

# ECMS NCB Training

## SIA-Colt Solution Overview

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June 2022

The word 'nexi' in a blue, lowercase, sans-serif font, mounted on the top edge of a modern glass skyscraper. The building's facade is composed of a grid of glass windows reflecting the sky. In the background, another curved glass building is visible under a clear blue sky.

**nexi**

# Participant User Activities



- **SIAnet.XS Portal** (<https://sianetxs.sia.eu/>) is the single point of contact for SIAnet related configuration
- Participant and users enrolment on **SIAnet.XS Portal** activities are **DONE**
  - ✓ Initial User Administrator appointment and enrolment
  - ✓ Relevant users creation (UserAdmin, Domain Officer, Security Officer, Technical Operator)

- Action required for **ECMS CGU Subscription** (Domain Join) & **Security Management**
  - ✓ Submission of A2A/U2A ECMS requests (for each environment)
  - ✓ A2A Certificates creation for traffic segregation
  - ✓ Existing U2A Certificates are valid for ECMS access too (upon registration on CRDM through ECMS)



# Domain Join (CGU Subscription) process for ECMS



- Ticket details
  - ✓ **ECMS Domain**

A2A	U2A
A2A.EAC.ECMS	U2A.EAC.ECMS
A2A.UTEST.ECMS	U2A.UTEST.ECMS
A2A.PROD.ECMS	U2A.PROD.ECMS

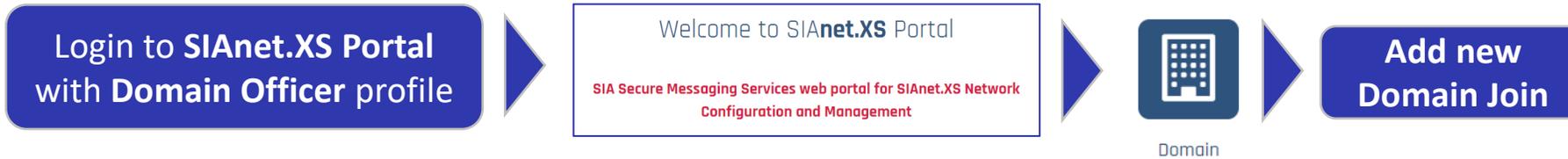
- ✓ **NetCode**, unique identifier over SIAnet messaging network
- ✓ **Technical Address** for A2A, i.e. the Business User (BU)
  - Logical address defined by DiCoA, jointly agreed with SIA-Colt
  - X500 format (Distinguished Name), according to SIAnet naming rules
  - upon registration on CRDM through ECMS 

- Domain Join ticket state diagram

- ✓ Approval workflow involving ESMIG ECMS Operator and NCB (if applicable)



# Example for A2A EAC ECMS



Ticket details

Select Relevant Approver: e.g. **“Banca d’Italia”**  
only for non-NCB participant, according to workflow described in the  
«TARGET Services onboarding Guide»

Select Domain: **A2A.EAC.ECMS**

**New Domain Join**

Domain: **A2A.EAC.ECMS**

Role: **DICOA**

Netcode: 12431

Relevant Approver: **39 - Banca d'Italia**

BU: **cn=techaddr1, ou=eac**  
cn=techaddr1, ou=eac.o=12431,dc=sianet,dc=sia,dc=eu

BIC Code:

Network Connected Party ⓘ

NCP:

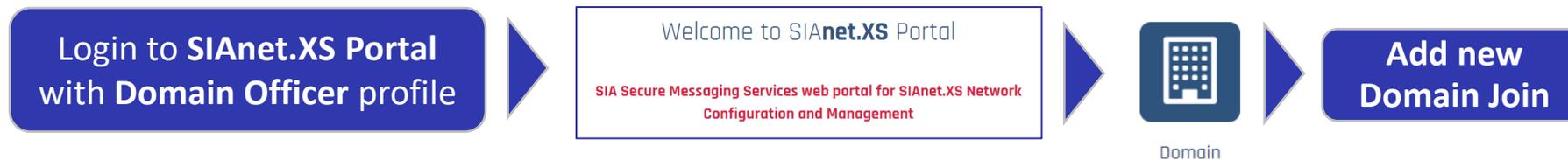
Netcode NCP:

**BIC Code (optional), for information only**

Select Role: **DICOA**

Define your Technical Address (BU): **cn=techaddr1, ou=eac,**

# Example for U2A EAC ECMS



Ticket details

Select Relevant Approver: e.g. **“Banca d’Italia”**  
only for non-NCB participant, according to workflow described in the  
«TARGET Services onboarding Guide»

Select Domain:  
**U2A.EAC.ECMS**

**New Domain Join**

Domain	U2A.EAC.ECMS	Netcode:	12431	Relevant Approver	39 - Banca d'Italia	<input type="checkbox"/> Network Connected Party ⓘ
Role	DICOA	BIC Code:	Insert BIC Code		NCP	
Domain Description					Netcode NCP	

Send Request

**BIC Code (optional), for information only**

Select Role: **DICOA**

# Security Management processes



## ➤ Digital Certificates

Certificate type	Action required	Status
A2A Certificates for Non-Repudiation at network level	New ECMS certificate requested for segregation of traffic (Optional)	
A2A Certificates for Business Layer Signature	New ECMS certificate requested for segregation of traffic (Optional)	
U2A Certificate	No need to request new Certificate for ECMS: just link the Certificate dn to the ECMS user.	
TLS Certificates	Only needed in case of change to infrastructure (e.g. new XS instance)	

## ➤ Process adheres to 4-eyes principle

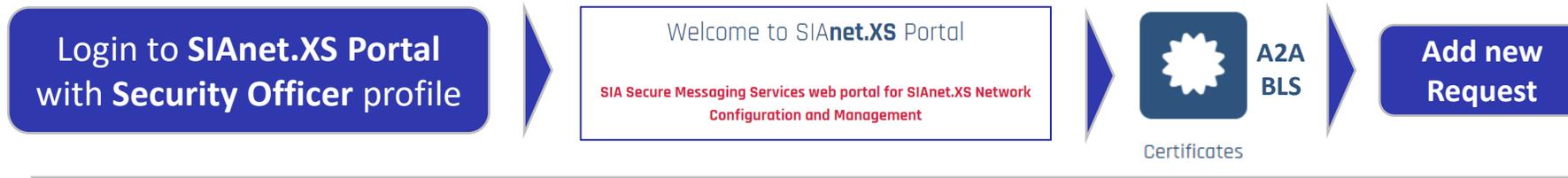
- ✓ First DiCoA user initiates the request
- ✓ Second DiCoA user approves/completes the request
- ✓ Certificate is issued by SIAnet.XS CA



## ➤ LAU Key for message authentication

- ✓ Pre-shared key between DiCoA Messaging Interface and SIA-Colt Network Gateway
- ✓ Split-Knowledge approach (Left + Right key parts)
- ✓ No need to define new LAU Key, if same DiCoA's Messaging Interface is used

# Example for BLS Certificates



Ticket details

**Select NetCode**

**Select Technical Infrastructure**  
hosting XS servers (if any)

**Select XS Server & HSM**

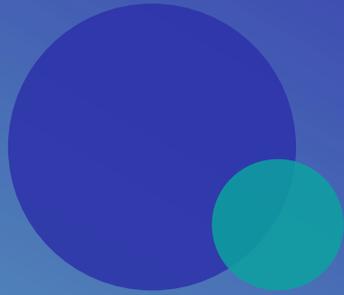
**Certificate request**

HSM type	Internal HSM	Technical infrastructure	SIA (it's mine)	Server	pexs12431b01	Subject	OU=A2A,O=12431,DC=sianet,DC=sia,DC=eu
Netcode	12431			HSMID	PEXS12431B01/HSM	instance1	
						ecms	
						eac	

Select HSM type (INT vs EXT)



Define your **Subject DN**, registered in CRDM through ECMS



 **sia | colt**