

# E2E Onboarding Guide (Supplier & Agent)

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# **Data Integration Platform**

The MHHS Data Integration Platform (DIP) is provided by Elexon and developed by Avanade to allow the different Market Participants in the electricity market to exchange messages.

The onboarding guide provides a step-by-step instructions to enable a Market Participant (MP) to complete all tasks required to successfully onboard to the DIP and will be available for when Parties need to on-board.

# DIP Onboarding Overview – Full Journey



- DIP User receives an invitation to on-board to the Pre-Production DIP where they will carry out their qualification testing
- 2 As part of this initial on-boarding the organisation will need to undertake the following:
  - Setup organisation including Users in DIP
  - Onboard to GlobalSign the DIP CA
  - Generate GlobalSign cert & API key
  - Set-up DIP Ids & Message Channels
- 3 Once an Organisation has successfully passed qualification testing their Organisational set-up is moved to Production by the DIP Manager Team. This does not include their User base as this could be a different set of people.
- 4 DIP User will receive an invitation to the Production DIP environment with a new set of Users
- 5 New API keys & PFX certificate is required for communication with Production DIP

# DIP Onboarding Overview – Pre-Production Environments



# Support and Assistance

The process to on-board to the DIP has many intricate steps. We fully believe that if prepared correctly, these steps should complete successfully and allow a smooth on-boarding, however, we understand that sometimes things do not go as you expect, and a helping hand is needed.

If this situation arises, please send an email to **DIPManager@elexon.co.uk** with your contact details, description of the step/stage you have reached, a short description of the problem you have encountered and someone will respond as soon as possible.

# **Preparation Reminder**

Before on-boarding please complete the following actions:

- 1. Have ready the assigned Primary & Certificate Admin details
- 2. Have your registered Company Name, the associated Company Number and a brief company description
- 3. Have your DNS admin prepared and ready for the DNS activity
- 4. Have your Certificate Admin, with the ability to manage through the conversion of certificates, on hand to assist (Section 4 and 5)
- 5. For non-BSCCo/RECCo qualified parties, i.e. DCPs and MDRs, a signed DIP access agreement.
- 6. Familiarisation with the <u>DIP Rules</u>

# Post On-boarding

Ensure you have set up to optimise your DIP experience:

- 1. Read the DIP User Guides to understand the functions and features in detail
- 2. Ensure at least 2 each of User Admin, Certificate Admin and Message Admin are invited and joined the DIP to allow cover during holiday or absence situations
- 3. Remember that members can have multiple roles use according to your needs
- 4. Non-Prod & Production different users, different certificates but only one GlobalSign registration



# Preparation Activities #1 Organisational Set-up

### The DIP Onboarding Guide

### **Organisation Prep Activities : Identifying individuals/Teams for DIP User Roles**

When you receive your on-boarding proforma you will be asked for details about your organisation, this information is essential when you start to onboard.

Within the DIP there are four Market Participant member roles which can be assigned. Any organisation member invited to the DIP can have either a single role or be assigned multiple roles (allowing all four assigned to one person).

The individuals appointed in the Pre-Production do not carry over to Production as responsibilities within companies can vary between Production and non-Production environments.

Role	Description
User Admin	The User Admin is the person who will receive the invitation from the DIP Team to join the DIP. The User Admin role, when assigned to any member, provides the functions to add other DIP Members and manage DIPIDs.
Certificate Admin	The Cert Admin is responsible for all certificate management, including registration, GlobalSign verification, completion of the certificate upload, and ongoing certificate maintenance. Given the scope of the role this may be multiple people at different parts of the process.
Message Admin	Will have the control and ownership of all activities relating to message processing, replay and management.
Analytics Reader	Will only have access to review the DIP Dashboard feature.
DNS Admin	Not a DIP login. Needs access to organisation DNS to create TXT record for certificate validation



The table below outlines the DIP Portal tabs accessible to users based on their roles

DIP Portal Tabs	Market Participant Org	Message Channels	Messages	Performance
MP User Admin	Manage Users (Create/Edit/Extend/Offboard)			
MP Certificate Admin	Manage Certificates (Create/Reissue/Download/Revoke) View/ Generate API Keys			
MP Message Admin	Manage DIP Ids (Request/Edit/Delete)	Manage URLs (Configure Status Message & Publication URLs, Replay/Requeue received messages)	View sent messages	View performance reports for their Org(s)
MP Analytics Admin	View Org details			View performance reports for their Org(s)



# **Use of DIP Connection Providers**

DIP Connection Providers (DCPs) are third-parties that provide IT services to Market Participants, the range of services can vary from providing hosted solutions to fully managed platforms. It is possible to delegate responsibility of some of the on-boarding tasks and ongoing DIP management functions to a DCP.

There are two options by which Market Participants can integrate DCPs within their DIP organisation:

- Full Company/DCP Integration where the DCP organisation is fully integrated in the Market Participant's company and are effectively a single organisation. The access for individuals within both companies is controlled by the roles and DIP Ids assigned to them.
- 2. DIP Id Management where the DCP organisation has visibility of their clients DIP Id once the link between DIP Id & DCP ID is made by the client Market Participant.

DCPs that have multiple clients using the DIP can effectively be on-boarded multiple times. DCPs have the ability to switch 'context' i.e. organisations from within their portal.

Some of the initial key on-boarding steps <u>must</u> be undertaken by a full-time employee of the Parent MP, i.e. Initial DIP invitation to validate company details and the Global verification process.





# Preparation Activities #2 OpenSSL

# Choice of OpenSSL Toolset

PKCS certificates have a dual role in securing communication channels between DIP Users and the DIP, firstly for signing messages and secondly for securing mTLS connections. PKCS certificates will need to be generated by DIP Users once provided with API keys and secrets provided by both GlobalSign and the DIP

An internet search of SSL Toolsets will produce a plethora of results. Avanade uses Azure Key Vault to produce and manage PKCS certificates, whilst the DIP manager has used OpenSSL from a bash script on Windows. Both are acceptable and work, please consult your relevant IT teams for assistance on this topic.

Examples for both Azure Key Vault and OpenSSL (bash) are provided in the on-boarding guidance documentation.





# Section 1 – Accessing the DIP Portal



# The Invitation to Join the DIP

The process for on-boarding will commence with the Market Participant's (MP) nominated **Primary Admin** receiving an email from the Programme **DIP Manager/Team** (portal@Energydataintegrationplatform.co.uk) inviting them to join the DIP: The DIP Manager/Qualification Team will contact your organisation prior to your on-boarding to receive the name of the MP User Admin.

The email sent to the Primary Admin will contain a link to the DIP 'Sign in' home page which is shown in the forthcoming pages.

Multi-Factor Authentication (MFA) is a mandatory set up for all users who will be accessing the DIP. The MFA set up will initiate during the first sign in of each invited user and an MFA request will occur each time any user signs in thereafter.

Once the MP Admin has been set-up, they then have the control of sending out invites to other people within their organisation who will undertake the different activities within the DIP (described on the previous page). The steps are the same for all DIP Users after they have received the Invitation e-mail. All logins are via DIP Users company e-mail address names.

# Preparation

- 1. Have MS Authenticator available on your phone to enable MFA
- 2. Complete and return your **DIP Onboarding Preparation Pro-Forma** to <u>MHHSQualification@elexon.co.uk</u>

If you do not receive the invite, once you are advised it has been sent, please use this link to get started: **Https://portal.uit.energydataintegrationplatform.co.uk** 

You should ensure this is WHITE listed and is not subject to quarantine or a suspected phishing delay.



### Section 2.5 Accessing the Dip Portal

# Access via the DIP Portal is via e-mail & password with MFA

	Microsoft	Hicrosoft
	Sign in	pitmpde.user03@energydataintegrationplatform.co
	EmailName@Company.com	Approve sign in request
ELEXON		Open your Authenticator app, and enter the number shown to sign in.
Data Integration Portal	Can't access your account?	01
		81
Sign in	Back Next	No numbers in your app? Make sure to upgrade to the latest version.
and the second se		I can't use my Microsoft Authenticator app right now

Vestry-vet, Beron hourtage	Data Integration Portal	PU
OME MARKET PARTICIPANT ORGANISATION		
Elexon MHHS Data Integration Portal Welcome to the Data Integration Portal (DIP) - the innova	tive solution for efficient and transparent communication between energy market participants. Our platform simplifies	Quick Links
the process of data exchange and offers a range of featur onboard into the DIP and monitor communications, whil	es designed to promote energy efficiency and conservation. Our user-friendly portal allows market participants to easily e accessing latest interface definitions and functionality around messages exchanged upon the platform	Explore tutorials, articles and help
		How to use the DIP ?
		How to undertake the onboarding process?
		How to use the DIP as an MP User?
		View All
		Support
		Raise a service request

#### MHHS PROGRAMME Industry-led, Elexon facilitated

# Read & Accept Term of Use (first time only)

4

Portal Area	Description
1	Identity of the logged in user
2	ELEXON Header Bar
3	Navigation/Menu options
4	Welcome Area
5	Common tools and Quicklinks

In the UIT environment the portal will have Yellow banners/menus



# Section 2 – Verify Company Details

### Section 2 – Verify Company Details

Click the '+' to create a Cert Admin

This is not relevant to your company's onboarding

also the Cert Admin

# Verify Company Details

Mandatory

Optional

This is a one-off task undertaken by the Primary Admin for the organisation. The User Admin must enter/check the company details and has the option to create additional users (this can also be achieved at a later stage)

ELEXON MHHS PROGRAMME AA Data Integration Portal DIP Market Participant Organisation onboarding form Use this form to complete your Market Participant Organisation's onboarding into the DIP, inviting users and creating DIP IDs for your constituent Market Participants. Market Participant Organisation Please ensure your company information is correct Company Name Check/ amend Company Name if required 5 Example Company Enter full name and Company Description All the information supporting this example email of the user Check/ amend Company Description if required 6 Create New User Profile Company Numbe First Name ast Name Check/ amend Company Number if required 7 123456 First Name is required (Click here if you are acting as a DCP in the DIP) ----Please check this box to request your organisation to be DIP Connection Provide Email Address Users Select the user role Please add additional users, they can also be added at a later date in the members section Member of All DIP IDs Select Organisation Role  $\sim$ if the Pro-forma has not advised the User Admin is from the drop down (a Select DIP IDs  $\sim$ user can have Note: If you require a domain which isn't listed, please contact the DIP Admin Market Participants multiple roles) it to be whitelisted. Please add the Market Participants for your organisation, These will be processed and assigned DIP IDs Cancel Confirm Please DO NOT ADD any Market Participants: (9) Ð Cancel Select the pertinent DIP Ids the user has access to. 16 Defaults to All DIP Ids





# Section 3 – Member Management

### Section 3 – Member Management



# Member management is accessible from the Members sub-tab from the main Market Participant Organisation page

MHHS PROGRAMME Index ard, New Normal		E L E X O N Data Integration Portal	PC
HOME MARKET PARTICIPANT ORGANISATION	MESSAGE CHANNELS		
Super Energy Co Detailed information on the Market Participant, th	he constituent DIP IDs operating within the DIP and	their members along with certificate functionality.	CP Nominate DIP Connection Provider
Company Type	Company Number	Role Codes	DIP Connection Provider
Supplier, Distributor	1234567	SUP1, SDS, MDR, ADS, EES, SUP	None set
Description			
Our company is			
Whitelisted Domains			
superenergy.co.uk, energydataintegrationpla	tform.co.uk, mailinator.com, accenture.com, energy	ydataintegrationplatform.co.uk, accenture.com, avanade.com, pitdipporta	al.onmicrosoft.com
DIP IDs Members Certificates		Create Member   🝸 Filt	ler Q Search

A Cert Admin and a Message Admin need to be added as a first task to enable the on-boarding process

rectrosed, Deen tio coset			Dat	a Integration Portal		
ME	RKET PARTICI ORGANISATIC	IPANT DN				
nergy Den	no I td					
etailed information	n on the Market	t Participant, the con	tituent DIP IDs operating within the	DIP and their members along with cer	rtificate functionality.	D Nominate DIP Connection Provider
Company Type None set Description			Company Number 1234567	Role Codes None Set		DIP Connection Provider None set
our company						
IP IDs Members				Create	Member   <b>Y</b> Filter C	Search
IP IDs Members	Last Name	Email ID		Create	Member   Y Filter C	k Search s Actions
IP IDs Members First Name  David	Last Name Gardiner	Email ID pitmpde.user03@H	nergydataintegrationplatform.co.uk	Create Role K MP User Ad	Member   Y Filter C Role Code min	L Search s Actions ✓ Edit ∎ Offboard



### Section 3 – Member Management

# Inviting users from outside your organisation

You are only able to add members to your organisation who have e-mail addresses featuring whitelisted domains, assuming you checked the 'Whitelist DCP's domains' option when nominating a DCP, you should see that organisations domains listed. If not, or you need additional domains whitelisted, please contact the DIP Manager.

Once verifying the desired domain is present, navigate to the member tab

ME       MARKET PARTICIPANT ORGANISATION       MESSAGE CHANNELS       MESSAGES       PERFORMANCE       AUDIT       MPAN         Aarket Participants       > Smart Energy         Start Energy         You can view your organisation details below. Please ensure that you keep this information accurate and up-to-date.         Company Number       Role Codes       DCP:         232424       MSA       Disational         Description       New company         Whitelisted Domains       mailinator.com, pit.testmp.co.uk, dcporganisation.co.uk         • Whitelist Domain       Webhook URL Configurations         • Remove All Webhook URL Configurations       Energy	ELEXON Data Integration Portal	
larket Participants  Smart Energy Smart Energy ou can view your organisation details below. Please ensure that you keep this information accurate and up-to-date. Company Number Company Number Role Codes DCP: 232424 MSA Disat Description New company Whitelisted Domains mailinator.com, pit.testmp.co.uk, dcporganisation.co.uk  Whitelisted Domains mailinator.com, pit.testmp.co.uk, dcporganisation.co.uk  Mitelisted Domains mailinator.com, pit.testmp.co.uk, dcporganisation.co.uk  Romove All Webhook URL Configurations  Remove All Webhook URL Configurations	NNELS MESSAGES PERFORMANCE AUDIT MPAN	USEF
Iarket Participants Smart Energy   Somart Energy   Du can view your organisation details below. Please ensure that you keep this information accurate and up-to-date.   Company Number Role Codes   232424 MSA   Description   New company   Whitelisted Domains mailinator.com, pit.testmp.co.uk, dcporganisation.co.uk Whitelist Domain Webhook URL Configurations i Remove All Webhook URL Configurations		
Smart Energy ou can view your organisation details below. Please ensure that you keep this information accurate and up-to-date. Company Number Role Codes DCP : 232424 MSA Disat Description New company Whitelisted Domains mailinator.com, pit.testmp.co.uk, dcporganisation.co.uk • Whitelist Domain Webhook URL Configurations • Remove All Webhook URL Configurations		
Company Number Role Codes DCP:   232424 MSA Disate   Description New company   Whitelisted Domains   mailinator.com, pit.testmp.co.uk, dcporganisation.co.uk   • Whitelist Domain   Webbook URL Configurations   • Role Codes   • Role Codes		
Company Number       Role Codes       DCP         232424       MSA       Disate         Description       New company       Same and the second s	keep this information accurate and up-to-date.	
Company Number     Role Codes     DCP:       232424     MSA     Disal       Description     New company       Whitelisted Domains     mailinator.com, pit.testmp.co.uk, dcporganisation.co.uk          • Whitelist Domains       Webhook URL Configurations          • Remove All Webhook URL Configurations		
232424 MSA Disat Description New company Whitelisted Domains mailinator.com, pit.testmp.co.uk, dcporganisation.co.uk • Whitelist Domain Webhook URL Configurations • Remove All Webhook URL Configurations	Role Codes DCP Sta	Status
Description New company Whitelisted Domains mailinator.com, pit.testmp.co.uk, dcporganisation.co.uk Whitelist Domain Webhook URL Configurations Remove All Webhook URL Configurations	MSA Disable	bled
New company Whitelisted Domains mailinator.com, pit.testmp.co.uk, dcporganisation.co.uk Whitelist Domain Webhook URL Configurations Remove All Webhook URL Configurations		
Whitelisted Domains mailinator.com, pit.testmp.co.uk, dcporganisation.co.uk Whitelist Domain Webhook URL Configurations		
Whitelisted Domains mailinator.com, pit.testmp.co.uk, dcporganisation.co.uk Whitelist Domain Webhook URL Configurations Remove All Webhook URL Configurations		
mailinator.com, pit.testmp.co.uk, dcporganisation.co.uk  Whitelist Domain  Webhook URL Configurations  Remove All Webhook URL Configurations		
Whitelist Domain Webhook URL Configurations Remove All Webhook URL Configurations		
Webhook URL Configurations		
Remove All Webhook URL Configurations		
Add New Child Organisation		



### Section 3 - Adding New Members to the DIP

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# Adding New Users / Editing Existing Uers

The User Admin should sign in, access the Members tab in Market Participants, and create the Message Admin using 'Create Member':

1	Click 'Create	e Member' in the Member	s tab			3 Click 'Confirm' to send the invitation
DIP IDs Members	Certificates Is of your members and roles b	elow. Please ensure that you keep this information a	ccurate and up-to-date.	[	Create Member Tilter Q Search	Select Organisation Role
First Name 🔻	Last Name	Email ID	Role	Expiry Date	Actions	This field is required
Ayi	Edet	ayi.edet@elexon-flex.com	MP User Admin MP Message Admin MP Certificate Admin MP Analytics Reader	2026-07-23	Edit) C Extend F Offboard	Cancel Confirm
Egidio	Zindato	Egidio.Zindato@elexon-flex.com	MP User Admin MP Message Admin MP Cortificate Admin	2025-07-24	🖍 Edit 🕃 Extend 🥛 Offboard	
2	Add First Na Name and a Address Click @ to v whitelisted o Click drop-d available rol select the ap organisation for the user	ame, LAST a valid Email iew list of domains own to see es and opropriate hal roles required	Create New User First Name I Email Address Member of	Profile required.	Last Name     @     @     Select Organisation Role	<ul> <li>4 Recommended Action:</li> <li>It is advised that each Market Participant has at least 2 User Admin, 2 Certificate Admin and 2 Message Admin's to ensure cover is provided during potential situations of absence.</li> <li>It is also acceptable for one person to hold multiple roles.</li> <li>Please ensure you have cover for all potential access needs.</li> </ul>
	HHS ROGRAMME		Note: If you requi for it to be whitel	re a domain whi isted.	ch isn't listed, please contact the DIP Admin	To Edit a members role, click the Edit button against that members name.

#### Section 3 – Extending Members

### **Extending Users**

It is worthwhile noting all Users within a organisation having an expiry date, this is under the control of the Users Admins within the home organisation. It is down to the discretion of each company's User Admin how these end dates are managed:

ana









# Section 4 – GlobalSign Registration & API Key Generation

# Interface Code of Connection

OFGEM have programme requirements around security and non-repudiation. This means:

- 1. All messages passing through the DIP must be digitally signed with a PKI certificate and authenticated by API keys
- 2. Connections between MPs, or their agents, to the DIP must be secured via an mTLS connection.

The Interface Code of Connection provides a description of how parties need to interact with the DIP.

The DIP Certificate Authority (DCA) is managed by GlobalSign.

- Each Market Participant is responsible for their own message signing, therefore, whether you are using a DCP or not, the Market Participant must complete the DNS and Certificate process for message signing.
- The DNS is validated by GlobalSign and therefore must belong to the Market Participant. The DNS can be the Market Participant's web domain or any other domain associated with the organisation.
- If using a DIP Connection Provider (DCP), the DCP should use their own mTLS certificate, and then use the MPs certificates for signing messages. The respective Market Participant's Signing certificate **must** be used to sign their messages.

Two API & Certificate pairs are required:

- The first is used to authenticate against the GlobalSign API used for Signing Message Certificates
- Message Certificates signed above are then used for communication between the DIP and the MP or their agent













The Certificate Admin must follow the following steps to initiate the GlobalSign Registration process:



2 Check details of MP Company Details are correct

3 Select 'Certificates' tab to show 5-stage GlobalSign Registration and onboarding screen

4 Click the 'link' to GlobalSign MHHS Services registration page







### The GlobalSign Registration and Verification

After clicking the link to the GlobalSign Services for MHHS home page, the Primary Certificate Admin must complete the following steps.

# Read the GlobalSign MHHS introduction and scroll down screen

Choose another country or region to see products and se		EN / United Kingdom	<ul> <li>✓ Continue</li> </ul>
GlobalSign GlobalSign	Cor	tact Us   +44 1622 766 766   Atlas Login   Solutions IoT Partner Resources Si	GCC Login   EN / English upport Company Shop
GlobalSi	gn Services for	MHHS	
Program	IIIIC		
Program		ATLAS ON	IBOARDING
Welcome to CAO Global Signi We (MHHS) programme's Data Integr	are have to help with your orbitarding journey to the Marketw atou mattern (Dir).	ide Half Hourly Settlement	IBOARDING ICESS
Welcame to GMO Globallight We (MHHS) programme's Data Integr We are a global leader of trusted	are here to help with your enboarding journey to the Market w asion Platform (DP). Keretly and security solutions, GMO GlobalSign is working in or	ATLAS ON PRC Adde Half Hourly Settlement Jalaboration with the	BOARDING ICESS
Welcome to GAO Globalfager We (MHHS) programme's Data Integr We are a global Inder of trusted appointed OFGEN Service Provide Which are required for server co	are here to help with your orbitanding journey to the Marketw asion Platform (DP). Wently and security solutions. GMO GlobalSign is working in cu to the supply you with digital emrificate services for authenticate monutacion with the DP.	ATLAS OR PRC Adde Half-Hourly Settlement slatboration with the na and encryption purposes.	BOARDING CESS and the second s
Welcame to GMO Globalizari W (LMH KS) programma's Data Integr We are a globalitador of trusted appointed DYGKIS Service Provid Which are regulared for source on We will provide you with up to the Wel will provide you with up to the Wel will provide you with up to the	aré here to help with your orboarding purney to the Market w aston Pratform (DP). Identify and security solutions: GMO GlobalSgri is working in o ter to supply ou with digital certificate services for authenticate manufication with the DP. o digital certificates. These certificates are to be used for mutual adobalsgri SALAC & service.	ide Half Hourly Settlement Automation with the on and encrystion purposes.	BOARDING CLESS The Anticipation of the Anticipation of the Anticipation of the Anticip

#### **GENERAL NOTES**

- 1. Ensure you follow the GlobalSign steps as outlined in the Onboarding Guide. DO NOT skip any steps / follow steps out of sequence.
- 2. Always check your spam when you're stuck or expecting an email from GS.
- 3. Wait for confirmation that account binding is done from GS and API credential ready to use before using your credentials. Otherwise, your certificate will be created before the API Keys gets bound to your account, and you will run into problems with your certificate down the line.

Complete the form in the lower half of the GlobalSign MHHS screen

### Get Started with Atlas

#### About You

Tell us a bit about yourself

First Name *	Last Name *
Job Title *	Contact Phone Number
Email *	

#### Your Organisation

Please provide the official registration details of your organisation

Country *	~

View our Privacy Policy to understand how we collect and use your personal data

Submit

#### INSTRUCTIONS

- 1. The details entered in fields FIRST NAME, LAST NAME, JOB TITLE in the 'About You' section should be the person dealing with the certificate request (Cert Admin) and GlobalSign vetting. Global Sign will contact the named individual and verify they are a current full-time employee and authorised to create a signing certificate.
- 2. The EMAIL ADDRESS provided is where all Global Sign communications will be sent for vetting only.

This should be the **Certificate Admin's** email address.

It is also acceptable to have a 'generic' email which is available to multiple people to monitor but must be accessible by the Cert Admin.

- 3. Please enter a direct contact number of the Cert Admin into 'Contact Phone Number': utilised to help in case the primary verification is unsuccessful
- 4. Click 'I am not a robot' then SUBMIT to conclude
- 5. You will receive a "Thank you for you interest in GlobalSign" message



### The GlobalSign Registration and Verification

The email from GlobalSign will include their 12-step guide in the way of an itemised checklist – please follow as instructed.

# After completing and submitting the GlobalSign Online Form an email will be received (as below) with a 12-step guide



The following pages will provide guidance on the key steps of







# GS Step 3 – Approve Quotation - Set-up Payment Method (1 of 2)

A mustard tile will appear requesting the Payment Method is set-up. Choose invoice. This is only required for the GlobalSign system to function, NO ACTUAL PAYMENT is required.



#### Choose Invoice 2 **Atlas** Signed in as robert.golding@elexon-flex.com **Finance Hub** A Home Invoices Credit Memos Payment Methods Purchases Payment Methods Identity Profiles O Discovery The method selected below will serve as the default option for all account payments, including outstanding invoices and future orders, until an alternative method is Certificates selected. Please also note that adding a new card will automatically select it as the default payment option. Access Credentials Invoice O Credit or Debit Card 5



Signed in as d.gardiner@avanade.com

Order Summary

Payment Method

Invoice

Review & Accept Quote

Customer Reference: Not Provided

# GS Step 3 - Approve the quotation (2 of 2)

NOTICE: Your quotation is ready', a BLUE TILE will appear in your dashboard. Click this to continue through the onboarding process.

Ø Discovery

Certificates
 Access Credentials

Atlas

A Home

Purchases
 Identity Prof

Domain

Access Credentials

Payment Method

Invoice payments over \$5000/£3000/€3500 are subject to a credit check

Please provide a purchase order number or other reference to appear on your invoice, or confirm that you

Complete quotation acceptance by clicking 'Use this payment

method' button, this will return you to the dashboard

Your order is complete

Return to dashboard

Your service is now available, but may require additional setur

Pay by invoice
 Pay by credit or debit card

don't need to.

Back

Optional purchase order numbe

lse this payment metho

On receiving the email advising you're your quotation is ready, LOGIN to Atlas and click the 'View and Accept Quote' tile

Atlas					Signed in as d.gardiner/flavanade.com	
Home     Home     Parthase     U     Buthety Profiles     Otsevery     Conservery     Access Ordentials     v		Dashboard	Request Solution Solution Conservation Solution Conservation Solution Comparison (Solution Conservation Solution Conservation	Generate API Credentials	s ts	
		Generate mTLS Certificates Some Services require you to generate in mTLS certificate, in addition to an API credential, to securely access the APIs				Che
The £	0 quota	ation will appe the quotatior	ear. Scroll dov n acceptance	vn the page see step	e to complete	
<ul> <li>Home</li> <li>Purchases</li> <li>Identity Profiles</li> <li>Discovery</li> <li>Certificates</li> <li>Access Credentials</li> </ul>		uote Summary Review and Accept Quote IntranetSL OV Product Pack Juanthy: 6.00 allafty Period 12 IntranetSSL OV SAN Juanthy: 2.00 IntranetSSL OV RSA	Downloa	Quote Si Review & Accept quot Payment I Invoke Customer Ri Customer Ri Custo	ummary Accept Quote e details Method sference:	4
		rax. Srand Total: Durrency: Duote Date: 2024-12-17		£0.00 GBP		

3 Follow the guidance in the email and complete the tick box selections shown

## GS Step 4 – Request Identity Profile

You will receive an email titled "New User Registration" from

- 1 noreply@atlas.globalsign.com inviting you to join a GlobalSign Atlas Portal Account. Please follow the instructions in the email to proceed.
- You will receive a email titled "Password Reset Code GlobalSign Atlas". Please use this 2 code to create a new password. You can now login using your email and new password.

You will be notified within 24 business hours by email from noreply-atlas@globalsign.com that your service quotation is ready for your approval. You will also receive an email from a representative of GlobalSign from firstname.lastname@globalsign.com with instructions

Log in to your Atlas Account and Approve the quotation

Select 'Identity Profile' tab and create a new Identity Profile for your IntranetSSL OV service

The DASHBOARD will default to the below 3 tiles - please await the 5 MUSTARD TILE in Step 6 before proceeding (up to 20-30 minutes)





### Start STEP 4 (of the 12-step guide on slide 19) by clicking the new mustard coloured tile.





3

### GS Step - 4 Create the Identity Profile

This requires accuracy in completion of the Identity Profile.

Each field will be used to verify the name provided is a known full-time employee of the company ORGANISATION NAME (O). ADVICE – let your receptionist know an anonymous call may be received to avoid issue





### GS Step 5 - GlobalSign Verification

Step 5 is the pause in the middle of the process where GlobalSign, through their own mechanisms, will conclude the vetting.

As shown below, there is a 72hr window for verification before you can proceed with steps 6-12.





### GS Step 5 - GlobalSign Verification

Step 5 is the pause in the middle of the process where GlobalSign, through their own mechanisms, will conclude the vetting.

As shown below, there is a 72hr window for verification before you can proceed with steps 6-12.

A verification e-mail will be sent

DO NOT PROCEED UNTIL A VERIFICATION EMAIL HAS BEEN RECEIVED

©	← Reply	« Reply all	→ Forward 😁 …
			Wed 12/16/2024 11:57 AM
Dear Mr. Golding,			
Thank you for your Identity (IDEN-03849) request with GlobalSign - case number 00015236.			
We are the Certificate Authority responsible for approving your request. Additional information can be found at the end of this email.			
Before we can complete your request, we need to confirm this order with a representative of the Applicant organisation.			
Could you please respond to this email, confirming the following: "I, (name of approver), confirm the Identity (IDEN-03849) request for Elexon Flex and approve the activation of this order. The confirmation password is:			
Thank you for your understanding and cooperation. If you have any questions or concerns, please feel free to contact us.			
Kind regards,			
Dimitar Mitev Client Services - Vetting Team			
GlobalSign is a Certificate Authority (CA) that issues trusted digital certificates. In order to maintain the status of a CA, we need to comply with the Requirements from the CAB Forum and our internal regulations and guidelines. These Requirements can be found here: <u>QV level   EV level</u>			
Maidstone House, Unit B, 2nd Floor, King Street, Maidstone, Kent, ME15 6JQ, United Kingdom			
support@globalsign.com   Locations & Contact   Open Support Ticket   System Alerts			
GlobalSign GMO			
	Dear Mr. Golding,     Thank you for your Identity (IDEN-03849) request with GlobalSign - case number 0015236.     We are the Certificate Authority responsible for approving your request. Additional information can be found at the end of this email.     Before we can complete your request, we need to confirm this order with a generative of the Applicant organisation.     Could you please respond to this email. confirming the following:         Thank you for your understanding and cooperation. If you have any questions or concerns, please feel free to contact us.     Indir geards,     Dimitar Mitev     GlobalSign is a Certificate Authority (CA) that issues trusted digital certificates. In order to maintain the status of a CA, we need to comply with the Requirements from the CAB Forum and our internal regulations and guidelines.     I Les Requirements can be found here:         Uravit I FUI ward  Meditore House, Unit B, 2nd Floor, King Street, Maidstone, Kent, MEIS 63Q, United Kingdom	<ul> <li>Could you please respond to this email, confirming the following:</li> <li>Thank you for your Identity (IDEN-03849) request with GlobalSign - case number divergence of the Applicant organisation.</li> <li>We are the Certificate Authority responsible for approving your request. Additional information can be found at the end of this email.</li> <li>Before we can complete your request, we need to confirm this order with a forewer of the Applicant organisation.</li> <li>Could you please respond to this email, confirming the following:</li> <li>Thank you for your understanding and cooperation. If you have any questions or concerns, please feel free to contact us.</li> <li>Kind regards,</li> <li>Dimitar Mitev</li> <li>GlobalSign is a Certificate Authority (CA) that issues trusted digital certificates. In order to maintain the status of a CA, we need to comply with the Requirements from the CAB Forum and uninternal regulations and guidelines.</li> <li>These Requirements can be found here:</li> <li>Divitar Mitev</li> <li>GlobalSign is a Certificate Authority (CA) that issues trusted digital certificates. In order to maintain the status of a CA, we need to comply with the Requirements from the CAB Forum and our internal regulations and guidelines.</li> <li>Due of I Picerei</li> <li>Divitar I Picerei</li> <li>Divitar I Locations &amp; Contact   Open Support Ticket   System Alert</li> <li>Divitar Services Locate   Open Support Ticket   System Alert</li> <li>Divitar Services   Locations &amp; Contact   Open Support Ticket   System Alert</li> </ul>	Could you please respond to this email. confirming the following:     "     "     (name of approver), confirm the Identity (IDEN-03849) request for Elexon Fiex     an approve the activation of this order. The confirmation password is:     Could you please respond to this email. confirming the following:     "     (name of approver), confirm the Identity (IDEN-03849) request for Elexon Fiex     an approve the activation of this order. The confirmation password is:     Thank you for your understanding and cooperation. If you have any questions or     concerns, please feel free to contact us.     Kind regards,     Dimitar Mitev     Client Services - Vetting Team     SlobalSign is a Certificate Authority (CA) that issues trusted digital certificates. In order to     maintain the status of a CA, we need to comply with the Requirements from the CAB Forum     and our intermal regulations and guidelines.     These Requirements can be found are: <u>VELWEI</u> Metatone House, Unit B, 2nd Floor, King Street, Meidstone, Kent, ME15 602, United Kingdom <u>SupportRiglobalaign.com   Locations B. Contact   Quen Support Ticks   System Alexita </u>







# Step 4.2 – Generate GlobalSign API Credentials


# Generate API Credentials, PFX Signing Certificate and DIP Upload Overview (GS Steps 6-10)



A certificate generation capability/tool is required to undertake steps 2 & 6. Example usings Azure Key Vault and native OpenSSL commands are provided below

The end result is a PFX file loaded into the DIP





Generate mTLS

Some Services require you to generate in

mTLS certificate, in addition to an API

credential, to securely access the APIs

Certificates

Â

# GS Steps 6-10 - Generating API credentials

The Certificate Admin must complete the API Certificate generation within the Global Sign Atlas system once 'Identity Validation' has been confirmed.



- Please wait for confirmation email from a representative of GlobalSign that the service 11 can now be used
- Once completed, continue to the next step of the DIP Onboarding Guide. 12





# Generating API credentials

The Certificate Admin must complete the API Certificate generation within the Global Sign Atlas system once 'Identity Validation' has been confirmed.

7	You must select 'View and Copy' ir you like to receive your API creation then Click CONTINU	n the 'How would lentials' page, JE			8 In	Select ACTIVE c ternet SSL to yo Click CC	ertificate to assign ur credentials, then ONTINUE	
				Atlas				Signed in as robert.golding@elexon-flex.com
	How would you like to receive your AP You can optionally encrypt your key and secr	l credential?	a A	*	O	Link a Service	Link an Identity Familiar Name	
	View and Copy We provide the key and secret in your web browser for you to copy to your clipboard. You can also download them in .csv format.	API CREDENTIAL SUMMARY EXEMPTION BLICTED No	0 0 5	7 0 0	Th	Link to a Serv is API credential must be linked to	ice o an active service.	
	Encrypted File For additional security, you can also provide a public key that we'll use to create an encrypted (.enc) file you can download.	SERVICE IDENTITY FRANLAR NAME	G	>		1	API CREDENTIAL SUMMARY	
	Relevant customers should follow their Service Providers' Instructions for generating and using public keys. General help is available on the topic of obtaining BlobalSign credentials. Which method do you want to use? View and Copy Uiew and Copy Uiew in browser, copy to clipboard. Download able as a .cv file. BACK				Intranetsslovrsa Ibi sRv0001933 Key Type:RS Start Date: 18 December 2024 ACTIVE BACK	Cor	DECRMPTION SELECTED No BENCE DF:SRV001933 intranststoyrs-1 IDD:SRV001933	





# Generating API credentials with GlobalSign Continued.....

9	Give the credential a familiar name text you wish) and record this safe click 'CONTINUE'	e (any Iy and	→ 10	Click 'Download key and Alternatively (and) click both to clipboard' and sto
	Add a Familiar Name Create a label to distinguish this from similar cr	edentials.		SUCCESS! NOW SECUR If you lose this API secre
FAMILIAR NAME onboarding, key BACK	CONTINUE	API CREDENTIAL SUMMARY ENCRYPTION SELECTED No SERVICE IDF: SRV:0001036 Test Certificates - 50 FAMILIAR IMARE onboarding_key		API KEY 186610baff175cae API SECRET
	Enter and take a not <b>name</b> ' the CONTI	e of your ' <b>familiar</b> en click NUE		AI VIEW &

Click 'Download key and secret as .csv' button and save file. Alternatively (and) click both the API Key and API Secret 'Copy Key to clipboard' and store in a .txt file for the next stage.

### Success! Now Securely Save your API Key & Secret

If you lose this API secret, you'll need to generate a new API credential.

API KEY		
186610baff175cae		COPY KEY TO CLIPBOARD
	i	!
API SECRET		
	1 92 1	COPY SECRET TO CLIPBOARD
	i	!
	DOWNLOAD KEY & SECRET AS .CS	v
	API DOCUMENTATION 12	
	VIEW & MANAGE API CREDENTI	ALS
	RETURN TO DASHBOARD	

# **PLEASE NOTE!**

You must DOWNLOAD the .CSV. Once you navigate away from this page you cannot return to access this content.



# Generating CSR & Key File

GlobalSign provided the API Key and Secret. The DIP requires a validated certificate in PFX format together with these API credentials. The following will be conducted outside of the DIP by someone with technical understanding of generating a certificate.

Select a CSR(Certificate Signing Request) generation tool and create a CSR. Two methods tried and tested are Azure Key Vault & OpenSSL

# **Azure Key Vault**

Create a CSR with any subject name. YOU MUST select **Key Size 4096** in Advanced Policy Config. Click DOWNLOAD CSR to save your CSR file.

Method of Certificate Creation	Generate		~
Certificate Name * 🕕	onboarding-key-GlobalSig	+mTLS	✓
Type of Certificate Authority (CA) 🕕	Certificate issued by a non	integrated CA	×
Subject * 💿	cn=onboarding_key		
DNS Names	0 DNS names		
Validity Period (in months) *	12		
Content Type	● PKCS #12 ○ PEM		
Lifetime Action Type	E-mail all contacts at a give	n percentage lifetime	V
Percentage Lifetime *			80
Advanced Policy Configuration	Configured		
Tree			
iaĝo	U tags		
		Extended Key Usages (EKUs)	Download CSR
		1.3.6.1.5.5.7.3.1, 1.3.6.1.5.5.7.3.2	1
		X 509 Key Lisage Flags	
DI DI		2 selected	
Please	<b>e</b>	Pouro Kou on Panoual?	
		Ves	Key Size
nsure v			2048
nourc y	0u	INO NO	0 2072
oloct K	$\sim$	Exportable Private Key?	0 30/2
	⊂y	( Yes	4096
	hé	O No	
51ZE 403	90	March Town	Enable Certificate Transparency?
		Rey Type	
		C RSA	() N₀
		() EC	
		Key Size	Certificate Type
			Ear avample: "O\/_SSI "



File	Edit	View												ŵ
MIIEd 1Vwea 7m5du pYNud rTQfr	-BEGIN qTCCApE aaz19wJ uWcVO3R ds/yZaD rLPzmkf	CERTIF CAQAw0 2MTT46 JrG88u o70bR\ kFAh0t	ICATE REQ TEXMBUGA1 yePEy5TEX cCMMCLWNr qfyCR1ry4 nZkEØRLP0	UEST UEAwwOb25it cPYzGNZmbjf NJIBjmVjpz: cKqTprG9ZIU FvAA0uS9eCM	2FyZGluZ19 @MAdhKzhgTi NS9/X/q/oSi IrOF/GbfrYA MyN77mpRCM	°ZXkwggIiM ∂yw+1UJtay m1xEM46AYdJ aUpn4II51rk	A0GCSqC WP0PKdv ZhwcNNr km0uL53 RoC2206	SIb3DQEB 4d2rOf8D 83Nq84q1 4i+CsSYm	AQUAA4 )jDy5Ts .BsDbje 1eHM6Zr	ICDwAwggIKA J3BA4L1F6ph BXeJKnJaeq@ /zPyWC96gxI Xrf5IC+gYVc	oICAQDAm bXGTHmY8 5fZViG8c q3tH1TFE 41s63w31	CsXgsbhs +26p2Dbt GUUTU/it AUIJQFJZ vknW+TSx	HyKPSm 6ZUQQ+ uaQB9M m29mCb xy3fWa	HQk8 Id9KF oj0K6
9ZKvi dg2D, 01BB) 06V8i ye4ar 1WYe) 7cdU: hQpQ- +Z3KF ØyJPi	WHb7+mC waPG+R9 /51ba4x YwFAYIK wiZYdQd mAzzenE Xb3e/H5 zvL+ZRt +7MpHfA Pg84u7F vfOn3ip -END CE	VmvIT3 IdTshC TG1BS0 wYBBQU IG1jBV UMe7k+ NaQZGC fTaStp migdyy L3fgPY oxocuc RTIFIC	NGiosNsjf a12z8KFDL 08dKIWdCt HAwEGCCsG cxHyW72VW mSiuITdc0 XEZBTu0Ct Mbfs7u0E7 y9x22VNYx /D4IpK/pX mkLVtW1rt ATE REQUE	1NVJ+ AXs+Zw6utW fsUrhawiLfy AQUFBwMCMA 1b120QEZZB; v3dZcTvsfi( NEOzLu0e+Ns PsOSZQk+13; Y4Sky1xYJ00 k+FvytmNTA XRET47I9pOł ST	rrAN4diBrnZ: B52TPoafOLI GA1UdEwQCM c1RWxdPNwvv tsNf2AhmcRj Q0VCZKb2Xsi k/cZ7IY/ne B/AEASJdaM +ECXqJk/j5 KPTSDtmZMP4	Kr1bRvNWQv8 QCYjCsqQII AAwQQYJKoZI nj40zX65iw) MtkjQVPVQ- mi1PEQlLapU nj1PEQLLapU jEvYZbj62 24Wsy21i3ty TKF3a9nYGE 51A	8tVhMA1 DAQABoE IhvcNAC V818Xn1 + UCAE3RL aBcXvL/ yNg3t0k B1Dk/uC	/1tlwZpY swSQYJKa ELBQADgg WeZ2nA35 yDqXDqr6 BLqGh7fp hhsZM0T5 ba1EoLHu	/FhSM+C ZIhvcN ZIBAFnN &8thoj7 it3fzNq ijUBw+D i	9kfHxcRuHn+ AQkOMTwwOjź i7TY7SO51wA RWqCz7ysOqw qzNjYuH6dgS QDriqIuIp7N QpzILUqVG4y	byOWdEQK OBgNVHQ8 LlR5Jo/5c //k43GmIv iXNcxBr/w WNXR1Z1b /S4QQmwK2	5ME8VKEM BAf8EBAM cX0qL+NY D3UmsnRI IzccpcqU dHhTCNKt hVOKLiv1	oRnc6p CBaAwH zY34At mtdgjv IAEzJU NAFODn p4cpse	08rV 1QYD 1XG+ 1ALa 13k1 13k1

Please click 'YES' to Enable Cert Transparency

Certificate Type must be blank - no entry!

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# **Openssl version:**



openssl req -new -newkey rsa:4096 -nodes -keyout apicert.key -out apicert.csr -subj "/CN=onboarding\_key"

Generates two files:

# Certificate Signing Request (.csr)

#### ----BEGIN CERTIFICATE REQUEST----

MIIEXjCCAkYCAQAwGTEXMBUGA1UEAwwOb25ib2FyZGluZ19rZXkwggliMA0GCSqG Slb3DQEBAQUAA4ICDwAwggIKAoICAQClcss8+dKyWTFkG3+F3iJJK9D011k7yCqC KGDjERKgTTpKaMHB0kpAkg6E+MIsP68LtWCp6UljhDjccFRKD5Ix3EyvGA1vFOO4 wMPwU7duED13VI0nFag7dAcQtCFdkzZ1N6dfoYqu9yCsUWj6Pp/3Fdolu8brjvX8 fq6lpXOCAKnH0Pdfpj8hkeMFlqD1wU3PLLyX1ftabmIwB0kBhOGQbsbjAMgqAjlz ZYh3i8QISqI6K5TkFCIcxUWtfpS2vVgQMoQ1DfSTwewRY8mKYMPBq371N7in4oBp z29HIcZ0UTlt/pfvtmK9atY4APZtQLROsm7YI+eloGvfldSYC/1y4pUcKeRmFodD 2iuhCKspOyKugmmvyq3wwY7TuUwPb8Zh28stOnw4ituAheeM5mgoEcHCbwoIG9zs RtXOW66w9iLb84r6jlDf+9Xfps6Dj+dezTesD8N2QPqsInpsmR2027xicCWycUmk

----

--ihY+qEThEjO8x4iP4AtsIUyiIQxflr9MAEopuWS07OtWGPaV8SPBpqyT/9hq2WHW LRK5lt6C/N+wyO/RrJhLmfWQKQtpOvpWwpBH4QITaovvsEMFB2/P7gKibMCYNVer 3IRPIVpeldFmMX0WNMIpXJUyRRgM2OSjh4CCL68EgYTZ7eXzcgNRNwhu/ERb9OIR CyRc1aYJUY+F5vv+4j6R/UlnjGFzZmIuWmnKDw58aESADtQwom9OMImikIIiYGJZ 4Wo2yLHeonS7pirc48c5aJ7ytDxygsI7GXAireU1X8ChbnB0BTGCXw9yzhyZDcxV MBNBSYDG/VMNuOBP8NDffwjzLJCYQw2lt9qKyns/A6apE2bNNOecc+tXJOIdU01Z EzIl8Y6Zf8hWKoj3oQatNCKI4ZcnoKxuxAy7KR+RRXhohXHSTk2C2WL15mOgi4k4 BaLB3Jmkce3h1QmdFrJswkee06652jk8KVMwL3mtf9EkDvUHng+nD09jfiAf3Tx5 1VX9Mi/y1Zr0iWtRBMcU32fE

----END CERTIFICATE REQUEST----

# Private Key (.key)

#### ----BEGIN PRIVATE KEY----

MIIJQwIBADANBgkqhkiG9w0BAQEFAASCCS0wggkpAgEAAoICAQClcss8+dKyWTFk G3+F3iJJK9D011k7yCqCKGDjERKgTTpKaMHB0kpAkg6E+MIsP68LtWCp6UljhDjc cFRKD5lx3EyvGAlvFOO4wMPwU7duED13VI0nFag7dAcQtCFdkzZ1N6dfoYqu9yCs UWj6Pp/3Fdolu8brjvX8fq6lpXOCAKnH0Pdfpj8hkeMFlqD1wU3PLLyX1ftabmIw BOkBhOGQbsbjAMgqAjIzZYh3i8QISql6K5TkFClcxUWtfpS2vVgQMoQ1DfSTwewR Y8mKYMPBq371N7in4oBpz29HIcZ0UTlt/pfvtmK9atY4APZtQLROsm7YI+eloGvf IdSYC/1y4pUcKeRmFodDYvN+sCYpt23aM3TAQIVqmDB668y/hOBOFeECNEdpP0RB ig0AgjVdeltXIVRHjJC+/e61WA2PIRoSVbTP6EXWuha4q75JGTK9YUBKW4jdctRM r2YcM4K3n9CPkHhc7p7b7IVjS31Tm7860ZTwzX5yqM2av7thjmWnMWpE0RbcpAOw

\_\_\_\_

\_\_\_

ZqKSRdu92gboflCx1/ERHcz4ftW94otonWjhkqbM58mFH8NvKHsxrYcPo3WU6Qml JDuUjbtX1Y3ekyuB2id9LeMn7po+4PacZN6L6nWFgtKlgOCrrzzLAbVpgupWwWdD SFz6763+pwQutY3+1Q4euvOcFfDDOQIDAQABAoICAByVGltsZWP+WLQMtBkyaQXv FehWk8nqKL3Xr/VKa8dZ0CoustqDM+S31t5OBK44ykrhiNORw+X3X8NlflpW6IDG 2FCfezEbEMRIORF5xQS0tYm6V9l6uIebEeVm2STLW+sgNEAnLkhP1UsvvU0OKKCN G+TM7e6gAgse75QX0T6yUqJ8jV/u3pU0GN5MSX5raL/T4LjydLwIudnF32Mty7li ESYCapInVDmFXvAYK0it/hzCjrRgbgw+YG06owJ275HMyF5KDOjB5cCTVqwbT3ZT RBieLkW6XCqSveZXPzZXCoJ3kiIGCqWtiMY5OF+uqTe9vUH6w4bRFvzIAb5eDJpb 0XEQcYZmIBNBNEf81f7hqV4A7qcwXzg=

----END PRIVATE KEY----





# Generating the correct key format for upload to the DIP

The Certificate Admin must return to the GlobalSign Atlas system to complete the next stage of certificate preparation for the DIP.

NOTE: If you have appointed a new Cert Admin into the Atlas account, they can complete the following steps.





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# Create a PFX Certificate for Upload to the DIP

The output from the GlobalSign system requires the key to be converted to PFX format. This is completed using OpenSSL





### Return to the DIP to upload API credentials

The Certificate Admin will return to the 'Certificates' tab as below and click the NEXT button to proceed:



Click 'NEXT' to move to on to 'API Credentials' entry 45

![](_page_44_Picture_6.jpeg)

![](_page_45_Picture_1.jpeg)

# **Upload API Credentials**

The Certificate Admin must now upload the GlobalSign API Key & Secret, together with the PFX Certificate, to the DIP.

![](_page_45_Figure_4.jpeg)

![](_page_45_Picture_5.jpeg)

![](_page_46_Picture_0.jpeg)

# Step 4.3 & 4.4 – Domain Registration & Verification

#### Step 3 & 4 – Domain Registration & Verification

![](_page_47_Figure_1.jpeg)

### Register and Validate the Company Domain in the DIP

The Certificate Admin will work with a DNS Admin to complete the Domain registration in DNS.

![](_page_47_Figure_4.jpeg)

Please take a note of the '**Name**' = '@' and the **VALUE is a 'txt'**, and pass both to **DNS Admin** for insertion into the DNS BEFORE clicking (5).

		API CREDENTIALS	DOMAIN C	REATION	DOMAIN VERIFICATION	CENTIF	CATE CREATION
Glo	balSign Domain Verifi	cation					
Date	e select a previously created don	sam which you t	ansh to have vermen	1.			
Care of	al des energedatainteenationalation	Lenuk.		•			
-							
The b	elow TXT record must be added to you	r domains DNS so	that it can be verfified	f by Global Sign.			
Nat	e Value						
0	globalsign-domain-verification=	GASSATFED93DFO	C64E218FAE4E1483C1				
Doma	in vertification attempt log						
Stat	as Description	Timestamp	Method				
ERR	OR no valid DNS records returned	1692095988	ONS				
0	lease check this box to confirm you h	ive added the abo	rve DNS record to your	domain before at	tempting to verify.		
							_
						Previous	Next

![](_page_47_Picture_7.jpeg)

![](_page_48_Picture_0.jpeg)

![](_page_49_Picture_1.jpeg)

# Generate mTLS & Signing Certificate Overview

To generate a mTLS or a signing or a combined mTLS/signing certificate follow the steps below:

1.	2.	3.	4.	5.
Generate CSR & KEY file	Load CSR file into DIP	Generate CER file	Download CER file from the DIP	Merge CER & KEY file to generate PFX certificate

A certificate generation capability/tool is required to undertake steps 1 & 5. Example usings Azure Key Vault and native OpenSSL commands are provided below

The end result is a PFX file

![](_page_49_Picture_7.jpeg)

![](_page_50_Picture_1.jpeg)

# Step 1. Generate CSR & KEY file

#### Login to the DIP as Certificate Admin

- 1. From the Market Participant menu select the Certificates tab
- 2. Select the **Create Certificate** option

IOME	MARKET PARTICIPANT ORGANISATION	MESSA	GE CHANNELS	MESSAGES	PERFORMANCE								
Elexo You can v	on Flex Limited	ase ensure 1	hat you keep this i	nformation accurate ar	ıd up-to-date.					B	Request	DIP Connection P	rovider Status
Comp 1607 Descr Home	pany Number 9976 ription e of the DIP Manager and test harnesses				Rol	e Codes P, REGS, SDS, ADS, I	иSS						DCP Status Disabled
White	elisted Domains n-flex.com												
DIP IDs <b>Current</b> You can y	Members Certificates Iy Active Certificates view the status of your current active cert	tificates bel	ow. Please ensure t	hat you keep this infor	mation accurate and up-	to-date.			C Upd	ate API Cre	dentials	Create	Certificate
Certii 011F	ficate Serial Number 74952A3EB636D3A2F6DDAF2EC669	Status ISSUED	Created Date 2025-03-18	Expiry Date 2026-03-25	Created By robert.golding@elexor	C n-flex.com e	ommon Name nergydip-nonprod.2069.elexon-	1 flex.com r	ype nTLS & Signing	🕂 Re	issue	▲ Download	🙁 Revoke
Certificat	tes History								<b>▼</b> F	lter Q	Search		
Certif	icate Serial Number		Status	Created Date	Expiry Date	Created By		Common Nam	2			Туре	
012EF	167B8290AD2F812F6FBFD4C988F		REVOKED	2025-03-13	2026-03-20	robert.golding@e	elexon-flex.com	energydip-nonp	rod.2069.elexon-fl	ex.com		mTLS & S	igning
Showing	items 1-1 of 1 Show 10 All												

- 1. From the Create Certificate pop-up
- 2. Enter the required <u>Host Name</u> & <u>Domain Name</u>. Domain name is taken from a drop down populated by the list of domains registered against the organisation.
- 3. Select 'Certificate Purpose' to choose a "mTLS" (for DCPs), "Signing" (for MPs) or "mTLS & Signing" certificates (both)
- 4. Subject name is generated from values provided
- 5. Select Copy this will copy the Subject Name SN
- 6. You will also need to copy the Domain Name & Host DN&H

Host Name	Domain Name		DNR
my-host	elexon-flex.com.		
Certificate Purpose mTLS & Signing 🛛 👻			
Subject Name			CN
energyap-nonprod.2003.elexon-nex.com		Сору	SIN
CSR			

![](_page_50_Picture_14.jpeg)

# Step 1 (cont). Generate CSR & KEY file (Azure Key Vault version)

#### Using the details from the previous step

#### Open the Certificate Creation Tool (e.g. Azure Key Vault)

- 1. Click (select) to generate a certificate (in AKV click Generate/Import)
- 2. Give the certificate a name (no spaces)
- 3. Choose 'Certificate used by non-integrated CA' from drop down
- 4. Enter 'cn=' then paste the SUBJECT NAME (SN) copied from previous step
- IMPORTANT click 'DNS Names' and complete the 2 entries SN & DN&H copied from previous step

Advanced Policy Configuration

6. Click 'Not configured' next and ensure Key Size is 4096

![](_page_51_Picture_10.jpeg)

![](_page_51_Picture_11.jpeg)

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#### 7. Click 'Create' button to create CSR & KEY files

![](_page_51_Picture_13.jpeg)

- 8. Open the generated CSR
- 9. Download CSR

Home > edip-kv-ms-poc-uks-002   Certif	icates >			Webhook-dev Certificate Operation	1 \$	×
Versions				🖒 Refresh 🛓 Down	load CSR 🕴 Merge Signed Request 🚫 Request Cancellation 🔋 Delete	
	+ New Version 🕐 Refresh 🚺	🕽 Delete 🛓 Download Backup 🗱 Issuance Poli	cy 🕻 Certificate Operation	Status	🔁 in Progress	
Cverview	Version	Thumbprint	Status	Status Details	Please perform a merge to complete this certificate request.	
"A Access control (IAM)	CURRENT VERSION					Copy to clipboard
	3e0dcac2881145cc9f3b59077a4	lae4dő	O Disabled	Request ID	df7b9cb6ca6f488a8b3091ac82ec8371	0

![](_page_51_Picture_17.jpeg)

# Step 1 (cont). Generate CSR & KEY file (OpenSSL version)

- 1. Using the Subject Name (SN) and the Host & Domain Name (H&DN) copied from previous step:
- 2. Enter the command OpenSSL command:

# openssl req -new -newkey rsa:4096 -nodes -keyout mtlscert.key -out mtlscert.csr subj "/CN=<SN>" -addext "subjectAltName = DNS<H&DN>, DNS:<SN>"

<u>MOIO</u>

3. This will generate two files: CSR & KEY files

![](_page_52_Picture_6.jpeg)

![](_page_53_Picture_1.jpeg)

# 2. Load CSR file into DIP

3. Open the downloaded CSR file into a text editor

AtlasDemo_sabc39c345464da39877e061	AtlasDemo_eabc39c3454f4da39877e06/	Webhook-dev_df7b9cb6ca	6f488 ×	+	-		×
ile Edit View							۲
-BIGDI CENTFICATE REQUST 		AMACK SqcSIb 3DQEBAQUAU ttBr-srIbu/34TV11bb26 Tar/PriTr1/4 +qh2UDA2TX7B23yp2Q1c TuLok6dwH1 mac;+ L2x21b4Sn/mgs0h/4Viko Ud3QQMBQCCSaQUF3 Colory Jackson Griftod69x25/6YY31aa1 UK810Y005/57+K//HQDE L3x21b4S2P+ HolmoyLdB2P+ Lci/CkexP281UHr59Au6 L5/ScR2F281Hr59Au6 L5/ScR2F284 L5/ScR2F284 L5/ScR2F284 L5/ScR2F284 L5/ScR2F284 L5/ScR2F284 L5/ScR2F284 L	4ICDwaw 21zdpp9 02KYeNg 02KYeNg 02KYeNg 02KYeNg 02KYeNg 12zd 12zd 12zd 12zd 12zd 12zd 12zd 12zd	ggIKAoICA /RoKs3pGM 6DcZVWkoF 6DcZWkkoF gSE92fAjKa xunSm38m6 gEFBQcDAj QYDWR0TBA YSzWgERV eheSCXwEK x0/ gvØwdj9ex	QDF86dbC /F3znPCQ meT13VRR 8cRFt18L n3wI1c5J BNBgNWHR Iw4DANBg UJQF6stD B5kRSmbU JHbqCC/4	cN5DaD pyi1Vt 8J8RKA 3bG1j1 99aFa+ EERjBE kqhkiG 1 ho7BI8 foXtbo	73mPs yqc6o pWVq5 + JQIDA ghFlb 9w88A 915zA

#### 4. Select the Certificate Text

			THURDONIN		34	10.3			
Atlast	Demo_eabc39c345	464da39877e061	AtlasDemo_eabc39c3454f4da39877e06f	Webhook-dev_df7b9cb6ca6f48	a ×	+	-		×
ile Edit	View								۲
BEGI	N CERTIFICAT	E REQUEST	-						
IE/zCCA	wcCAQAwHDEaM	BEGATUEAMRZ	V51cmd5ZG1wLWR1di41NDMwggIiM	A0GCSqGSIb3DQEBAQUAA4IC	Dialong	gIKAoICAQ	OF86dbC	cN5DaD	7JmPs
9pWky67	zUAdme6xe1Gg	1H57x1XKjvNul	lqdIj5DD5k7DnAnHrTtyeZfpccPe	ttBr+xTBu/3fTY11Wb2821z	dpp9/	RoKs3pGM/	F3znPCQ	py11Vt	yqc6o
rosamh1	JUZUQNU86Yn7	bbUnaw8ZSokM	ICCCx00c/aemVm4MPo31mN+y9Q07	1a/9r11r1/4		0.714.0.0		0.200044	
QPP9305	fMBPaLpnY99s	1Q11UKaJsuHM	auG5096jtJmX9As2/Ofr@t280Tpb	+qhzUGAz1X7BzJyp2Q1q82K	Yenge	DCZVVkoFi	IeT13VKK	BJSKKA	phVq5
10521191	6/u80x015d8s	vel ZeluuaVxp	PGVpe+/1jrpQ4Ur1rYA0m42536K	TuLokoexH1					
IUL danua	DIVERGENES	EAS JEGTS I WAA	LtuzxPFcevG0P/qf13wbil0iip0E0	macj+		FOT CANV-	-07+101	3663.43	
08081810	DIWHZHMZOEdq	LyPxaUxMLBJd	1/pStnoM2CMA9BeVSpNJTKRFgBuE	L2x21HwSnVigs0wPwYkwWC9	in12pp	SULTAJKAS	SCRET18L	306131	10104
ISUDGABU	Callababb CO	RKD/qakSPCPWj	A/TACLAGUISN/GR4018JIJXPEIC	UUSSYUU WINFS JALUCQV220	17/ths	UN5838800	13W11C5J	994144	AULUA
40010001	Gabgkqrik169w	DDCQ4xgTwwgTi	CAUGITURATINGTI DAQUAGNG BUCAL	En al Research of Cause Rev 7 Reve	oggrog	PEPEQCUAJO	ADANRA	cenjbe	SULL TO
eyrorkan	EAdVote Cook	IVUZVIACSVAy.	224002831CH0320F01W1003VICH	Poawsucexnuez vcheur zouu	AND NO	TUTNOTOHO	NHOHNOR	VOUR TO	
· EAAOCAn				Chittad69v35/6vY13aa7adY			11066940	1	
FAAOCAg	moE1SKHRHduo	VIWQ25W10215	7aWra1b7+UEAS1MPCBGVdoaf8oE	Ghftod69x25/6yYjJaaZrdX allCTN2YeVCNP62Lotialfild	In KIM	5zWigtRVL beSCXvEKE	JJQF6xt0	1	015×A
FAAOCAg LxxVI/N1	mgF15KHRHdug	WechX+P010D0;	2aWze1b2+UEAS1MPCBGYdoaf8pF IS8637b+C6016E7A2WSeVU2Ce4B	Ghftod69x25/6yYjJaaZrdX gUCTN2YmVCMP62LqjialfUd bKR10YaDb57ckK/UcD6o7v1	IpUQVe	SzWigtRVL heSCXwEKE	IJQF6xt0 ISkRSmbU	1 ho7BI8	915zA
sFAAOCAg ixxVI/N1 bisY49ZA s6ETbb88	mqF1SKHRHduq FSXLGg3My8Bu	N8chX+P010D0 01zbqoRfm7U50 e2scfkabPEvb	VPBNJEPPB27067044C9WS/3CPR6 3ZaWze1bZ+UEASIMPCBGYdoaf8pF ISR637bsCG016F7A2YVSgYUZCm4B IVdzyc1/t6wG2z6tfDbm/J7ky12of	Ghftod69x25/6yYjJaa2rdX gUCTN2YmVCMP62Lqjia1fUd bKB10YgDh57rkK/HqD6o7y1 BolymuyidB2P+	IpUQVe 140Mg	SzVWgtRVL he5CXwEKE 0/	JJQF6xt0 35kRSmbU	ho7BI8	91SzA
sFAAOCAg ixxVI/NI sisY49ZA g6EThh8R loOh1bwg	mgF1SKHRHdug FSXLGg3My8Bu to9CINXszVAOR BukGn51NsBUH	VIWQ25W10215 NBchX+P010D0 01zbqoRfm7U5 e2scfkghPEvb2 P53VIw058D41	vpbm2cppb2v06/qqc.9k3/9cPk6 92aWze1b2+UEAS1MPCBGVdoaf8pF 1SR637bsCGQ16F7A2VVSgYUZCm4B 2Ydzwj/t6wG2z6tfDbmVT7kx37oC AxXd/w6RXsco7iDA0L0Cn8v4L6FW	Ghftod69x25/6yYjJaaZrdX gUCTN2YmVCNP62Lqjia1fUd bKB10YgDh57rkK/HqD6o7y1 RolvmuyUdB2P+ c1/GkrsP7B1UHP584gaR03	IpUQVe 40Wgo	SzWigtRVL he5CXwEKE 0/	IJQF6xt0	foXtho	915zA
sFAAOCAg ixxVI/N1 oisY49ZA g6EThh8R 3p0h1bwq 4rmD1C9k	mgF1SKHRHdug IFSXLGg3My8Bu to9CINXszVA0R IBukGn51NsBUH	VIWQ25W1B215 NBchX+P010D0 01zbqoRfm7U5 e2scfkghPEvb2 P53VLwQ580419 7C1UX+86V2ET	vpini1pp0_vLGASIMPCBGYdoaf8pF JSR637bsCG016F7A2YVSgYUZCm4B LYdzwj/t6wG2z6tfDbmVT7kx37oC JuXd/mC0XsCo7j0A0LOCBv4L6fN TDMtzekH11L1M2M37bof1Bn37U	Ghftod69x25/6yYjJaaZrdX gUCTN2YmVCNF62LqjialfUd bKB10YgDh57rkK/HqD6o7yi RolvmuyUdB2P+ ci/GkcsPZBiUIHr584gaRQ3 UMSkral21kifva19abKam41	IpUQVe I40Wga IYDdg	SzWWgtRVL he5CXwEKE 0/ v0wdj9ex]	IJQF6xt0 ISkRSøbU IHbqCC/4	foXtbo	915zA 1Q72T
sFAAOCAg LxxVI/N1 pisY49ZA g6EThh8R JpOh1bwq 4rmD1C9k p1c8htHL	mgF1SKHRHduq IFSXLGg3My8Bu to9CINXs2VAOR IBukGn51NsBUH 1kgTXIVH26Xa 1ENomeaM9Lff	viiwQ25w16215 N8chX+P010D0 01zbqoRfm7U5 e2scfkghPEvb P53VLwQS80419 7C1UXz8GV2FT f5bXaqDv47Wf	VpDH1Epb2/00/040C9M3/9CFR0 22AW2EDZ-UEASIMPCBY00aFB5 ISR637bsC6016F7A2YVSgYUZCMB IYdzwj/t6WG2z6tfDbmVT7kx37oC JuX4/mE0XsC7j0A0L0CpBv4L6FM IDM1zcMHjtUNXDM32HgfUM3Z1V RFUIR0c7bVtc5N4M55V90RF1do	Ghftod69x25/6Y3Jaa2rd4 gUCTN2YmVCNP62LqjialfUd bKB10YgDh57rkK/HqD6o7y1 RolvmuyUdB2P+ ci/GkcsP2BiUIHr584gaRQ3 1M8kceL2jkjiHr584gaRQ3 C7o125r0cm4FeB152oXYM9	IpUQVe I40Wga IYDdg IUw+ ch+KY2	SZVWgtRVL heSCXwEKE 0/ v0wdj9exJ e0XMGDExE	IJQF6xt0 ISkRSwbU IHbqCC/4	1 ho7BI8 foXtbo	915zA 1Q72T
FAAOCAg LxxVI/N1 pisY49ZA g6EThh8R JpOh1bwq 4rmD1C9k p1c8htHL END	mqF1SKHRHduq IFSXLGg3MyBBu to9CINXs2VAOR (0ukGn51NsBUH 11kgTXIVH26Xa 1ENnmeaM9Lff CERTIFICATE	viiiikų2sikilo21si NilohX+P010D0j 01zbqoRfm7U5i e2scfkghPEvb P53VLikQS8041 7C1UXz8GV2FT f5bXaqQyA7Wf- REQUEST	VVDDIJL2p0274074004CVW3794CVW3794 2541/2512741EA51MPCBCW36ar8pF 158637bsCG016F7A27VSgYU2CM48 2743x471454256F7D0HV77kx37aC 27447427454573140405294416FH 20MtzckH1jt1UnXDM32HgfUWq321V RFU180g2NWtso3HAHSSy988c14a	Ghftod69x25/6Y1jaa2rdX gUCTN2YmVCNP64jia1td KkB10YgDh57rkK/HqD6o7y1 RolvmuyUd82P+ ci/GkcsPZB1U1Hr584gaRQ3 LN8kceL2jkjfxe19aWKamd3 G7o125rQqwAEgB152oXYW99	IpUQVe Id0igs IVDdg IUw+ ch+KY2	SZVWgtRVL he5CXwEKE 0/ v0wdj9exJ e0XMGDFxD	IJQF6xt0 85kRSwbU IHbqCC/4 05Gu7wA=	1 ho7BI8 foXtbo	915zA 1Q72T
sFAAOCAg 1xxVI/NJ o1sY49ZA g6EThh8R JpOhlbwq 4rmD1C9k p1c8htHL END	imqF15KHRHduq IFSXLGg3MyBBu to9CINXs2VA0R J0ukGn51NsBUH 1kgTXTVH26Xa 1ENnmeaM9LFF CERTIFICATE	vmuQ2sw1b21st N0chX+P010D0J 01zbqoRfm7U5J e2scfkghPEvbJ P53VLivQS8041t 7C1UX28GV2FT f5bXaqQyA7Wfs REQUEST	vpbn.jcpbc/ab/ddcWdfydcrWdy/ach 254/zcl2c4/LASJMPCBCW/docH8pf 55R637bsCGO16F7A2VYSgVUZCm4B Vdtwj/t5&C26tFDbwYT7ck37aC JuXd/AcCMscCo7jOADLOCpbvLG5M LCMtzchHjtIUnXDM3ZhgfUWq3Z1V AFFUI80g2hktso5HAH5Sy98Bc140	GhftodG9x25/6yYjlaa2rd4 gUCTN2YmVCNP62Lqjia1fU kKB18YgDh57rkK/HqG6o7yi RolymuyUd82P+ ci/GkcsPZBiUIHr584gaRQ3 JN8kceL2jkjfxe19aWKamd3 G7olZSrQqwAEgB152oXYW9x	IYDdg IUw+ ch+KY2	SZVWgtRVL he5CXwEKE 0/ v0wdj9exJ e0XMGDFxD	JJQF6xt0 85kRSmbU 1HbqCC/4 05Gu7iaA=	foXtbo	915zA 1Q72T

# 3. Generate CER File

5. PASTE the Certificate Text into the CSR field in DIP

![](_page_53_Picture_9.jpeg)

#### 6. Click 'Create Certificate'

7. 'Toast' advises successful certificate generation

MBHS PROGRAMME		ELEXON Data Integration Portal				Onboarding status updated successfully.	
MARKET PARTICIPANT					0	Certificate data s successfully.	laved
ORGANISATION							
A very prominent energy o	company						
Detailed information on the Market Participant,	, the constituent DIP IC	Ds operating within th	he DIP and their mem	pers along with certificate functionality.			
Company Type	Company Nu	imber		Role Codes		DIP Connect	tion Provide
None set	123456			SDS, UDS, MSA, SUP, MDS, REGS		None set	
Description							
Very active and well known in the industry							
Whitelisted Domains							
mailinator.com							
ertificates							
urrently Active Certificates						Cre	ate Certifica
Certificate Serial Number	Status	Created Date	Expiry Date	Created By	Re-Issue	Download	C Reynike

![](_page_53_Picture_13.jpeg)

![](_page_53_Picture_14.jpeg)

# 4. Download CER file from DIP

The Certificate Admin will be presented with a list of certificates associated with the organisation and can DOWNLOAD the ACTIVE certificate.

- 1. The list of your available certificates are displayed within Market Participant menu
- 2. Click 'Certificates' tab and check certificate is ISSUED
- 3. Click Download to utilise the new ISSUED certificate.

	ELEXON	<b>R</b> 0	
NOME MARKET PARTICIPANT MUSSAGE CHANNELS MESSAGES PERFORMAN	ι	General Details Certification Path	×
Elexon Flex Limited You can view your organisation details below. Please ensure that you keep this information accurate and up-to-date.	10 Barrard NB Francisco Barrielo	Windows does not have enough information to verify this certificate.	General Details Certification Path Show: CAll>
Company Number 15076976 Description Home of the DIP Manager and test harnesses Whitelisted Domains elexon flex.com cgi.com	Role Codes DCP 5 SUP, REGS, SDS, ADS, MSS, LDSO, MAP Disabl	Issued to:: GLOBALSIGN TEST CERTIFICATE - FOR TEST PURPOSES ONLY Issued by: GlobalSign Non-Public HVCA Demo Valid from 07/09/2023 to 06/12/2023	Field Value Serial number 0191506728504de803678116 Signature ladorithm sha256528 Signature hash algorithm sha2566 Itsuer Globalign Non-Puble HVCA D Valid from 07 September 2023 12:53:58 Valid to 06 December 2023 12:53:58 Subject GLOBALSIGN TEST CERTIFICA Sign hink kew State Mark Medi
DIPIDs Members Certificates Currently Active Certificates You can view the status of your current active certificates below. Please ensure that you keep this information accurate a	C Update API Credentials Create Certific	3	CK Edit Properties Copy to File
Certificate Serial Number Status Created Date Expiry Date Created 011F74952A3E663603A2F6DDA72EC669 ISSUED 2025-03-18 2026-03-25 robert,	by Common Name Type Deventord 2009 elexon-flex.com mTLS & Signing €		OK
Certificates History         Status         Created Date         Expiry 0           012EF16788290AD2F812F6FBFD4C988F         REVOKED         2025-03-18         2026-03-	▼ Filter         Q. Sauch           te         Created By         Common Name         Type           0         robert.golding@elenon-flex.com         energydip-nonprod.2058.elenon-flex.com         mTLS & Signing	Open the downloaded Co Click 'Details' Tab. Check validity by compar matches.	ertificate file and ing <b>Serial Number</b>

Check Subject is as expected.

![](_page_54_Picture_7.jpeg)

![](_page_54_Picture_8.jpeg)

![](_page_55_Picture_1.jpeg)

# 5. Merge CER & KEY file to generate PFX certificate (AKV version)

Final stage of the process must be conducted within the Certificate Generation tool chosen earlier

1. Select menu option 'Merge Signed Request'

Webhook-dev     Ø       Certificate Operation     O       O     Refresh     Download CSF	Merge Signed Request Request Cancellation Delete	2	A 'toast' pop-u	p will confirm the m	erge was successful
Status Status Details	lin Progress Please perform a merge to complete this certificate request.	mhhs <sub>Certificate</sub> (	-dip-mtls-and-sig	jning ☆	Merging the signed request for certificate × 'mhhs-dip-mtls-and-signing'.
Request ID	df7b9cb6ca6f488a8b3891ac82ec8371	💍 Refre	sh 🞍 Download CSR 🗍 N	Nerge Signed Request 🚫 Request Can	The signed request for certificate 'mhhs-dip-mtls-and- signing' has been successfully merged.
	I	1 The	signed request for certificate 'mhh	s-dip-mtls-and-signing' has been succe <b>tsful</b> l	/ merged
	•	Status		Completed	
<b>Select the F</b> (a .c	FILE downloaded from the DIP Portal er file – example shown below)	Request IE		22a711323fe847d09f8ad7fd2b1a3c11	D
MHHS-DIP-Ce	ertificate-01F7C0143456CD7A0CFDA138A616B44F.cer	3. T	he certificate m elect the certifi	ust now be downlo cate and choose 'D	aded as a PFX WITHOUT Password ownload in PFX/PEM Format'

![](_page_55_Picture_6.jpeg)

🥪 edip-kv-ms-poc-uks-002-alan-mhhs-dip01-atlas-mtls-20231003.pfx

![](_page_55_Picture_8.jpeg)

5. Merge CER & KEY file to generate PFX certificate (OpenSSL version)

To generate the PFX file :

1. Enter the command OpenSSL command:

# openssl pkcs12 -export -out mtlscert.pfx -inkey mtlscert.key -in mtlscert.cer -password pass:

<u>eroi</u>

2. This will merge the CER and KEY generate a PFX file

![](_page_56_Picture_6.jpeg)

![](_page_57_Picture_0.jpeg)

# Step 5-Setting up DIP IDs

# Background – DIP Roles

Role ID	DIP Active	Requestable role	Service Name	Market Segment/Role	Market Participant Role
MSA	*	$\checkmark$	Metering Service (Advanced)	Advanced Market Segment	Т
ADS	*	✓	Advanced Data Service	-	0
MSS	*	✓	Metering Service (Smart)	Smart and Traditional (non-Smart) Market Segments	S
MRS			Metering Reading Service	-	6
SDS	*	4	Smart Data Service		Ν
SMSO	¥	✓	Smart Meter System Operator		
MDR	\$	4	Meter Data Retrieval Service	-	
UMSO	*	$\checkmark$	Unmetered Supplies Operator Service	Unmetered Supplies Market Segment	3
UMSDS	*	4	Unmetered Supplies Data Service	-	Q
MDS	*		Market-wide Data Service	BSC Central Settlement (CS)	n/a
LSS	*		Load Shaping Service		n/a
ISD	*		Industry Standing Data		n/a
VAS	*		Volume Allocation Service		n/a
REGS	*	$\checkmark$	Registration Service	Registration	Ρ
SUP	*	✓	Supplier	Supplier	х
МАР	¥	✓	Meter Asset Provider		8
LDSO	*	✓	Licensed Distribution System Operator (IDNOs & DNOs)	Distribution Network Operator	R
EES	*		Electricity Enquiry Service	RECCo	L
	\$ - MDR has t	ne option to use the DIP for me	ssage exchange		
	¥ - MAP & SM	SO roles do not participate in m	nessage exchange in the DIP		

![](_page_58_Picture_2.jpeg)

# Market Participant Data Setup - Supplier

![](_page_59_Figure_2.jpeg)

All the data required for each Market Participant on-boarding onto the UIT environment has been set up in advance.

Each Supplier requires a DIP Id for each of the MPIDs they are qualifying

Optionally each Supplier will need to understand their MDR status.

![](_page_59_Picture_6.jpeg)

Suppliers and Smart Data Services Participants have choices about how to operate the MDR function within the MHHS Design.

Depending on how Suppliers and Smart Data Services intend to use the MDR function, this may involve some additional DIP Onboarding steps for how to set up the MDR Market Role.

<u>Note</u> - the DIP has separate DIP IDs that need to be set up and configured to support the use of the MDR function

The 'MDR' Market Role Participant details are used for two (2) purposes within the MHHS design

- 1. Registration Process (Mandatory)
  - MDR identity details are used for populating data items within Registration DIP messages to ensure that every MPAN has a registered MDR Participant with the Registration systems for external party validation purposes (e.g. DCC).
- 2. Sending / Receiving DIP messages (Optional)
  - MDR Participants using the MDR DIP Market Role wish to 'opt-in' and use the optional DIP messages introduced under CR-023 – Standardisation of Interfaces within the SDS

For example,

- Where the Supplier intends to appoint themselves as an MDR for each MPAN and continue to collect consumption and generation data via the DCC using their existing Supplier User Roles then an additional separate DIP ID will be required to be set of for the DIP Market Role of 'MDR'
- If the Supplier, using its MDR function, also wishes to use the optional DIP messages introduced under CR-023 Standardisation
  of Interfaces within the SDS to send / receive DIP messages (IF-061 to IF-065 messages) then this is an extra configuration
  required within the DIP to create a SDS to MDR Pairing.

![](_page_60_Picture_12.jpeg)

![](_page_61_Picture_1.jpeg)

НОМЕ	MARKET ORG	PARTICIPANT ANISATION	MESSAGE (	HANNELS	MESSAGES	PERFORMANCE						
Elex	on Flex Li	mited										
You can	view your organi	sation details below. Plea	ise ensure that <u>i</u>	ou keep this inforr	nation accurate and	Jp-to-date.					C Request DIP Con	nection Provider Status
Com 1607	pany Number 6976					Role Codes SUP, REGS, SI	DS, ADS, MSS, L	DSO, MAP				DCP Status Disabled
Desc Hom	ription le of the DIP Man	ager and test harnesses										
Whit	elisted Domains on-flex.com											
cgi.c	om											
DIP IDs	Members C	ertificates							Create New DIP ID	<b>Y</b> Filter	Q Search	
You can	view the status o	f your DIP IDs below. Plea	ise ensure that	you keep this inforr	nation accurate and	up-to-date.						
DIPI	0 ▼	DIP Role Code	MPID	MP Role Code	DCP Orga	nisation DC	PID E	ffective From Date (MPR)	Effective To	Date (MPR)		Actions
11910	000001	ADS	DMXX	0	Unassigne	d N//	A 2	025-01-30	2030-01-01			🎤 Edit  📋 Delete

![](_page_61_Picture_3.jpeg)

![](_page_62_Picture_1.jpeg)

# **Select DIP ID to administer:**

MHHS PROGRA					ELEXON Data Integration P	ortal		U
НОМЕ	MARKI OR	ET PARTICIPANT GANISATION	MESSAGE CHANNEL	S MESSAGES	PERFORMANCE			
Big El You can v	nergy Co	Ompany nisation details below. Plea	ase ensure that you keep t	his information accurate	and up-to-date.			
Comp	any Number				Role Codes			DCP Status
22424	24				SUP, VAS			Active
Descri	iption							
new o	one							
White	listed Domain	s						
sit.tes	tmp.co.uk, liv	e.co.uk, esgglobal.com						
DIP IDs You can v	Members iew the status	Certificates of your DIP IDs below. Plea	ase ensure that you keep t	his information accurate	and up-to-date.	Create New DIP ID	Q Search	
DIP ID	•	DIP Role Code	MPID	MP Role Code	Effective From Date (MPR)	Effective To Date (MPR)		Actions
10865	576131	VAS	ABCD	n/a	2024-07-15	2025-07-15	🖍 Edit	Delete
14944	31682	SUP	RDG1	х	2024-07-04	2025-07-04	🖍 Edit	🛢 Delete
Showing	items 1 - 2 of 2	2 Show 10 All					(	< 1 >

![](_page_62_Picture_4.jpeg)

- 1. Nominate DCP
- 2. API Keys
- 3. Add Member

![](_page_63_Picture_5.jpeg)

![](_page_63_Picture_6.jpeg)

#### Step 5 - Nominate a DCP for a DIP ID

DIP ID 🔻	DIP Role Code	MPID MP Role Code	Effective From Date (MPR)	Effective To Date (MPR)		Actions		Idoptify the [	DID Vou wich to nomi	note a DCD for and aliak it
1252210018	MSA	QAWD T	2024-06-24	2025-06-24	🖍 Edit 🛛 🗎	i Delete			DIF ID you wish to homi	
								This will take	e you to the DIP ID deta	ils view.
HOME NARKET PARTIC	IPANT MESSAGE CH/	ELEXON Data Integration Portal	audit mpan users					Click the 'No	ominate DIP Connection	Provider' button.
Market Participants > Smart Ene	rgy > DIP ID 1252210018			2					3	
Details Company Number MPID 232424 QAWD	Market Participant Role Code	DIP Role Code DIP ID Effective Frr MSA 1252210018 2024-06-24	GD Nominate DIP Connection Provider um Date (MPR) Effective To Date (MPR) 2025-06-24	<b>Nomina</b> Market	te DIP Connection P Participant	Provider for DIP ID 1	1252210018 e 5-		Nominate DIP Connection Provider for DIP ID 12522100	18 e 5-
Interface Configuration Please select an interface to config Interface	ure for this DIP ID	• Add breaker	0 teach				<ul><li>✓</li><li>✓</li></ul>	$\rightarrow$	Example DCP Organisation	
Members First Name ▼ La Cert Ac User Ac Showing items 1-2 of 2 Show 30	sst Name Email Imin certadm@ma Imin useradmin1@ ) All	Role MP Certificate Admin mailinator.com MP User Admin	Actions n II Officard II Officard C 2 2	Whiteli This will a assign the	t DCP's domains? low you to invite members m roles	) s of the DCP organisation Cancel	into yours and Nominate		Whitelist DCP's domains? ✓ This will allow you to invite members of the DCP organisation into yours a assign them roles Cancel Nomin	nd ate

Your desired DCP should have already created a DCP ID in the portal and shared it with you. Select you desired DCP from the Market Participant field and then the DCP ID they have shared with you.

You must also tick the 'Whitelist DCP's domains' if you intend to add DCP users as members of your organisation to allow them to perform administration tasks, for example create certificates or generate API Keys. Please note, if you do not see your desired DCP listed, please ask them to create a new DCP ID for you.

Once happy with the nomination details, click the nominate button.

![](_page_64_Picture_6.jpeg)

![](_page_65_Picture_0.jpeg)

# Section 6-Message Channel Set-up

#### Section 6 – Message Channel Setup

![](_page_66_Picture_1.jpeg)

#### ELEXON UU Data Integration Portal MARKET PARTICIPANT HOME MESSAGE CHANNELS MESSAGES PERFORMANCE ORGANISATION Market Participants > Big Energy Company > DIP ID 1494431682 DIP ID: 1494431682 CO Nominate DIP Connection Provider Details MPID Market Participant Role Code DIP Role Code DIP ID Effective From Date (MPR) Company Number Effective To Date (MPR) RDG1 SUP 1494431682 2025-07-04 2242424 Х 2024-07-04 API Keys Primary Key Show Сору Regenerate Secondary Key Show Сору Regenerate Interface Configuration Please select an interface to configure for this DIP ID IF-001 - Not configured IF-002 - Not configured Q Search 🕂 Add Member **T** Filter IF-003 - Not configured Email Role Actions IF-004 - Not configured MP User Admin MP Message Admin edwardkbowyer@live.co.uk Offboard MP Certificate Admin IF-006 - Not configured MP Analytics Reader MP User Admin MP Message Admin User Eleven user11@sit.testmp.co.uk Offboard MP Certificate Admin MP Analytics Reader

![](_page_66_Picture_3.jpeg)

![](_page_66_Picture_5.jpeg)

# Section 6 – Message Channel Setup

![](_page_67_Picture_1.jpeg)

ROGRAMME			E L E X O N Data Integration Portal			
MARKET PARTICIPANT ORGANISATION	MESSAGE CHANNELS MESSAGES	PERFORMANCE				
<pre>/ket Participants &gt; Big Energy Compan</pre>	y > DIP ID 1494431682					
P ID: 1494431682						
etails						GD Nominate DIP Connection Prov
Company Number 2242424	MPID RDG1	Market Participant Role Code X	DIP Role Code SUP	DIP ID 1494431682	Effective From Date (MPR) 2024-07-04	Effective To Date   2025-07-04
íeys						
ry Key 728ef36471f90baa23d09056791	Show Copy Regenerate					
dary Key						
b7408994c80807d8ecc5bb8e85c	Show Copy Regenerate					
face Configuration						
se select an interface to configure for thi rface	is DIP ID					
F-001 - Configured	*					
Publication Configuration		✓ Ed	it 📲 Clear			
The Publication endpoint is where you re	ceive messages sent to you from the DIP and is configure	ed specific to each DIP ID				
hiblication IIB						
mps.orgnenergy.comany.common.r						
lax Payload Size Kb						
Out Preferences						
iding the ability to selectively Opt-Out o	of receiving messages for specific Event Codes on Interfa	e IF-001 for this DIP ID				
itialRegistration]						
ivent Code						
InitialRegistration]						
reference Time Range Description	1					
is not currently possible to Opt Out of [initial	Registration) on Interface IF-001 for					

![](_page_67_Picture_3.jpeg)

![](_page_68_Picture_0.jpeg)

# You have successfully onboarded to the DIP

![](_page_69_Picture_0.jpeg)

# Adding GlobalSign Admins

![](_page_70_Picture_1.jpeg)

Guidance for Certificate Admin

Up to this point in the process, the Certificate Admin has been responsible for the vetting process and completion.

At this point of the process you may wish to assign additional Cert Admins to complete the upcoming sections as more technical knowledge is required to complete the next onboarding steps. Please note, this could be someone from the DCP or a 3<sup>rd</sup> Party technical Person.

As well as adding the Cert Admin to the DIP they should also be added as a new User Admin within GlobalSign. See next page for details.

# **Please Note:**

Additional Cert Admins are not mandatory at this point – you can continue through the process should you wish. If you decide to not add a new Cert Admin please ignore the next slide.

![](_page_70_Picture_8.jpeg)

#### Step 4b - Create the PFX Certificate

![](_page_71_Picture_1.jpeg)

# Assigning a new Cert Admin to GlobalSign Atlas account

![](_page_71_Figure_3.jpeg)

![](_page_71_Picture_4.jpeg)
## Other resources

A full interactive demo of the on-boarding process can be found:

https://www.youtube.com/watch?v=8K3fWSJFv0k





## **Promotion to Production**

## **Promotion to Production**

Will the subject of a later presentation:



End of DIP Onboarding Guide

## Thank you

