCS012; MMCCS013; MMCCS014; MMCCS015; MMCCS016; MMCCS025; MMCCS026	
DICCS020	Stream Audience	The CCS User or users associated with the CCS SSF stream.	String	General character string	N/A	N/A	No	aud	MMCCS004	
DICCS021	SSF Events Delivered	The types of shared signals events the CCS will send on the stream.	String	General character string	N/A	N/A	No	events_delivered	MMCCS004	
DICCS022	SSF Minimum Verification Interval	The minimum time, in seconds, that must pass between verification requests for the stream.	Number	Integer	N/A	N/A	No	min_verification_interval	MMCCS004	
DICCS023	SSF Inactivity Timeout	How long, in seconds, a stream can remain inactive before the CCS pauses it.	Number	Integer	N/A	N/A	No	inactivity_timeout	MMCCS004	
DICCS024	Correlation State	A value used to match a request with the corresponding response event.	String	General character string	N/A	N/A	No	state	MMCCS005; MMCCS006; MMCCS007	

Data Item Reference	Data Item Name	Description	Data Type	Format	Logical Length	Physical Length	Enumeration Yes or No	YAML Name	Market Messages	Notes
DICCS025	JWT Identifier Claim	A unique identifier for the relevant JWT, used to distinguish it and, where applicable, prevent replay.	String	UUID	N/A	N/A	No	jti	MMCCS006; MMCCS007; MMCCS009; MMCCS010; MMCCS011; MMCCS012; MMCCS013; MMCCS014; MMCCS015; MMCCS016; MMCCS025; MMCCS026	
DICCS026	Issued At Time Claim	The date and time when the relevant token, assertion, request object or event was issued.	Number	High resolution datetime	20	20	No	iat	MMCCS006; MMCCS007; MMCCS009; MMCCS010; MMCCS011; MMCCS012; MMCCS013; MMCCS014; MMCCS015; MMCCS016; MMCCS025; MMCCS026	
DICCS027	Audience Claim	The identifier of the intended recipient of the relevant token, assertion or event.	String	General character string	N/A	N/A	No	aud	MMCCS006; MMCCS007; MMCCS009; MMCCS010; MMCCS011; MMCCS012; MMCCS013; MMCCS014; MMCCS015; MMCCS016; MMCCS025; MMCCS026	

Data Item Reference	Data Item Name	Description	Data Type	Format	Logical Length	Physical Length	Enumeration Yes or No	YAML Name	Market Messages	Notes
DICCS028	Event Subject Identifier	Identifies the ID that the shared signals event concerns.	Object	N/A	N/A	N/A	No	sub_id	MMCCS011; MMCCS012; MMCCS013	This object groups the related data items shown beneath it within a market message. It does not have a value of its own, but its YAML name appears in the message.
DICCS029	Subject Identifier Format	The format used for the event subject identifier.	String	General character string	6	6	Yes	format	MMCCS011; MMCCS012; MMCCS013	For CCS events, the value is opaque and does not reveal information about the subject.
DICCS030	Subject Identifier	The grant id for the Permission that the shared signals event concerns.	String	General character string	N/A	N/A	No	id	MMCCS011; MMCCS012; MMCCS013	
DICCS031	Security Event	The details of the shared signals event the notification concerns.	Object	N/A	N/A	N/A	No	events	MMCCS006; MMCCS011; MMCCS012; MMCCS013	This object groups the related data items shown beneath it within a market message. It does not have a value of its own, but its YAML name appears in the message.
DICCS032	Verification Event	The shared signals event sent by the CCS to confirm that a CCS SSF stream can receive events.	Object	N/A	N/A	N/A	No	https://schemas.openid.net/secevent/sf/event-type/verification	MMCCS006	This object groups the related data items shown beneath it within a market message. It does not have a value of its own, but its YAML name appears in the message.

Data Item Reference	Data Item Name	Description	Data Type	Format	Logical Length	Physical Length	Enumeration Yes or No	YAML Name	Market Messages	Notes
DICCS033	Client Identifier	The registered identifier of the client making the request or associated with an issued token.	String	General character string	N/A	N/A	No	client_id	MMCCS007; MMCCS009; MMCCS010; MMCCS014; MMCCS015; MMCCS016; MMCCS025; MMCCS026	
DICCS034	Signed Request Object	The signed JWT containing the authorisation request details.	Object	N/A	N/A	N/A	No	request	MMCCS007	This object groups the related data items shown beneath it within a market message. It does not have a value of its own, but its YAML name appears in the message.
DICCS035	Response Type	The type of response requested from the authorisation endpoint.	String	General character string	4	4	Yes	response_type	MMCCS007	For CCS, it is an authorisation code.
DICCS036	Redirect URI	An endpoint that the user may be redirected to after an authorisation journey.	String	URI	N/A	N/A	No	redirect_uri	MMCCS007; MMCCS009	
DICCS037	Scope	The access requested by the client.	String	General character string	N/A	N/A	No	scope	MMCCS007; MMCCS010; MMCCS016; MMCCS024; MMCCS025; MMCCS026	This includes openid when an ID token is required.
DICCS038	Code Challenge	A value used to confirm that the token request came from the same client as the original authorisation request. It is checked against the Code Verifier at the token endpoint.	String	General character string	N/A	N/A	No	code_challenge	MMCCS007	
DICCS039	Code Challenge Method	The method used to create the code_challenge that helps protect the authorisation process.	String	General character string	4	4	Yes	code_challenge_method	MMCCS007	

Data Item Reference	Data Item Name	Description	Data Type	Format	Logical Length	Physical Length	Enumeration Yes or No	YAML Name	Market Messages	Notes
DICCS040	Requested Identity Claims	The claims the client asks the authorization server to return in an ID token.	Object	N/A	N/A	N/A	No	claims	MMCCS007	This object groups the related data items shown beneath it within a market message. It does not have a value of its own, but its YAML name appears in the message.
DICCS041	ID Token Claim Requests	The claims requested for inclusion in the ID token.	Object	N/A	N/A	N/A	No	id_token	MMCCS007	This object groups the related data items shown beneath it within a market message. It does not have a value of its own, but its YAML name appears in the message.
DICCS042	Permission Requested Claim	The claim requested by the ATM for inclusion in the ID token.	String	General character string	N/A	N/A	Yes	[claim name]	MMCCS007	
DICCS043	Essential Claim Indicator	Indicates that the client requires the requested identity claim rather than merely preferring it.	Boolean	true/false	N/A	N/A	No	essential	MMCCS007	
DICCS044	Permission Data Type	The dataset the Permission covers.	String	General character string	N/A	N/A	Yes	type	MMCCS007; MMCCS010; MMCCS016; MMCCS024	
DICCS045	Permission Type	Whether the Permission supports one data retrieval or repeated retrieval while it remains valid.	String	General character string	N/A	N/A	Yes	permission_type	MMCCS007; MMCCS010; MMCCS016; MMCCS024	
DICCS046	Purpose	The specific purpose or purposes for using the data.	String	General character string	N/A	N/A	Yes	purpose	MMCCS007; MMCCS010; MMCCS016; MMCCS024	The valid set of enumerations are included in the Permission Purpose Catalogue.

Data Item Reference	Data Item Name	Description	Data Type	Format	Logical Length	Physical Length	Enumeration Yes or No	YAML Name	Market Messages	Notes
DICCS047	Start Date Time	The start of the Permission validity period.	Number	High resolution datetime	20	20	No	start_date_time	MMCCS007; MMCCS010; MMCCS016; MMCCS024	If omitted from the request, the CCS sets it when the Energy Data Subject grants Permission.
DICCS048	End Date Time	The end of the Permission validity period.	Number	High resolution datetime	20	20	No	end_date_time	MMCCS007; MMCCS010; MMCCS016; MMCCS024	
DICCS049	Linked Permission	The grant ID of an earlier Permission that this Permission renews.	String	General character string	N/A	N/A	No	linked_permission	MMCCS007; MMCCS010; MMCCS016; MMCCS024	
DICCS050	Dataset Details	The information needed for the dataset selected in Permission Data Type.	Object	N/A	N/A	N/A	No	type_details	MMCCS007	This object groups the related data items shown beneath it within a market message. It does not have a value of its own, but its YAML name appears in the message.
DICCS051	Half-Hourly Metered Data	The details of the half-hourly Metered Data covered by the Permission.	Object	N/A	N/A	N/A	No	half_hourly_metered_data	MMCCS007; MMCCS010; MMCCS016; MMCCS024	This object groups the related data items shown beneath it within a market message. It does not have a value of its own, but its YAML name appears in the message.
DICCS052	Fuel Type	The fuel type for the energy data being accessed.	String	General character string	N/A	N/A	Yes	fuel_type	MMCCS007; MMCCS010; MMCCS016; MMCCS024	

Data Item Reference	Data Item Name	Description	Data Type	Format	Logical Length	Physical Length	Enumeration Yes or No	YAML Name	Market Messages	Notes
DICCS053	Metering Point Energy Flow	The direction of energy flow for the data being accessed.	String	General character string	N/A	N/A	Yes	metering_point_energy_flow	MMCCS007; MMCCS010; MMCCS016; MMCCS024	
DICCS054	Data Period From	The start of the data access period.	Number	High resolution datetime	20	20	No	from	MMCCS007; MMCCS010; MMCCS016; MMCCS024	
DICCS055	Data Period To	The end of the data access period.	Number	High resolution datetime	20	20	No	to	MMCCS007; MMCCS010; MMCCS016; MMCCS024	
DICCS056	EDH Server ID	The identifier of the EDH server that holds the data for the Permission.	String	URI	N/A	N/A	No	edh_server_id	MMCCS007; MMCCS010; MMCCS016; MMCCS024	
DICCS057	Tariff Interoperability	The details of the Tariff Data covered by the Permission.	Object	N/A	N/A	N/A	No	tariff_interoperability	MMCCS007; MMCCS010; MMCCS016; MMCCS024	This object groups the related data items shown beneath it within a market message. It does not have a value of its own, but its YAML name appears in the message.
DICCS058	TI Event Notifications	Indicates whether the Permission includes ongoing Tariff Interoperability Event Notifications.	Boolean	true/false	5	N/A	No	event_notifications	MMCCS007; MMCCS010; MMCCS016; MMCCS024	
DICCS059	Consumer Information Hints	Optional information supplied by the ATP to help pre-fill and match the Permission journey. The CCS verifies the authoritative values.	Object	N/A	N/A	N/A	No	consumer_information	MMCCS007	This object groups the related data items shown beneath it within a market message. It does not have a value of its own, but its YAML name appears in the message.

Data Item Reference	Data Item Name	Description	Data Type	Format	Logical Length	Physical Length	Enumeration Yes or No	YAML Name	Market Messages	Notes
DICCS060	Consumer First Name Hint	The Energy Data Subject's first name, as known by the ATP.	String	General character string	N/A	N/A	No	first_name	MMCCS007	
DICCS061	Consumer Last Name Hint	The Energy Data Subject's last name, as known by the ATP.	String	General character string	N/A	N/A	No	last_name	MMCCS007	
DICCS062	Consumer Address Hint	The Energy Data Subject's address, as known by the ATP.	String	General character string	N/A	N/A	No	address	MMCCS007	
DICCS063	Consumer Email Hint	The Energy Data Subject's email address, as known by the ATP.	String	General character string	N/A	N/A	No	email	MMCCS007	
DICCS064	Consumer Mobile Number Hint	The Energy Data Subject's mobile number, as known by the ATP.	String	General character string	N/A	N/A	No	mobile_number	MMCCS007	
DICCS065	Expiry Time Claim	The date and time when the relevant token, assertion or request object expires and must no longer be accepted.	Number	High resolution datetime	20	20	No	exp	MMCCS007; MMCCS009; MMCCS010; MMCCS014; MMCCS015; MMCCS016; MMCCS025; MMCCS026	
DICCS066	Request Object Not Before Claim	The earliest date and time when the request object can be accepted.	Number	High resolution datetime	20	20	No	nbf	MMCCS007	
DICCS067	Client Assertion Type	The standard used for the client authentication assertion.	String	General character string	54	54	Yes	client_assertion_type	MMCCS007; MMCCS009; MMCCS014; MMCCS015; MMCCS025	The CCS uses a private-key JWT.

Data Item Reference	Data Item Name	Description	Data Type	Format	Logical Length	Physical Length	Enumeration Yes or No	YAML Name	Market Messages	Notes
DICCS068	Client Assertion	A single-use JWT signed by the client to authenticate itself.	Object	N/A	N/A	N/A	No	client_assertion	MMCCS007; MMCCS009; MMCCS014; MMCCS015; MMCCS025	This object groups the related data items shown beneath it within a market message. It does not have a value of its own, but its YAML name appears in the message.
DICCS069	Subject Claim	The identifier of the subject represented by the relevant token or assertion.	String	General character string	N/A	N/A	No	sub	MMCCS007; MMCCS009; MMCCS010; MMCCS014; MMCCS015; MMCCS016; MMCCS025; MMCCS026	
DICCS070	Account Holder Verification Requested Claim	The Account Holder claim the CCS asks the Energy Supplier to include in the ID token.	String	General character string	N/A	N/A	Yes	[claim name]	MMCCS007	
DICCS071	Request URI	A short-lived reference to the Pushed authorization request, used when redirecting the Energy Data Subject to the CCS.	String	General character string	N/A	N/A	No	request_uri	MMCCS008	
DICCS072	Expires In	The number of seconds that the referenced item remains valid.	Number	Integer	N/A	N/A	No	expires_in	MMCCS008; MMCCS010; MMCCS016; MMCCS026	
DICCS073	Authorization Code Grant Type	Identifies an authorization code grant used to exchange an authorization code for tokens.	String	General character string	18	18	Yes	grant_type	MMCCS009	
DICCS074	Authorization Code	The single-use code returned after successful authorisation and exchanged for tokens.	String	General character string	N/A	N/A	No	code	MMCCS009	

Data Item Reference	Data Item Name	Description	Data Type	Format	Logical Length	Physical Length	Enumeration Yes or No	YAML Name	Market Messages	Notes
DICCS075	Code Verifier	The value used to prove that the token request is linked to the original authorisation request.	String	General character string	N/A	N/A	No	code_verifier	MMCCS009	
DICCS076	Resource Indicator	The EDH that the ATP wants the Access Token to cover.	String	URI	N/A	N/A	No	resource	MMCCS009; MMCCS015	
DICCS077	Access Token	The short-lived token presented to access an authorised resource.	String	General character string	N/A	N/A	No	access_token	MMCCS010; MMCCS016; MMCCS026	This object groups the related data items shown beneath it within a market message. It does not have a value of its own, but its YAML name appears in the message.
DICCS078	Certificate Confirmation	Identifies the client certificate bound to the Access Token.	Object	N/A	N/A	N/A	No	cnf	MMCCS010; MMCCS016; MMCCS026	This object groups the related data items shown beneath it within a market message. It does not have a value of its own, but its YAML name appears in the message.
DICCS079	Certificate SHA-256 Thumbprint	The SHA-256 thumbprint of the client certificate bound to the token.	String	General character string	N/A	N/A	No	x5t#S256	MMCCS010; MMCCS016; MMCCS026	
DICCS080	Grant ID	The unique identifier of the Permission grant.	String	UUID	N/A	N/A	No	grant_id	MMCCS010; MMCCS016; MMCCS023; MMCCS024	

Data Item Reference	Data Item Name	Description	Data Type	Format	Logical Length	Physical Length	Enumeration Yes or No	YAML Name	Market Messages	Notes
DICCS081	CCS Enrichment	Information added by the CCS after identity, address, and RMP checks.	Object	N/A	N/A	N/A	No	enrichment	MMCCS010; MMCCS016; MMCCS024	This object groups the related data items shown beneath it within a market message. It does not have a value of its own, but its YAML name appears in the message.
DICCS082	Verified MPAN	An electricity Metering Point confirmed through the Electricity Enquiry Services or Energy Supplier validation.	String	General character string	N/A	N/A	No	verified_MPAN	MMCCS010; MMCCS016; MMCCS024	
DICCS083	Verified MPRN	A gas Supply Meter Point confirmed through the Gas Enquiry Services or Energy Supplier validation.	String	General character string	N/A	N/A	No	verified_MPRN	MMCCS010; MMCCS016; MMCCS024	
DICCS084	Token Type	Identifies how the Access Token is presented.	String	General character string	N/A	N/A	Yes	token_type	MMCCS010; MMCCS016; MMCCS026	For the CCS this is always Bearer.
DICCS085	Refresh Token	The credential used to obtain a new Access Token without repeating the Permission journey.	String	General character string	N/A	N/A	No	refresh_token	MMCCS010; MMCCS015	
DICCS086	ID Token	A signed token containing the Energy Data Subject identity claims the client is permitted to receive.	Object	N/A	N/A	N/A	No	id_token	MMCCS010; MMCCS016	This object groups the related data items shown beneath it within a market message. It does not have a value of its own, but its YAML name appears in the message.
DICCS087	Consumer Given Name	The Energy Data Subject's verified given name, where this claim was requested and approved.	String	General character string	N/A	N/A	No	given_name	MMCCS010; MMCCS016	

Data Item Reference	Data Item Name	Description	Data Type	Format	Logical Length	Physical Length	Enumeration Yes or No	YAML Name	Market Messages	Notes
DICCS088	Consumer Family Name	The Energy Data Subject's verified family name, where this claim was requested and approved.	String	General character string	N/A	N/A	No	family_name	MMCCS010; MMCCS016	
DICCS089	Managed Addresses	The addresses where the CCS has confirmed that the Energy Data Subject is an Occupant.	Object	N/A	N/A	N/A	No	managed_addresses	MMCCS010; MMCCS016	This object groups the related data items shown beneath it within a market message. It does not have a value of its own, but its YAML name appears in the message.
DICCS090	Verified Address	The address where the Energy Data Subject's Occupancy has been verified.	String	General character string	N/A	N/A	No	address	MMCCS010; MMCCS016	
DICCS091	Verified Postcode	The postcode of the address where the Energy Data Subject's Occupancy has been verified.	String	General character string	N/A	N/A	No	postcode	MMCCS010; MMCCS016	
DICCS092	Managed Address Identifier	The house or building number for a managed address.	String	General character string	N/A	N/A	No	identifier	MMCCS010	
DICCS093	Account Holder MPxNs	The addresses and metering points for which the authenticated consumer is the Account Holder.	Object	N/A	N/A	N/A	No	account_holder_mpxns	MMCCS010	This object groups the related data items shown beneath it within a market message. It does not have a value of its own, but its YAML name appears in the message.

Data Item Reference	Data Item Name	Description	Data Type	Format	Logical Length	Physical Length	Enumeration Yes or No	YAML Name	Market Messages	Notes
DICCS094	Property Address	The supply address associated with the account being verified.	Object	N/A	N/A	N/A	No	property_address	MMCCS010	This object groups the related data items shown beneath it within a market message. It does not have a value of its own, but its YAML name appears in the message.
DICCS095	Supply Address	The supply address as a single line.	String	General character string	N/A	N/A	No	address	MMCCS010	
DICCS096	Supply Postcode	The postcode of the supply address.	String	General character string	N/A	N/A	No	postcode	MMCCS010	
DICCS097	Account Holder MPANs	The electricity metering points at the supply address.	Object	N/A	N/A	N/A	No	mpans	MMCCS010	This object groups the related data items shown beneath it within a market message. It does not have a value of its own, but its YAML name appears in the message.
DICCS098	Account Holder MPAN	The MPAN for an electricity metering point held by the Account Holder.	Number	Integer	13	13	No	mpan	MMCCS010	
DICCS099	Supplier MPID	The Market Participant Identifier of the Energy Supplier registered for the metering point.	String	General character string	4	4	No	mpid	MMCCS010	

Data Item Reference	Data Item Name	Description	Data Type	Format	Logical Length	Physical Length	Enumeration Yes or No	YAML Name	Market Messages	Notes
DICCS100	Account Holder MPRNs	The gas metering points at the supply address.	Object	N/A	N/A	N/A	No	mprns	MMCCS010	This object groups the related data items shown beneath it within a market message. It does not have a value of its own, but its YAML name appears in the message.
DICCS101	Account Holder MPRN	The MPRN for a gas metering point held by the Account Holder.	Number	Integer	10	10	No	mprn	MMCCS010	
DICCS102	SET Transaction Identifier	Identifies the underlying revocation, query, or Permission verification transaction.	String	General character string	N/A	N/A	No	txn	MMCCS006; MMCCS011; MMCCS012; MMCCS013	
DICCS103	Permission Revoked Event	The event type that indicates a Permission has been revoked.	Object	URI	N/A	N/A	No	https://schemas.recco.com/secevent/grant-revoked	MMCCS011	This object groups the related data items shown beneath it within a market message. It does not have a value of its own, but its YAML name appears in the message.
DICCS104	Event Timestamp	The date and time when the event took effect at the CCS.	Number	Unix timestamp	10	10	No	event_timestamp	MMCCS006; MMCCS011; MMCCS012; MMCCS013	
DICCS105	Revocation Reason	The reason code explaining why the Permission grant is being revoked.	String	General character string	N/A	N/A	Yes	revocation_reason	MMCCS011; MMCCS014	

Data Item Reference	Data Item Name	Description	Data Type	Format	Logical Length	Physical Length	Enumeration Yes or No	YAML Name	Market Messages	Notes
DICCS106	Permission Queried Event	The event type that indicates a Permission has been queried.	Object	URI	N/A	N/A	No	https://schemas.recco.com/secevent/grant-queried	MMCCS012	This object groups the related data items shown beneath it within a market message. It does not have a value of its own, but its YAML name appears in the message.
DICCS107	Query Reason	The reason code explaining why the Energy Data Subject queried the Permission grant.	String	General character string	N/A	N/A	Yes	query_reason	MMCCS012	
DICCS108	Permission Verification Required Event	The event type that indicates a Permission must be verified.	Object	URI	N/A	N/A	No	https://schemas.recco.com/secevent/permission-verification-required	MMCCS013	This object groups the related data items shown beneath it within a market message. It does not have a value of its own, but its YAML name appears in the message.
DICCS109	Token	The Refresh Token the ATP asks the CCS to revoke.	String	General character string	N/A	N/A	No	token	MMCCS014	
DICCS110	Token Type Hint	Information that identifies the type of token and helps the CCS process the revocation request.	String	General character string	13	13	Yes	token_type_hint	MMCCS014	
DICCS111	Refresh Token Grant Type	Identifies a Refresh Token grant used to request a new Access Token.	String	General character string	N/A	N/A	Yes	grant_type	MMCCS015	

Data Item Reference	Data Item Name	Description	Data Type	Format	Logical Length	Physical Length	Enumeration Yes or No	YAML Name	Market Messages	Notes
DICCS112	Organisation ID	The unique identifier assigned to the organisation.	String	UUID	N/A	40	No	OrganisationId	MMCCS018; MMCCS027; MMCCS029; MMCCS031; MMCCS033; MMCCS035; MMCCS037; MMCCS038; MMCCS039; MMCCS041; MMCCS043; MMCCS044	
DICCS113	Participant Registration Status	The current directory registration status of the participant organisation.	String	General character string	N/A	N/A	Yes	Status	MMCCS018	
DICCS114	Organisation Name	The name of the organisation.	String	General character string	N/A	255	No	OrganisationName	MMCCS018	
DICCS115	Created On	The date and time when the organisation record was created.	Number	High resolution datetime.	20	20	No	CreatedOn	MMCCS018	
DICCS116	Legal Entity Name	The organisation's legal entity name. This is usually the same as its organisation name.	String	General character string	N/A	255	No	LegalEntityName	MMCCS018	
DICCS117	Country of Registration	Country of registration for the organisation.	String	General character string	N/A	255	No	CountryOfRegistration	MMCCS018	
DICCS118	Company Register	The official company register that records the organisation, such as Companies House.	String	General character string	N/A	255	No	CompanyRegister	MMCCS018	
DICCS119	Organisation Tag	A label used to describe or categorise the organisation.	String	General character string	N/A	255	No	Tag	MMCCS018	
DICCS120	Organisation Size	The size category recorded for the organisation.	String	General character string	N/A	255	No	Size	MMCCS018	

Data Item Reference	Data Item Name	Description	Data Type	Format	Logical Length	Physical Length	Enumeration Yes or No	YAML Name	Market Messages	Notes
DICCS121	Registration Number	The organisation's registration number in its official company register.	String	General character string	N/A	255	No	RegistrationNumber	MMCCS018	
DICCS122	Organisation Registration ID	The organisation's registered legal-entity identifier.	String	General character string	N/A	40	No	RegistrationId	MMCCS018	
DICCS123	Registered Name	The organisation's registered legal name.	String	General character string	N/A	255	No	RegisteredName	MMCCS018	
DICCS124	Address Line 1	The first line of the address.	String	General character string	N/A	255	No	AddressLine1	MMCCS018	
DICCS125	Address Line 2	The second line of the address.	String	General character string	N/A	255	No	AddressLine2	MMCCS018	
DICCS126	City	The city in the address.	String	General character string	N/A	255	No	City	MMCCS018	
DICCS127	Postcode	The postcode in the address.	String	General character string	N/A	40	No	Postcode	MMCCS018	
DICCS128	Country	The country in the address.	String	General character string	N/A	255	No	Country	MMCCS018	
DICCS129	Parent Organisation Reference	The reference for the organisation's parent organisation.	String	General character string	N/A	65535	No	ParentOrganisationReference	MMCCS018	
DICCS130	Authorisation Servers	The authorisation servers registered for the organisation.	Object	N/A	N/A	N/A	No	AuthorisationServers	MMCCS018; MMCCS030	This object groups the related data items shown beneath it within a market message. It does not have a value of its own, but its YAML name appears in the message.

Data Item Reference	Data Item Name	Description	Data Type	Format	Logical Length	Physical Length	Enumeration Yes or No	YAML Name	Market Messages	Notes
DICCS131	Authorisation Server ID	The unique identifier for the authorisation server.	String	UUID	N/A	40	No	AuthorisationServerId	MMCCS018; MMCCS030; MMCCS031; MMCCS032; MMCCS033; MMCCS035; MMCCS036	
DICCS132	Auto Registration Supported	Indicates whether the authorisation server supports automatic onboarding of software statement clients.	Boolean	true/false	N/A	N/A	No	AutoRegistrationSupported	MMCCS018; MMCCS030; MMCCS032	
DICCS133	Supports CIBA	Indicates whether the authorisation server supports Client-Initiated Backchannel Authentication (CIBA).	Boolean	true/false	N/A	N/A	No	SupportsCiba	MMCCS018; MMCCS030; MMCCS032	
DICCS134	Supports DCR	Indicates whether the authorisation server supports Dynamic Client Registration (DCR).	Boolean	true/false	N/A	N/A	No	SupportsDCR	MMCCS018; MMCCS030; MMCCS032	
DICCS135	API Resources	The API resources published by the authorisation server.	Object	N/A	N/A	N/A	No	ApiResources	MMCCS018; MMCCS030; MMCCS032	This object groups the related data items shown beneath it within a market message. It does not have a value of its own, but its YAML name appears in the message.
DICCS136	API Resource ID	The unique identifier of an API resource version.	String	UUID	N/A	40	No	ApiResourceId	MMCCS018; MMCCS030; MMCCS032; MMCCS034	
DICCS137	API Version	The version number of the API.	String	General character string	N/A	N/A	No	ApiVersion	MMCCS018; MMCCS030; MMCCS032; MMCCS034	

Data Item Reference	Data Item Name	Description	Data Type	Format	Logical Length	Physical Length	Enumeration Yes or No	YAML Name	Market Messages	Notes
DICCS138	API Discovery Endpoints	The endpoints used to access the API resource.	Object	N/A	N/A	N/A	No	ApiDiscoveryEndpoints	MMCCS018; MMCCS030; MMCCS032; MMCCS034	This object groups the related data items shown beneath it within a market message. It does not have a value of its own, but its YAML name appears in the message.
DICCS139	API Discovery ID	The unique identifier of the API discovery endpoint record.	String	UUID	N/A	40	No	ApiDiscoveryId	MMCCS018; MMCCS030; MMCCS032; MMCCS034	
DICCS140	API Endpoint	A web address that meets the required URI format.	String	URI	N/A	255	No	ApiEndpoint	MMCCS018; MMCCS030; MMCCS032; MMCCS034	
DICCS141	Family Complete	Indicates whether all related endpoints for the API resource have been published.	Boolean	true/false	N/A	N/A	No	FamilyComplete	MMCCS018; MMCCS030; MMCCS032; MMCCS034	
DICCS142	API Certification URI	The location of the API certification evidence.	String	URI	N/A	500	No	ApiCertificationUri	MMCCS018; MMCCS030; MMCCS032; MMCCS034	
DICCS143	Participant API Resource Certification Status	The certification status of an API resource returned in the participant discovery response.	String	General character string	N/A	N/A	Yes	CertificationStatus	MMCCS018	
DICCS144	Certification Start Date	The date and time when the certification starts.	Number	Calendar date	10	10	No	CertificationStartDate	MMCCS018; MMCCS030; MMCCS032; MMCCS034; MMCCS036; MMCCS038; MMCCS042	

Data Item Reference	Data Item Name	Description	Data Type	Format	Logical Length	Physical Length	Enumeration Yes or No	YAML Name	Market Messages	Notes
DICCS145	Certification Expiration Date	The date and time when the certification expires.	Number	Calendar date	10	10	No	CertificationExpirationDate	MMCCS018; MMCCS030; MMCCS032; MMCCS034; MMCCS036; MMCCS038; MMCCS042	
DICCS146	API Family Type	The type of API described by the record.	String	General character string	N/A	128	No	ApiFamilyType	MMCCS018; MMCCS030; MMCCS032; MMCCS034	
DICCS147	Authorisation Server Certifications	The certifications recorded for the authorisation server.	Object	N/A	N/A	N/A	No	AuthorisationServerCertifications	MMCCS018; MMCCS030; MMCCS032; MMCCS036	This object groups the related data items shown beneath it within a market message. It does not have a value of its own, but its YAML name appears in the message.
DICCS148	Certification Identifier	The unique identifier of the relevant certification record.	String	UUID	N/A	40	No	CertificationId	MMCCS018; MMCCS030; MMCCS032; MMCCS036; MMCCS038; MMCCS042	
DICCS149	Participant Authorisation Server Certification Status	The current status of an authorisation server certification returned in the participant discovery response.	String	General character string	N/A	N/A	Yes	Status	MMCCS018	
DICCS150	Participant Certification Profile Variant	The certification profile variant returned in the participant discovery response.	String	General character string	N/A	N/A	Yes	ProfileVariant	MMCCS018	

Data Item Reference	Data Item Name	Description	Data Type	Format	Logical Length	Physical Length	Enumeration Yes or No	YAML Name	Market Messages	Notes
DICCS151	Profile Version	The version number of the certification.	Number	Integer	N/A	N/A	No	ProfileVersion	MMCCS018; MMCCS030; MMCCS032; MMCCS036; MMCCS038; MMCCS042	
DICCS152	Certification URI	The location of the certification evidence.	String	URI	N/A	500	No	CertificationURI	MMCCS018; MMCCS030; MMCCS032; MMCCS036; MMCCS038; MMCCS042	
DICCS153	Customer Friendly Description	A description of the authorisation server used in Energy Data Subject interactions.	String	General character string	N/A	255	No	CustomerFriendlyDescription	MMCCS018; MMCCS030; MMCCS032	
DICCS154	Customer Friendly Logo URI	The URI for a logo used in Energy Data Subject interactions.	String	URI	N/A	255	No	CustomerFriendlyLogoUri	MMCCS018; MMCCS030; MMCCS032	
DICCS155	Customer Friendly Name	The name of the authorisation server used in Energy Data Subject interactions.	String	General character string	N/A	255	No	CustomerFriendlyName	MMCCS018; MMCCS030; MMCCS032	
DICCS156	Developer Portal URI	The URI for the developer portal.	String	URI	N/A	255	No	DeveloperPortalUri	MMCCS018; MMCCS030; MMCCS032	
DICCS157	Terms of Service URI	The URI for the terms of service.	String	URI	N/A	255	No	TermsOfServiceUri	MMCCS018; MMCCS030; MMCCS032; MMCCS038	
DICCS158	OpenID Discovery Document	The URI for the OpenID discovery document.	String	URI	N/A	255	No	OpenIDDiscoveryDocument	MMCCS018; MMCCS030; MMCCS032	
DICCS159	Issuer	The CCS Issuer Identifier published in the transmitter configuration.	String	URI	N/A	N/A	No	Issuer	MMCCS018; MMCCS020; MMCCS030; MMCCS032	
DICCS160	Payload Signing Certificate Location URI	The URI for the payload signing certificate location.	String	URI	N/A	255	No	PayloadSigningCertificateLocationUri	MMCCS018; MMCCS030; MMCCS032	

Data Item Reference	Data Item Name	Description	Data Type	Format	Logical Length	Physical Length	Enumeration Yes or No	YAML Name	Market Messages	Notes
DICCS161	Parent Authorisation Server ID	The unique identifier for the parent authorisation server.	String	UUID	N/A	40	No	ParentAuthorisationServerId	MMCCS018; MMCCS030; MMCCS032	
DICCS162	Org Domain Claims	The organisation's registered authorisation-domain claims.	Object	N/A	N/A	N/A	No	OrgDomainClaims	MMCCS018	This object groups the related data items shown beneath it within a market message. It does not have a value of its own, but its YAML name appears in the message.
DICCS163	Organisation Authority Domain Claim ID	The unique identifier of the organisation's authority domain claim.	String	UUID	N/A	N/A	No	OrganisationAuthorityDomainClaimId	MMCCS018	
DICCS164	Authorisation Domain Name	The name of the authorisation domain.	String	General character string	N/A	N/A	No	AuthorisationDomainName	MMCCS018; MMCCS028; MMCCS040	
DICCS165	Authority ID	The globally unique identifier of the authority.	String	UUID	N/A	N/A	No	AuthorityId	MMCCS018	
DICCS166	Authority Name	The name of the authority.	String	General character string	N/A	N/A	No	AuthorityName	MMCCS018; MMCCS040	
DICCS167	Resource Status	The current status of the relevant directory resource.	String	General character string	N/A	N/A	Yes	Status	MMCCS018; MMCCS028; MMCCS030; MMCCS032; MMCCS034; MMCCS036; MMCCS038; MMCCS040; MMCCS042	

Data Item Reference	Data Item Name	Description	Data Type	Format	Logical Length	Physical Length	Enumeration Yes or No	YAML Name	Market Messages	Notes
DICCS168	Org Domain Role Claims	The roles the organisation holds within its authorisation domains.	Object	N/A	N/A	N/A	No	OrgDomainRoleClaims	MMCCS018	This object groups the related data items shown beneath it within a market message. It does not have a value of its own, but its YAML name appears in the message.
DICCS169	Organisation Authority Claim ID	The unique identifier associated with the authority claim.	String	UUID	N/A	40	No	OrganisationAuthorityClaimId	MMCCS018	
DICCS170	Authorisation Domain	The authorisation domain associated with the authority.	String	General character string	N/A	30	No	AuthorisationDomain	MMCCS018; MMCCS040	
DICCS171	Role	The role held within the authorisation domain.	String	General character string	N/A	30	No	Role	MMCCS018; MMCCS040	
DICCS172	Country Authorisations	The countries where the authority role is authorised and the status of each authorisation.	Object	N/A	N/A	N/A	No	Authorisations	MMCCS018	This object groups the related data items shown beneath it within a market message. It does not have a value of its own, but its YAML name appears in the message.
DICCS173	Member State	The two-letter code for the country where the authorisation applies.	String	General character string	N/A	2	No	MemberState	MMCCS018	Populated in accordance with ISO 3166 Alpha-2 assigned codes.
DICCS174	Authorisation Endpoint	The endpoint that the consumer's browser uses to complete authentication and grant Permission.	String	URI	N/A	N/A	No	authorization_endpoint	MMCCS020	
DICCS175	Pushed Authorization Request Endpoint	The endpoint used to submit the signed authorisation request, as defined in RFC 9126.	String	URI	N/A	N/A	No	pushed_authorization_request_endpoint	MMCCS020	

Data Item Reference	Data Item Name	Description	Data Type	Format	Logical Length	Physical Length	Enumeration Yes or No	YAML Name	Market Messages	Notes
DICCS176	Token Endpoint	The endpoint used to exchange a grant for tokens.	String	URI	N/A	N/A	No	token_endpoint	MMCCS020	
DICCS177	Revocation Endpoint	The endpoint used to revoke a Refresh Token, as defined in RFC 7009.	String	URI	N/A	N/A	No	revocation_endpoint	MMCCS020	
DICCS178	Grant Endpoint	The endpoint used to retrieve the current state of a grant. The grant id is added to the endpoint address.	String	URI	N/A	N/A	No	grant_endpoint	MMCCS020	
DICCS179	Response Types Supported	The response types supported by the CCS.	String	General character string	4	4	Yes	response_types_supported	MMCCS020	Only the authorization code flow is supported, so tokens are not returned through the consumer's browser.
DICCS180	Grant Types Supported	The grant types accepted by the token endpoint.	String	General character string	N/A	N/A	Yes	grant_types_supported	MMCCS020	
DICCS181	Code Challenge Methods Supported	The methods the CCS supports for creating a PKCE Code Challenge.	String	General character string	4	4	Yes	code_challenge_methods_supported	MMCCS020	The CCS requires S256 and does not support the plain method.
DICCS182	Token Endpoint Auth Methods Supported	The client authentication methods accepted by the token endpoint.	String	General character string	15	N/A	Yes	token_endpoint_auth_methods_supported	MMCCS020	The Security Profile limits this to a single method.
DICCS183	Token Endpoint Authentication Signing Algorithms Supported	The signing algorithms the CCS accepts for client authentication assertions.	String	General character string	5	5	Yes	token_endpoint_auth_signing_alg_values_supported	MMCCS020	
DICCS184	Require Pushed Authorization Requests	Indicates that every authorisation request must first be submitted through the Pushed Authorization Request endpoint.	Boolean	true/false	4	4	Yes	require_pushed_authorization_requests	MMCCS020	The CCS does not accept request details that were not submitted through this endpoint.

Data Item Reference	Data Item Name	Description	Data Type	Format	Logical Length	Physical Length	Enumeration Yes or No	YAML Name	Market Messages	Notes
DICCS185	Request Parameter Supported	Indicates that authorisation request details can be supplied in a signed request object using the request parameter.	Boolean	true/false	4	4	Yes	request_parameter_supported	MMCCS020	
DICCS186	Request URI Parameter Supported	Indicates whether the CCS can use a Request URI to retrieve a request object. It cannot. The Request URI sent to the authorisation endpoint is instead the reference returned by the Pushed Authorization Request endpoint.	Boolean	true/false	5	5	Yes	request_uri_parameter_supported	MMCCS020	
DICCS187	Require Signed Request Object	Indicates whether the software client must send its authorisation request parameters in a signed request object.	Boolean	true/false	4	4	Yes	require_signed_request_object	MMCCS020	
DICCS188	Request Object Signing Algorithms Supported	The signing algorithms the CCS accepts for signed authorisation request objects.	String	General character string	5	5	Yes	request_object_signing_alg_values_supported	MMCCS020	
DICCS189	Permission Data Types Supported	The Permission data types the CCS Authorisation Server supports.	String	General character string	N/A	N/A	Yes	authorization_details_types_supported	MMCCS020	
DICCS190	TLS Client Certificate Bound Access Tokens	Indicates that each access token can be used only with the client certificate used when it was issued, as defined in RFC 8705. The CCS does not issue Access Tokens that can be used without that certificate.	Boolean	true/false	4	N/A	Yes	tls_client_certificate_bound_access_tokens	MMCCS020	
DICCS191	Scopes Supported	The scopes an ATP may request. The scopes available to each ATP are recorded in the CCS Directory.	String	General character string	N/A	N/A	No	scopes_supported	MMCCS020	

Data Item Reference	Data Item Name	Description	Data Type	Format	Logical Length	Physical Length	Enumeration Yes or No	YAML Name	Market Messages	Notes
DICCS192	Claims Supported	The Energy Data Subject identity claims the CCS can release.	String	General character string	N/A	N/A	No	claims_supported	MMCCS020	
DICCS193	Grant Management Actions Supported	The grant management actions supported by the authorisation server.	String	General character string	N/A	N/A	No	grant_management_actions_supported	MMCCS020	
DICCS194	Grant Management Action Required Indicator	Indicates whether every authorisation request must state a grant-management action.	Boolean	true/false	5	5	Yes	grant_management_action_required	MMCCS020	
DICCS195	Claims Parameter Supported	Indicates that the CCS accepts the claims request parameter. This allows an ATP to request a specific identity claim instead of all claims in a scope.	Boolean	true/false	4	5	Yes	claims_parameter_supported	MMCCS020	
DICCS196	mTLS Endpoint Aliases	The alternative mTLS addresses for endpoints where a client must present a certificate. An ATP uses these addresses instead of the corresponding addresses on the issuer host.	Object	N/A	N/A	N/A	No	mtls_endpoint_aliases	MMCCS020	This object groups the related data items shown beneath it within a market message. It does not have a value of its own, but its YAML name appears in the message.
DICCS197	mTLS Token Endpoint Alias	The mTLS endpoint alias used to revoke a Refresh Token when the client presents a certificate.	String	URI	N/A	N/A	No	token_endpoint	MMCCS020	
DICCS198	mTLS Revocation Endpoint Alias	The mTLS endpoint alias used to retrieve the current state of a grant when the client presents a certificate.	String	URI	N/A	N/A	No	revocation_endpoint	MMCCS020	
DICCS199	mTLS Pushed Authorisation Request Endpoint Alias	The mTLS endpoint alias used to exchange a grant for tokens when the client presents a certificate.	String	URI	N/A	N/A	No	pushed_authorization_request_endpoint	MMCCS020	

Data Item Reference	Data Item Name	Description	Data Type	Format	Logical Length	Physical Length	Enumeration Yes or No	YAML Name	Market Messages	Notes
DICCS200	mTLS Grant Endpoint Alias	The mTLS endpoint alias used to retrieve the current state of a grant when the client presents a certificate.	String	URI	N/A	N/A	No	grant_endpoint	MMCCS020	
DICCS201	JSON Web Keys	The public signing keys currently published by the CCS.	Object	N/A	N/A	N/A	No	keys	MMCCS022	This object groups the related data items shown beneath it within a market message. It does not have a value of its own, but its YAML name appears in the message.
DICCS202	JSON Web Key Type	The key type.	String	General character string	N/A	N/A	No	ktv	MMCCS022; MMCCS044	
DICCS203	JSON Web Key Identifier	The identifier of the key. It is matched against the Key ID in the header of a JSON Web Token to identify the correct verification key.	String	General character string	N/A	N/A	No	kid	MMCCS022; MMCCS044	
DICCS204	Key Use	What the key is published for. The CCS publishes signing keys here.	String	General character string	N/A	N/A	No	use	MMCCS022; MMCCS044	
DICCS205	Cryptographic Algorithm	The algorithm the key is used with.	String	General character string	N/A	N/A	No	alg	MMCCS022; MMCCS044	
DICCS206	RSA Modulus	The main numeric value used by the RSA public key, encoded using base64url.	String	General character string	N/A	N/A	No	n	MMCCS022; MMCCS044	
DICCS207	RSA Exponent	The public exponent used by the RSA key, encoded using base64url.	String	General character string	N/A	N/A	No	e	MMCCS022; MMCCS044	
DICCS208	Grant Status	Whether the grant is still live.	String	General character string	N/A	N/A	Yes	status	MMCCS024	
DICCS209	Grant Created At	The date and time when the grant was created.	Number	Unix timestamp	N/A	N/A	No	created_at	MMCCS024	

Data Item Reference	Data Item Name	Description	Data Type	Format	Logical Length	Physical Length	Enumeration Yes or No	YAML Name	Market Messages	Notes
DICCS210	Grant Last Updated At	The date and time when the grant was last updated.	Number	Unix timestamp	N/A	N/A	No	last_updated_at	MMCCS024	
DICCS211	Grant Expires At	The date and time when the Permission supporting the grant expires.	Number	Unix timestamp	N/A	N/A	No	expires_at	MMCCS024	
DICCS212	Grant Updated By	The party that last updated the grant, indicating whether the change was made by the ATP or the CCS.	String	General character string	N/A	N/A	Yes	updated_by	MMCCS024	
DICCS213	Grant Scopes	The scopes the grant covers.	Object	N/A	N/A	N/A	No	scopes	MMCCS024	This object groups the related data items shown beneath it within a market message. It does not have a value of its own, but its YAML name appears in the message.
DICCS214	Grant Identity Claims	The Energy Data Subject identity claims covered by the grant.	String	General character string	N/A	N/A	No	claims	MMCCS024	
DICCS215	Permission Authorisation Details	The Permission requested or granted, including its dataset, purpose, duration, and dataset-specific details.	Object	N/A	N/A	N/A	No	authorization_details	MMCCS007; MMCCS010; MMCCS016; MMCCS024	This object groups the related data items shown beneath it within a market message. It does not have a value of its own, but its YAML name appears in the message.
DICCS216	Client Credentials Grant Type	Identifies a client credentials grant used to request an access token for the client.	String	General character string	N/A	N/A	Yes	grant_type	MMCCS025	
DICCS217	User ID	The unique identifier of the user.	String	UUID	N/A	N/A	No	UserID	MMCCS027; MMCCS028	
DICCS218	User Email Address	The administration user's email address.	String	General character string	N/A	N/A	No	Email	MMCCS028	

Data Item Reference	Data Item Name	Description	Data Type	Format	Logical Length	Physical Length	Enumeration Yes or No	YAML Name	Market Messages	Notes
DICCS219	Legacy User Email Address	The administration user's email address in the deprecated legacy field.	String	General character string	N/A	N/A	No	UserEmail	MMCCS028	
DICCS220	Domain Role Details	The administration user's roles within registered authorisation domains.	Object	N/A	N/A	N/A	No	DomainRoleDetails	MMCCS028	This object groups the related data items shown beneath it within a market message. It does not have a value of its own, but its YAML name appears in the message.
DICCS221	Authorisation Domain Role Name	The name of the user's role within the authorisation domain.	String	General character string	N/A	60	No	AuthorisationDomainRoleName	MMCCS028; MMCCS040	
DICCS222	Contact Role	The name of the authorisation domain user type.	String	General character string	N/A	255	No	ContactRole	MMCCS028	
DICCS223	User Type ID	The unique identifier of the authorisation domain user type.	String	UUID	N/A	N/A	No	UserTypeID	MMCCS028	
DICCS224	System	The name of the authorisation domain user type.	String	General character string	N/A	255	No	System	MMCCS028	
DICCS225	Page Number	The page number to return from the result set.	Number	Integer	N/A	N/A	No	page	MMCCS029; MMCCS033; MMCCS035; MMCCS037; MMCCS041; MMCCS043	
DICCS226	Page Size	The number of records to return on each page.	Number	Integer	N/A	N/A	No	size	MMCCS029; MMCCS030; MMCCS033; MMCCS035; MMCCS036; MMCCS037; MMCCS038; MMCCS041; MMCCS043; MMCCS044	

Data Item Reference	Data Item Name	Description	Data Type	Format	Logical Length	Physical Length	Enumeration Yes or No	YAML Name	Market Messages	Notes
DICCS227	Sort	The field or fields used to sort the results.	String	General character string	N/A	N/A	No	sort	MMCCS029; MMCCS033; MMCCS035; MMCCS037; MMCCS041; MMCCS043	
DICCS228	Contains OpenID Discovery Document Filter	Filters responses according to whether they contain an OpenID Discovery Document.	Boolean	true/false	N/A	N/A	No	containsOpenIdDiscoveryDocument	MMCCS029	
DICCS229	Omit From Ecosystem Filter	Filters responses according to whether the Omit From Ecosystem value matches the input.	Boolean	true/false	N/A	N/A	No	omitFromEcosystem	MMCCS029	
DICCS230	Authorisation Server Status Filter	Filters authorisation servers by their current status.	String	General character string	N/A	N/A	Yes	status	MMCCS029	
DICCS231	Search Filter	Filters responses by Consumer Friendly Name or Authorisation Server ID. The match ignores letter case and can occur anywhere in the value.	String	General character string	N/A	N/A	No	filterBy	MMCCS029; MMCCS037	
DICCS232	Authorisation Servers Page	The paged form of the authorisation server response, including paging details and the returned records.	Object	N/A	N/A	N/A	No	AuthorisationServersPage	MMCCS030	This object groups the related data items shown beneath it within a market message. It does not have a value of its own, but its YAML name appears in the message.
DICCS233	Total Pages	The total number of pages available.	Number	Integer	N/A	N/A	No	totalPages	MMCCS030; MMCCS036; MMCCS038; MMCCS044	
DICCS234	Total Results	The total number of records available across all pages.	Number	Integer	N/A	N/A	No	totalSize	MMCCS030; MMCCS036; MMCCS038; MMCCS044	

Data Item Reference	Data Item Name	Description	Data Type	Format	Logical Length	Physical Length	Enumeration Yes or No	YAML Name	Market Messages	Notes
DICCS235	Pagination Details	Information describing the requested or returned page of results.	Object	N/A	N/A	N/A	No	pageable	MMCCS030; MMCCS036; MMCCS038; MMCCS044	This object groups the related data items shown beneath it within a market message. It does not have a value of its own, but its YAML name appears in the message.
DICCS236	Page Number	The number of the requested or returned page.	Number	Integer	N/A	N/A	No	number	MMCCS030; MMCCS036; MMCCS038; MMCCS044	
DICCS237	Sort	The field or fields used to order the returned results.	Object	N/A	N/A	N/A	No	sort	MMCCS030; MMCCS036; MMCCS038; MMCCS044	This object groups the related data items shown beneath it within a market message. It does not have a value of its own, but its YAML name appears in the message.
DICCS238	Sorted Indicator	Indicates whether the results are sorted.	Boolean	true/false	N/A	N/A	No	sorted	MMCCS030; MMCCS036; MMCCS038; MMCCS044	
DICCS239	Sort Order	The rules used to order the returned records.	Object	N/A	N/A	N/A	No	orderBy	MMCCS030; MMCCS036; MMCCS038; MMCCS044	This object groups the related data items shown beneath it within a market message. It does not have a value of its own, but its YAML name appears in the message.

Data Item Reference	Data Item Name	Description	Data Type	Format	Logical Length	Physical Length	Enumeration Yes or No	YAML Name	Market Messages	Notes
DICCS240	Sort Property	The name of the property used to sort the results.	String	General character string	N/A	N/A	No	property	MMCCS030; MMCCS036; MMCCS038; MMCCS044	
DICCS241	Sort Direction	Whether the results are sorted in ascending or descending order.	String	General character string	N/A	N/A	Yes	direction	MMCCS030; MMCCS036; MMCCS038; MMCCS044	
DICCS242	Ignore Case Indicator	Indicates whether differences between uppercase and lowercase letters were ignored when sorting.	Boolean	true/false	N/A	N/A	No	ignoreCase	MMCCS030; MMCCS036; MMCCS038; MMCCS044	
DICCS243	Ascending Sort Indicator	Indicates whether the results are sorted in ascending order.	Boolean	true/false	N/A	N/A	No	ascending	MMCCS030; MMCCS036; MMCCS038; MMCCS044	
DICCS244	Page Offset	The number of records skipped before the returned page starts.	Number	Integer	N/A	N/A	No	offset	MMCCS030; MMCCS036; MMCCS038; MMCCS044	
DICCS245	Unpaged Indicator	Indicates whether the response is returned as a single unpaged set.	Boolean	true/false	N/A	N/A	No	unpaged	MMCCS030; MMCCS036; MMCCS038; MMCCS044	
DICCS246	Pagination Mode	The method used to move through pages of results..	String	General character string	N/A	N/A	Yes	mode	MMCCS030; MMCCS036; MMCCS038; MMCCS044	
DICCS247	Number of Results	The number of records returned on the current page.	Number	Integer	N/A	N/A	No	numberOfElements	MMCCS030; MMCCS036; MMCCS038; MMCCS044	
DICCS248	Empty Page Indicator	Indicates whether the returned page contains no records.	Boolean	true/false	N/A	N/A	No	empty	MMCCS030; MMCCS036; MMCCS038; MMCCS044	

Data Item Reference	Data Item Name	Description	Data Type	Format	Logical Length	Physical Length	Enumeration Yes or No	YAML Name	Market Messages	Notes
DICCS249	Page Number	The number of the requested or returned page.	Number	Integer	N/A	N/A	No	pageNumber	MMCCS030; MMCCS036; MMCCS038; MMCCS044	
DICCS250	Response Content	The records returned in the response. In a paged response they appear under content. In an unpagged response they form the response body.	Object	N/A	N/A	N/A	No	content	MMCCS030; MMCCS036; MMCCS038; MMCCS044	This object groups the related data items shown beneath it within a market message. It does not have a value of its own, but its YAML name appears in the message.
DICCS251	Auto Registration Notification Webhook	A web address used to subscribe notifications relating to automatic software statement onboarding.	String	URI	N/A	255	No	AutoRegistrationNotificationWebhook	MMCCS030; MMCCS032	
DICCS252	Notification Webhook	A web address used to receive notifications.	String	URI	N/A	255	No	NotificationWebhook	MMCCS030; MMCCS032; MMCCS038	
DICCS253	Deprecated Date	The date when support for the authorisation server is deprecated or ends.	Number	Calendar date	10	10	No	DeprecatedDate	MMCCS030; MMCCS032	
DICCS254	Retirement Date	The date when the authorisation server is retired.	Number	Calendar date	10	10	No	RetirementDate	MMCCS030; MMCCS032	
DICCS255	Superseded By Authorisation Server ID	The identifier of the authorisation server that replaces the current server.	String	UUID	N/A	N/A	No	SupersededByAuthorisationServerId	MMCCS030; MMCCS032	
DICCS256	Omit From Ecosystem	Indicates whether the entity should be excluded from the relevant ecosystem. For example, an excluded authorisation server does not appear in the participants endpoint or OpenID Federation information.	Boolean	true/false	N/A	N/A	No	OmitFromEcosystem	MMCCS030; MMCCS032	

Data Item Reference	Data Item Name	Description	Data Type	Format	Logical Length	Physical Length	Enumeration Yes or No	YAML Name	Market Messages	Notes
DICCS257	Notification Webhook Added Date	The date when the notification webhook was added.	Number	Calendar date	10	10	No	NotificationWebhookAddedDate	MMCCS030; MMCCS032	
DICCS258	Notification Webhook Status	The current status of the notification webhook.	String	General character string	N/A	N/A	Yes	NotificationWebhookStatus	MMCCS030; MMCCS032; MMCCS038	
DICCS259	Supports Redirect	Indicates whether the authorisation server supports redirect.	Boolean	true/false	N/A	N/A	No	SupportsRedirect	MMCCS030; MMCCS032	
DICCS260	Created At	The date and time the record was created.	Number	Calendar date	10	10	No	CreatedAt	MMCCS030; MMCCS032; MMCCS038	
DICCS261	Flags	The CCS Directory flags attached to the record.	Object	N/A	N/A	N/A	No	Flags	MMCCS030; MMCCS032; MMCCS038	This object groups the related data items shown beneath it within a market message. It does not have a value of its own, but its YAML name appears in the message.
DICCS262	Flag ID	The unique identifier of the CCS Directory flag.	String	UUID	N/A	40	No	Id	MMCCS030; MMCCS032; MMCCS038	
DICCS263	Updated At	The date and time the record was last updated.	Number	Calendar date	10	10	No	UpdatedAt	MMCCS030; MMCCS032; MMCCS038	
DICCS264	Flag Name	The name of the CCS Directory flag.	String	General character string	N/A	255	No	Name	MMCCS030; MMCCS032; MMCCS038	
DICCS265	Resource Description	Text describing the relevant CCS Directory resource or item.	String	General character string	N/A	255	No	Description	MMCCS030; MMCCS032; MMCCS038; MMCCS044	
DICCS266	Flag Type	The type of the CCS Directory flag.	String	General character string	N/A	N/A	Yes	Type	MMCCS030; MMCCS032; MMCCS038	

Data Item Reference	Data Item Name	Description	Data Type	Format	Logical Length	Physical Length	Enumeration Yes or No	YAML Name	Market Messages	Notes
DICCS267	Flag Value	The value assigned to the CCS Directory flag.	String	General character string	N/A	255	No	Value	MMCCS030; MMCCS032; MMCCS038	
DICCS268	Access Level	The access level of the CCS Directory flag. A higher number indicates more sensitive information.	Number	Integer	N/A	N/A	No	AccessLevel	MMCCS030; MMCCS032; MMCCS038	
DICCS269	API Metadata	Additional metadata published for the API resource. The supplied specification does not define its internal properties.	Object	N/A	N/A	N/A	No	ApiMetadata	MMCCS030; MMCCS032; MMCCS034	This object groups the related data items shown beneath it within a market message. It does not have a value of its own, but its YAML name appears in the message.
DICCS270	API Family ID	The unique identifier of the API family.	String	UUID	N/A	N/A	No	ApiFamilyID	MMCCS030; MMCCS032; MMCCS034	
DICCS271	Certification Status	Indicates whether the certification is current or expired.	String	General character string	N/A	N/A	Yes	CertificationStatus	MMCCS030; MMCCS032; MMCCS034; MMCCS036; MMCCS038; MMCCS042	
DICCS272	Directory Certification Profile Variant	The certification profile variant recorded for a directory certification.	String	General character string	N/A	N/A	No	ProfileVariant	MMCCS030; MMCCS032; MMCCS036; MMCCS038; MMCCS042	
DICCS273	Profile Type	The type of certification profile.	String	General character string	N/A	N/A	No	ProfileType	MMCCS030; MMCCS032; MMCCS036; MMCCS038; MMCCS042	
DICCS274	API Resource Status Filter	Filters API resources by status.	String	General character string	N/A	N/A	No	status	MMCCS033	

Data Item Reference	Data Item Name	Description	Data Type	Format	Logical Length	Physical Length	Enumeration Yes or No	YAML Name	Market Messages	Notes
DICCS275	Authorisation Server Certifications Page	The paged form of the authorisation server certification response, including paging details and the returned records.	Object	N/A	N/A	N/A	No	AuthorisationServerCertificationsPage	MMCCS036	This object groups the related data items shown beneath it within a market message. It does not have a value of its own, but its YAML name appears in the message.
DICCS276	Software Statement Status Filter	Filters software statements by their current status.	String	General character string	N/A	N/A	Yes	status	MMCCS037	
DICCS277	Software Statement Status	The current status of the software statement.	String	General character string	N/A	N/A	Yes	Status	MMCCS038	
DICCS278	Client ID	The registered identifier of the ATP or software client making the request.	String	General character string	N/A	255	No	ClientId	MMCCS038	
DICCS279	Client Name	The name of the software statement client.	String	General character string	N/A	255	No	ClientName	MMCCS038; MMCCS044	
DICCS280	Environment	The operating environment associated with the software statement.	String	General character string	N/A	40	No	Environment	MMCCS038	
DICCS281	Software Statement ID	The unique identifier of the software statement.	String	UUID	N/A	40	No	SoftwareStatementId	MMCCS038; MMCCS039; MMCCS041; MMCCS042	
DICCS282	Software Statement Mode	The operating mode recorded for the software statement.	String	General character string	N/A	N/A	Yes	Mode	MMCCS038	
DICCS283	CCS Client Created Indicator	Indicates whether the software client was created through the CCS registration process.	Boolean	true/false	N/A	N/A	No	RtsClientCreated	MMCCS038	

Data Item Reference	Data Item Name	Description	Data Type	Format	Logical Length	Physical Length	Enumeration Yes or No	YAML Name	Market Messages	Notes
DICCS284	On Behalf Of	A reference to the fourth party organisation in the CCS Directory when the registering organisation is acting on its behalf.	String	General character string	N/A	255	No	OnBehalfOf	MMCCS038	
DICCS285	Policy URI	A web address for the client's human readable privacy policy.	String	URI	N/A	255	No	PolicyUri	MMCCS038	
DICCS286	Client URI	The web address for information about the software statement client.	String	URI	N/A	255	No	ClientUri	MMCCS038	
DICCS287	Logo URI	The web address for the software client's logo.	String	URI	N/A	N/A	No	LogoUri	MMCCS038	
DICCS288	Redirect URI	The endpoints that the user may be redirected to after an authorisation journey.	Array	URI	N/A	N/A	No	RedirectUri	MMCCS038	
DICCS289	Post Logout Redirect URIs	The endpoints that a user may be redirected to after logout.	Array	URI	N/A	N/A	No	PostLogoutRedirectUris	MMCCS038	
DICCS290	API Webhook URI	One or more endpoints used to receive API related notifications.	Array	URI	N/A	N/A	No	ApiWebhookUri	MMCCS038	
DICCS291	Software Version	The software statement version provided by the organisation's software team.	String	General character string	N/A	40	No	SoftwareVersion	MMCCS038	
DICCS292	Software Statement Locked Indicator	Indicates whether an assertion has been generated on the software statement.	Boolean	true/false	N/A	N/A	No	Locked	MMCCS038	
DICCS293	Update Failed Indicator	Indicates whether the latest software statement update failed.	Boolean	true/false	N/A	N/A	No	UpdateFailed	MMCCS038	
DICCS294	Update Failed Reason	The error message that explains why the update failed.	String	General character string	N/A	N/A	No	UpdateFailedReason	MMCCS038	

Data Item Reference	Data Item Name	Description	Data Type	Format	Logical Length	Physical Length	Enumeration Yes or No	YAML Name	Market Messages	Notes
DICCS295	Additional Software Metadata	Additional information supplied by organisation administrators for the software statement.	String	General character string	N/A	255	No	AdditionalSoftwareMetadata	MMCCS038	
DICCS296	OpenID Federation Enabled Indicator	Indicates whether OpenID Federation is enabled for the software client.	Boolean	true/false	N/A	N/A	No	OpenidFederationEnabled	MMCCS038	
DICCS297	OpenID Federation Entity Management Type	The type of OpenID Federation management that applies to the software statement.	String	General character string	N/A	N/A	Yes	OpenidFederationEntityType	MMCCS038	
DICCS298	Require Signed Request Object	Indicates whether the software client must send its authorisation request parameters in a signed request object.	Boolean	true/false	N/A	N/A	No	RequireSignedRequestObject	MMCCS038	
DICCS299	ID Token Signed Response Algorithm	The signing algorithm that the client expects the server to use for ID tokens. This must be PS256.	String	General character string	N/A	N/A	Yes	IdTokenSignedResponseAlgorithm	MMCCS038	
DICCS300	Token Endpoint Auth Method	The method used to authenticate the client at the token endpoint.	String	General character string	N/A	60	Yes	TokenEndpointAuthMethod	MMCCS038	
DICCS301	Client Secret	The client secret. This is returned only when the client is created or updated to use the client_secret_basic authentication method.	String	General character string	N/A	255	No	ClientSecret	MMCCS038	
DICCS302	Origin URI	An approved origin associated with the software client.	String	URI	N/A	255	No	OriginUri	MMCCS038	
DICCS303	TLS Client Certificate Bound Access Tokens	Indicates whether tokens issued to the client can be used only with its TLS certificate.	Boolean	true/false	N/A	N/A	No	TlsClientCertificateBoundAccessTokens	MMCCS038	

Data Item Reference	Data Item Name	Description	Data Type	Format	Logical Length	Physical Length	Enumeration Yes or No	YAML Name	Market Messages	Notes
DICCS304	Related Authorisation Server ID	The identifier of the authorisation server linked to the software statement.	String	UUID	N/A	N/A	No	RelatedAuthorisationServer	MMCCS038	
DICCS305	Homepage URI	The web address for information about the application and its services.	String	URI	N/A	255	No	HomepageUri	MMCCS038	
DICCS306	Backchannel Client Notification Endpoint	The HTTPS endpoint that receives a notification after the Energy Data Subject's authentication succeeds or fails.	String	URI	N/A	255	No	BackchannelClientNotificationEndpoint	MMCCS038	It is required for CIBA when the token delivery mode is ping or push.
DICCS307	Software Statement Certifications	The certification records linked to the software statement.	Object	N/A	N/A	N/A	No	SoftwareStatementCertifications	MMCCS038	This object groups the related data items shown beneath it within a market message. It does not have a value of its own, but its YAML name appears in the message.
DICCS308	Software Authority Claim ID	The identifier of the software statement's authority claim.	String	UUID	N/A	40	No	SoftwareAuthorityClaimId	MMCCS039; MMCCS040	
DICCS309	Organisation Authorisation Domain Role Claim ID	The unique identifier of an organisation authority domain role claim.	String	UUID	N/A	40	No	OrganisationAuthorisationDomainRoleClaimId	MMCCS040	
DICCS310	Software Statement IDs	The software statements associated with the certificate or key.	String	General character string	N/A	40	No	SoftwareStatementIds	MMCCS044	
DICCS311	Certificate or Key Status	The current status of the certificate or key.	String	General character string	40	N/A	No	Status	MMCCS044	
DICCS312	Valid From Date Time	The date and time when the certificate or key becomes valid.	Number	High resolution datetime	20	20	No	ValidFromDateTime	MMCCS044	
DICCS313	Revoked Date Time	The date and time when the certificate or key was revoked, if applicable.	Number	High resolution datetime	20	20	No	RevokedDateTime	MMCCS044	

Data Item Reference	Data Item Name	Description	Data Type	Format	Logical Length	Physical Length	Enumeration Yes or No	YAML Name	Market Messages	Notes
DICCS314	Expiry Date Time	The date and time when the certificate or key expires and is no longer valid.	Number	High resolution datetime	20	20	No	ExpiryDateTime	MMCCS044	
DICCS315	Key Type	The type of cryptographic key represented by the record.	String	General character string	N/A	255	No	keyType	MMCCS044	
DICCS316	Elliptic Curve X Coordinate	The X coordinate of an elliptic curve public key.	String	General character string	N/A	N/A	No	x	MMCCS044	
DICCS317	Elliptic Curve Y Coordinate	The Y coordinate of an elliptic curve public key.	String	General character string	N/A	N/A	No	y	MMCCS044	
DICCS318	Elliptic Curve Name	The name of the elliptic curve used by the public key.	String	General character string	N/A	N/A	No	crv	MMCCS044	
DICCS319	Public Key Value	The public key value used when the selected key format stores it in this field.	String	General character string	N/A	N/A	No	pub	MMCCS044	
DICCS320	X.509 Certificate Chain	The X.509 certificate or certificate chain associated with the key.	String	General character string	N/A	255	No	x5c	MMCCS044	
DICCS321	X.509 Certificate SHA-1 Thumbprint	The SHA-1 thumbprint of the X.509 certificate.	String	General character string	N/A	255	No	x5t	MMCCS044	
DICCS322	X.509 Certificate SHA-256 Thumbprint	The SHA-256 thumbprint of the X.509 certificate.	String	General character string	N/A	255	No	x5tsha256	MMCCS044	
DICCS323	X.509 Certificate URL	The endpoint used to retrieve the X.509 certificate.	String	General character string	N/A	255	No	x5u	MMCCS044	
DICCS324	Signed Certificate Path	The location of the signed certificate in PEM format.	String	General character string	N/A	255	No	SignedCertPath	MMCCS044	
DICCS325	JWK Path	The path to the JSON Web Key Set containing the certificate.	String	General character string	N/A	255	No	JwkPath	MMCCS044	

Data Item Reference	Data Item Name	Description	Data Type	Format	Logical Length	Physical Length	Enumeration Yes or No	YAML Name	Market Messages	Notes
DICCS326	Organisation JWK Path	The path to the organisation's JSON Web Key Set containing its certificates.	String	General character string	N/A	255	No	OrgJwkPath	MMCCS044	

Consolidated Enumeration Register

Data item reference	Data item name	Enumeration values	Enumeration Notes
DICCS004	SSF Supported Delivery Methods	urn:ietf:rfc:8935	
DICCS009	Authorisation Schemes Specification URN	urn:ietf:rfc:8705	
DICCS010	SSF Default Subjects	ALL	
DICCS014	SSF Delivery Method	urn:ietf:rfc:8935	
DICCS029	Subject Identifier Format	opaque	
DICCS035	Response Type	code	
DICCS039	Code Challenge Method	S256	
DICCS042	Permission Requested Claim	given_name family_name managed_address	
DICCS044	Permission Data Type	half_hourly_metered_data tariff_interoperability	
DICCS045	Permission Type	one_off enduring	
DICCS046	Purpose	Tariff comparison Tariff switching Tariff and usage optimisation Energy efficiency insights and advice Solar and battery assessment Energy bill analysis and budgeting Carbon footprint tracking Demand-side response Smart device and EV optimisation Home energy retrofits and grants Research and innovation Appliance and usage diagnostics	These purposes will be maintained through a separate Permission Purpose Catalogue.
DICCS052	Fuel Type	electricity gas	
DICCS053	Metering Point Energy Flow	import export	
DICCS067	Client Assertion Type	urn:ietf:params:oauth:client-assertion-type:jwt-bearer	
DICCS070	Account Holder Verification Requested Claim	account_holder_mpxns	
DICCS073	Authorisation Code Grant Type	authorization_code	
DICCS084	Token Type	Bearer	
DICCS105	Revocation Reason	Consumer to longer wants or needs the service Consumer no longer wants to share their data Consumer is moving or has moved property Consumer has change Energy Supplier and the data was linked to Energy Supplier Account The service did not meet the consumer's expectations	Enumerations maintained through REC governance and not included in the CCS developer portal.

		Permission details are not what the consumer expected Consumer has concerns about their data is being used Consumer does not recognise or remember granting the Permission Consumer has found an alternative service provider Consumer revoked with no reason provided ATP has ceased service provision ATP aware the consumer is no longer the appropriate Energy Data Subject Permission has been replaced or superseded One-time data access has been executed Energy Supplier has notified that it will not be sharing the relevant Account Specific Tariff Information Other	
DICCS107	Query Reason	Permission granted by another current occupant but the querying consumer objects to their data being shared No current occupant recognises the Permission Permission was granted by a previous occupant Permission appears to be associated with the wrong property Other concern Prefer not to say	Enumerations maintained through REC governance and not included in the CCS developer portal.
DICCS110	Token Type Hint	refresh_token	
DICCS111	Refresh Token Grant Type	refresh_token	
DICCS113	Participant Registration Status	Active Pending Withdrawn	
DICCS143	Participant API Resource Certification Status	Awaiting Certification Certified Deprecated Rejected Self-Certified	
DICCS149	Participant Authorisation Server Certification Status	Awaiting Certification Certified Deprecated Rejected Self-Certified	
DICCS150	Participant Certification Profile Variant	TBC	This list has not yet been defined and will be updated post consultation.
DICCS167	Resource Status	Active Inactive	
DICCS179	Response Types Supported	code	
DICCS180	Grant Types Supported	authorization_code refresh_token client_credentials	
DICCS181	Code Challenge Methods Supported	S256	
DICCS182	Token Endpoint Auth Methods Supported	private_key_jwt	
DICCS183	Token Endpoint Authentication Signing Algorithms Supported	PS256	

DICCS184	Require Pushed Authorisation Requests	true	
DICCS185	Request Parameter Supported	true	
DICCS186	Request URI Parameter Supported	false	
DICCS187	Require Signed Request Object	true	
DICCS188	Request Object Signing Algorithms Supported	PS256	
DICCS189	Permission Data Types Supported	half_hourly_metered_data tariff_interoperability	
DICCS190	TLS Client Certificate Bound Access Tokens	true	
DICCS194	Grant Management Action Required Indicator	false	
DICCS195	Claims Parameter Supported	true	
DICCS208	Grant Status	active revoked expired	
DICCS212	Grant Updated By	client authorization_server	
DICCS216	Client Credentials Grant Type	client_credentials	
DICCS230	Authorisation Server Status Filter	Active Inactive	
DICCS241	Sort Direction	ASC DESC	
DICCS246	Pagination Mode	OFFSET CURSOR_NEXT CURSOR_PREVIOUS	
DICCS258	Notification Webhook Status	Pending Confirmed Deactivated	
DICCS266	Flag Type	Organisation Software_Statement Authorisation_Server	
DICCS271	Certification Status	Awaiting Certification Certified Deprecated Rejected Warning Self-Certified	
DICCS276	Software Statement Status Filter	Active Suspended Inactive	
DICCS277	Software Statement Status	Active Suspended Inactive	
DICCS282	Software Statement Mode	Live Test	
DICCS297	OpenID Federation Entity Management Type	openid_entity_federation_managed openid_entity_self_managed	
DICCS299	ID Token Signed Response Algorithm	PS256 RS256	

DICCS300	Token Endpoint Auth Method	private_key_jwt tls_client_auth client_secret_basic	
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