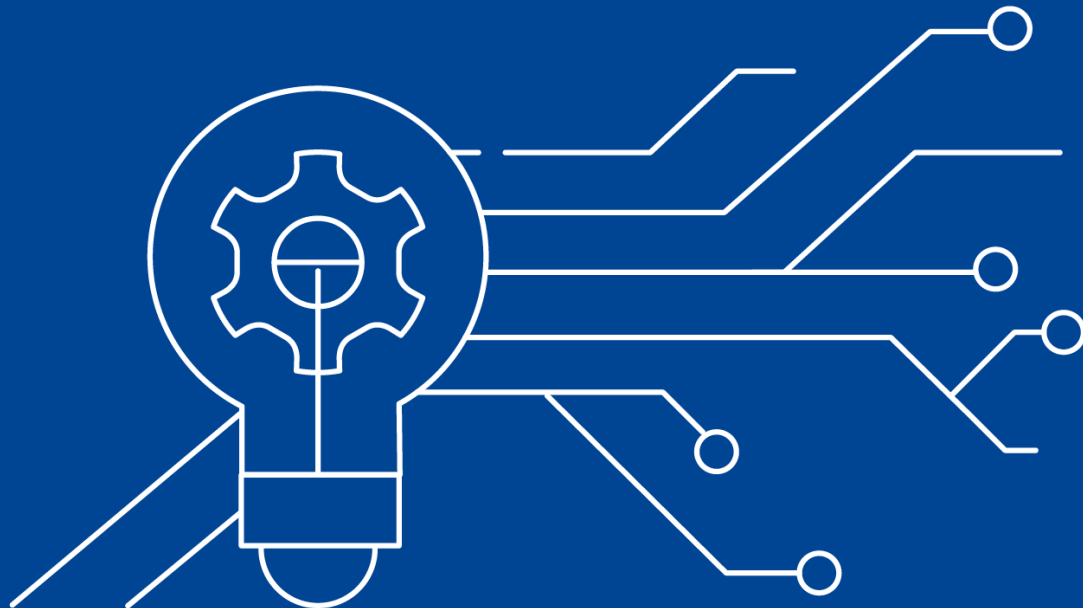


# Carrier Implementation Process

March 2022

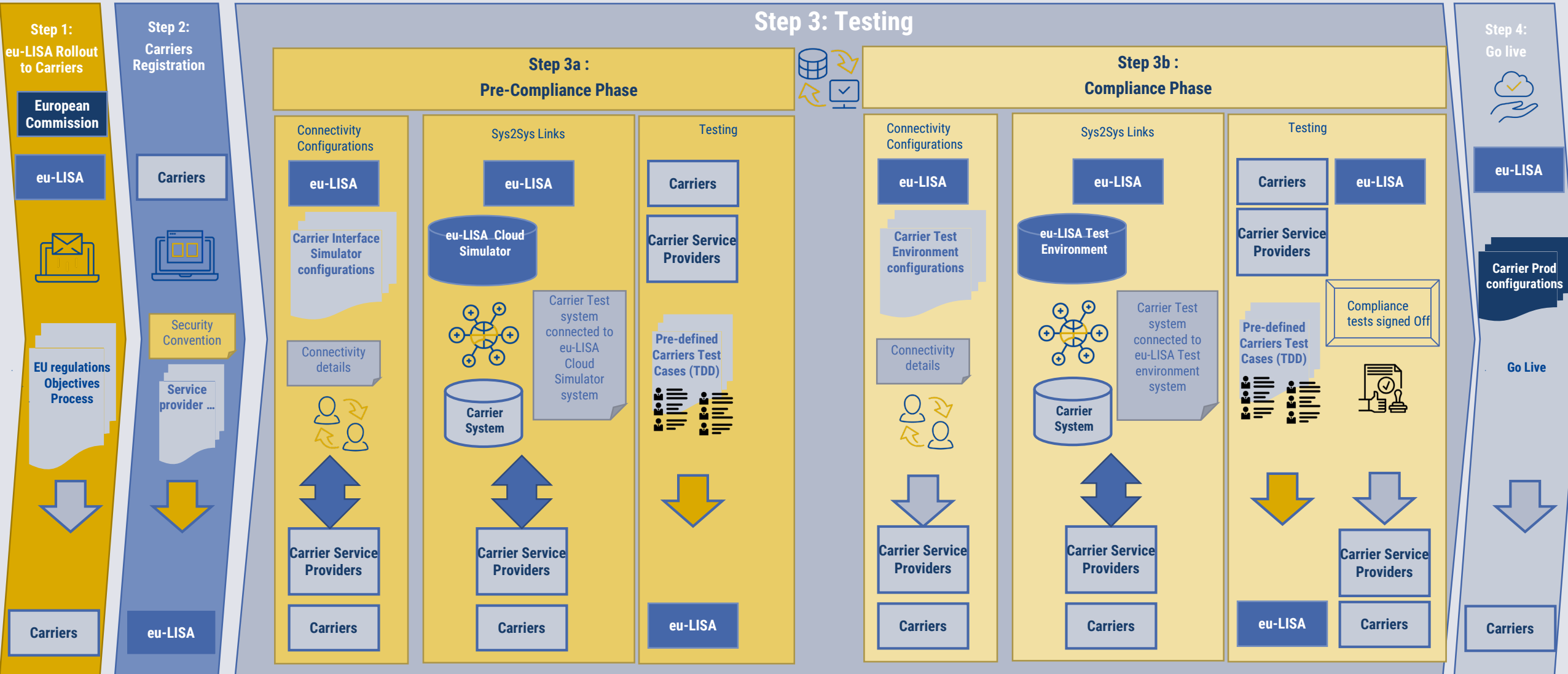
PUBLIC

# Carrier Implementation Process Overview



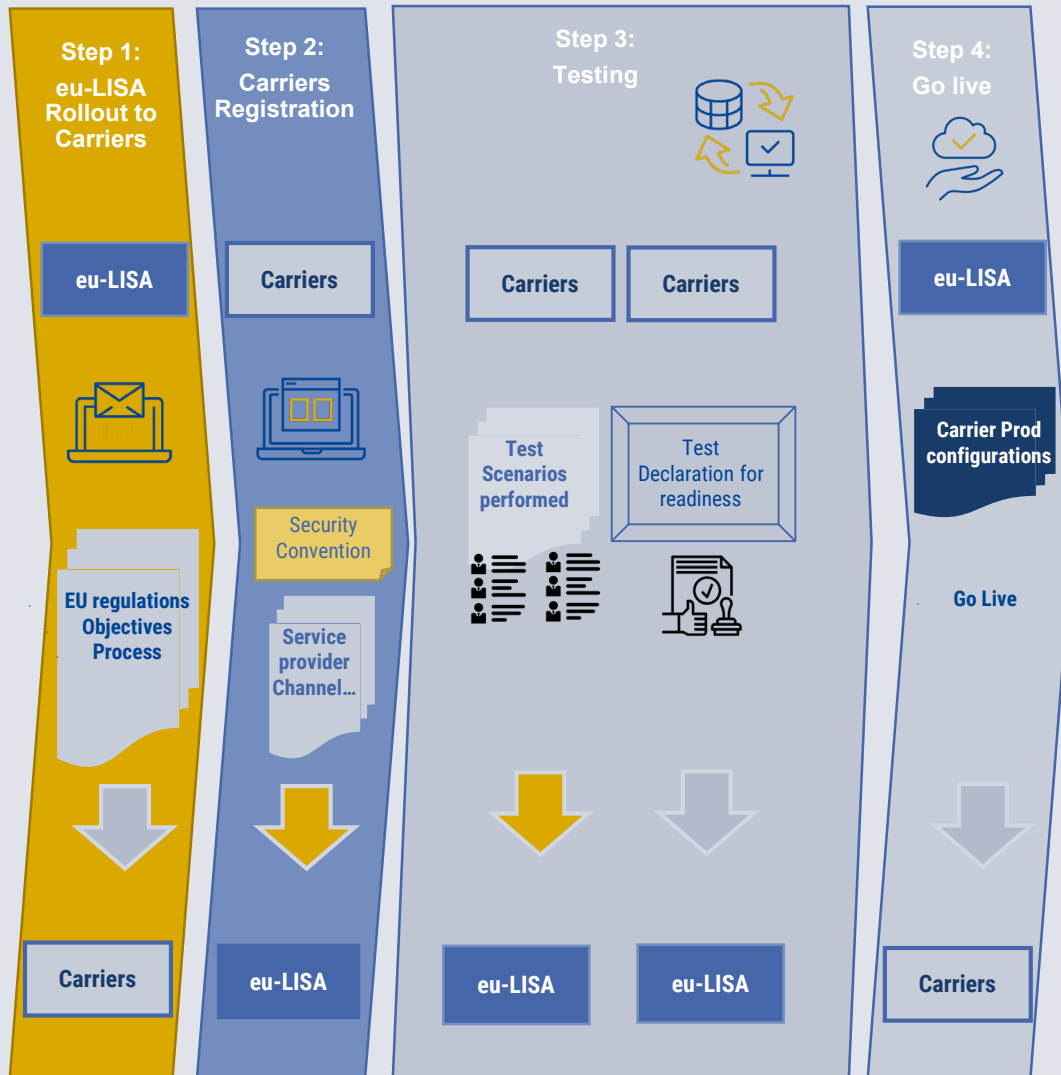
# EES – ETIAS Carrier Implementation Process

Sys2Sys Channel



# EES – ETIAS Carrier Implementation Process

Web portal and mobile application channel



- Carriers using **the web portal and mobile application** channel test their ability to connect and perform the testing of the interface
- When the testing is finalized, carriers need to send to eu-LISA **a testing declaration and readiness** for the go live and confirm that **their staff are trained**
- **Access** to the production is provided to authorised **carrier's staff**

# Step 1: Rollout to Carriers



Step 1: European Commission and eu-LISA Rollout to Carriers

- According to **the EES and the ETIAS regulations**, carriers will have to query EES and ETIAS and receive answers regarding **the status of travellers**.
- With the introduction of the EES, which replaces the manual stamping of passports with an electronic record of entries and exits, carriers will verify if a third-country national travelling to the EU **with a single or double entry visas** has already used the number of entries authorised by their visa.
- Once ETIAS enters into operation, carriers will have to verify, prior to boarding, that their **eligible ETIAS passengers** have a valid travel authorisation.

Air carriers, sea carriers and international carriers transporting groups overland by coach can now register with eu-LISA using the [forms](#) published on [eu-LISA Working Group for Carriers web page](#).

**eu-LISA**  | EES

REGULATION (EU) 2017/2226 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 30 November 2017

**eu-LISA**  | ETIAS

REGULATION (EU) 2018/1240 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 12 September 2018

## Step 2: Carrier Registration



- a. Carriers provide Information for the registration as per the EES and ETIAS regulations
- b. Carriers complete **the registration forms** with **authorized contacts** to be involved during the implementation, and after the entry into operation. **A Carrier Contact** is not necessarily a person that is an employee of the same company as the Carrier SPOC. The carrier may have contracted responsibility to another company, e.g. a Service Provider.
- c. Each Carrier Contact needs **to complete a Security Convention** in order to receive a **decryption key for encrypting or decrypting documents** being shared **via secured e-mail communication of authorised contacts** during the Manual On boarding.
- d. Carriers complete the registration with **the channel of choice** : Sys2Sys or web portal and mobile application
- e. For carriers using the **Sys2Sys channel**, contacts managing their system could be requested. It may be a Service Provider contact for Carriers that have outsourced the relevant system, or a Carrier contact for carriers that operate an in-house system.



## Step 3: Testing

### Pre-Compliance phase – Sys2Sys links

Both eu-LISA and the carriers shall provide **communication means and technical details** during the implementation phase using the carrier interface simulator.

The carriers must implement the underlying security protocols as listed below:

- **UN/EDIFACT**: Messages are sent through the **IBM MQ** over an Internet Protocol Security (IPsec) Virtual Private Network (VPN);
- **JSON or XML**: Messages are sent over mutual Transport Layer Security (mTLS) authentication.

To ensure data privacy and integrity between eu-LISA and the carriers, **TLS 1.3** shall be used as the communication standard.



## Step 3: Testing

### Pre-Compliance phase – Connectivity links and tests



Step 3: Testing

- The carrier or carrier service provider performs tests to ensure that messages are correctly received and **processed by the carrier interface simulator** according to the connectivity configurations
- When the connectivity link is validated, the carrier is authorized to proceed with tests according to the **Pre-defined Carriers Test Cases (TDD)**, the **Carrier technical Guidelines (CTG)** and specific sets of data
- When the testing is finalized, carriers need to send to eu-LISA a **testing declaration and readiness** for the **compliance phase**





## Step 3: Testing

### Compliance phase – Sys2Sys links



Step 3: Testing

Both eu-LISA and the carriers shall provide **the communication means and technical details** during **the implementation phase** (including IP addresses/URLs to be contacted and certificates).

The carriers must implement the underlying security protocols as listed below:

- **UN/EDIFACT**: Messages are sent through the **IBM MQ** over an Internet Protocol Security (IPsec) Virtual Private Network (VPN);
- **JSON or XML**: Messages are sent over mutual Transport Layer Security (mTLS) authentication.

To ensure data privacy and integrity between eu-LISA and the carriers, **TLS 1.3** shall be used as the communication standard.



## Step 3: Testing

### Compliance phase – Connectivity links and testing

- The carrier or carrier service provider performs tests to ensure that messages are correctly received and processed using the **eu-LISA test environment**
- When the connectivity link is validated, the carrier is authorized to proceed with further tests according to the **Pre-defined Carriers Test Cases (TDD)**, **the Carrier technical Guidelines (CTG)**
- Compliance tests are mandatory for each carrier and the eu-LISA support team will verify the acceptance of the Pre-defined Carriers Tests
- When eu-LISA test manager provides the green light for the pre-defined Carriers tests, then the carrier is **authorized to establish the connection to production**

Tests Signed off



Step 3: Testing





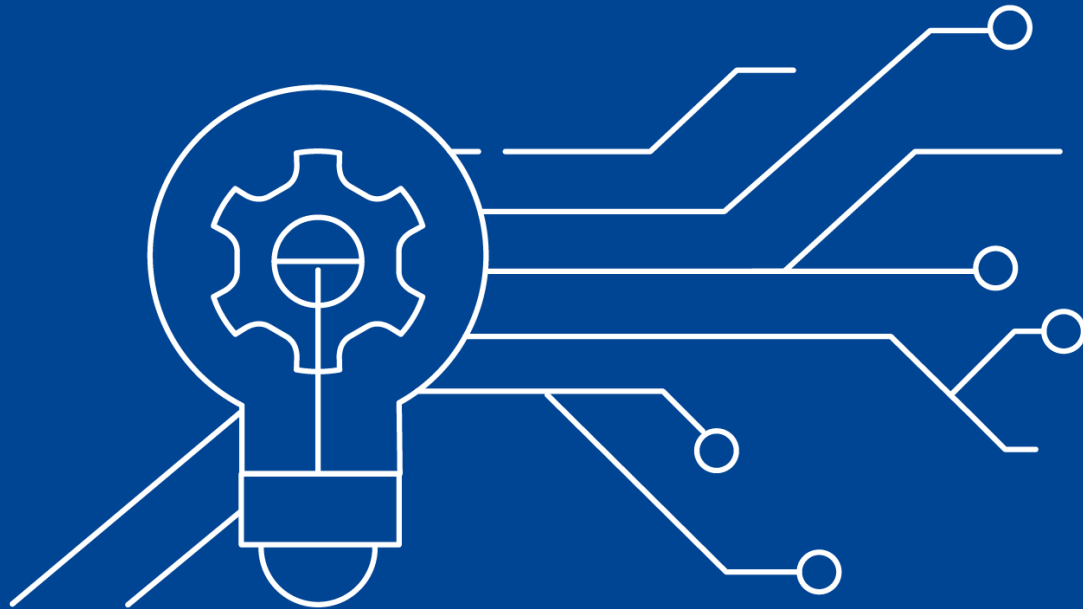
## Step 4: Go live

- Both eu-LISA and the carriers shall provide **the communication means and technical details** for **connecting production environments** (including IP addresses/URLs to be contacted and certificates). Same as during the compliance phase, the carriers must implement the underlying security protocols as listed below:
  - ✓ **UN/EDIFACT**: Messages are sent through the **IBM MQ** over an Internet Protocol Security (IPsec) Virtual Private Network (VPN);
  - ✓ **JSON or XML**: Messages are sent over mutual Transport Layer Security (mTLS) authentication.

To ensure data privacy and integrity between eu-LISA and the carriers, **TLS 1.3** shall be used as the communication standard.



# Carrier Certification and Testing Strategy



# Pre-Compliance Phase

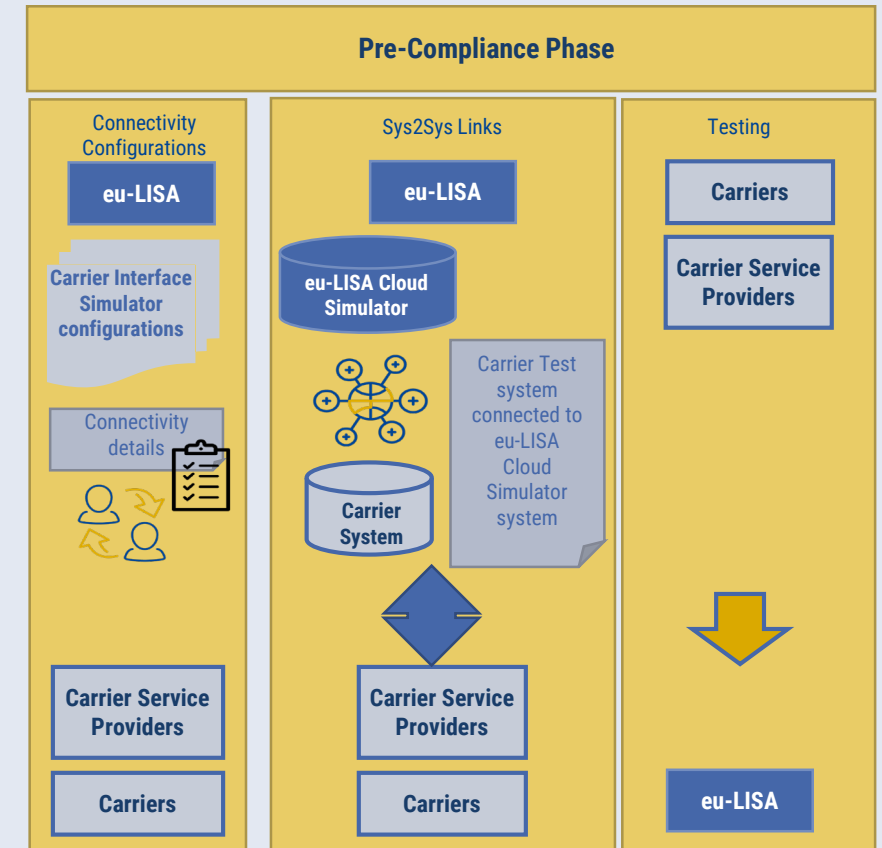
## Sys2Sys

**Recommendations** The Pre-Compliance (Pre-CT) phase is not expected for carriers requesting to use only the Web Portal and Mobile Application to check the traveler status

The Pre-Compliance is the phase in which the carrier can perform free testing using the Carrier Interface Simulator and following Test guidelines as per the Predefined Carrier Test Cases (TDD) document

Not all carriers requesting a Sys2Sys connection need to perform the Pre-Compliance Tests

It is recommended that at least one carrier per Service Provider/System performs a testing with the Carrier Interface Simulator using mocked data



# Compliance Phase

## Sys2Sys

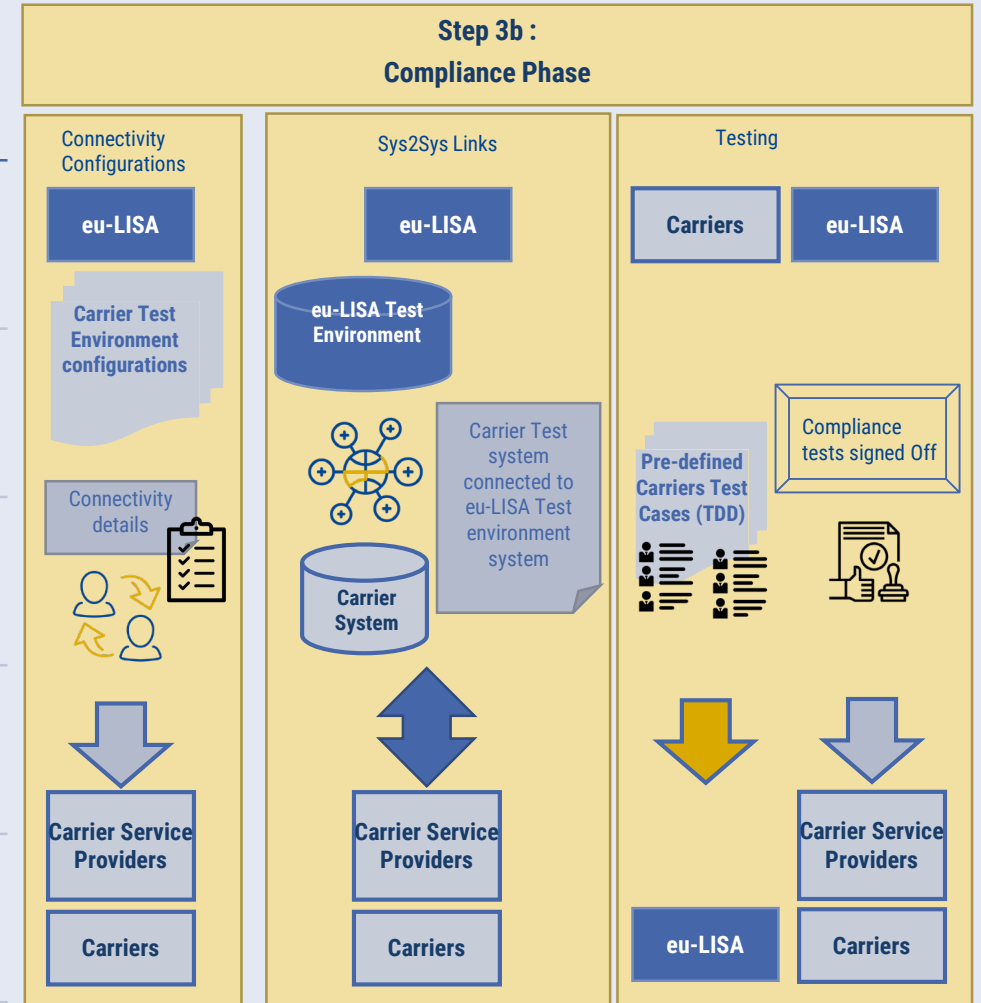
**Recommendations** The Compliance phase is not expected for carriers requesting to use only the Web Portal and Mobile Application to check the traveler status

All carriers requesting a Sys2Sys connection need to perform the Compliance Tests

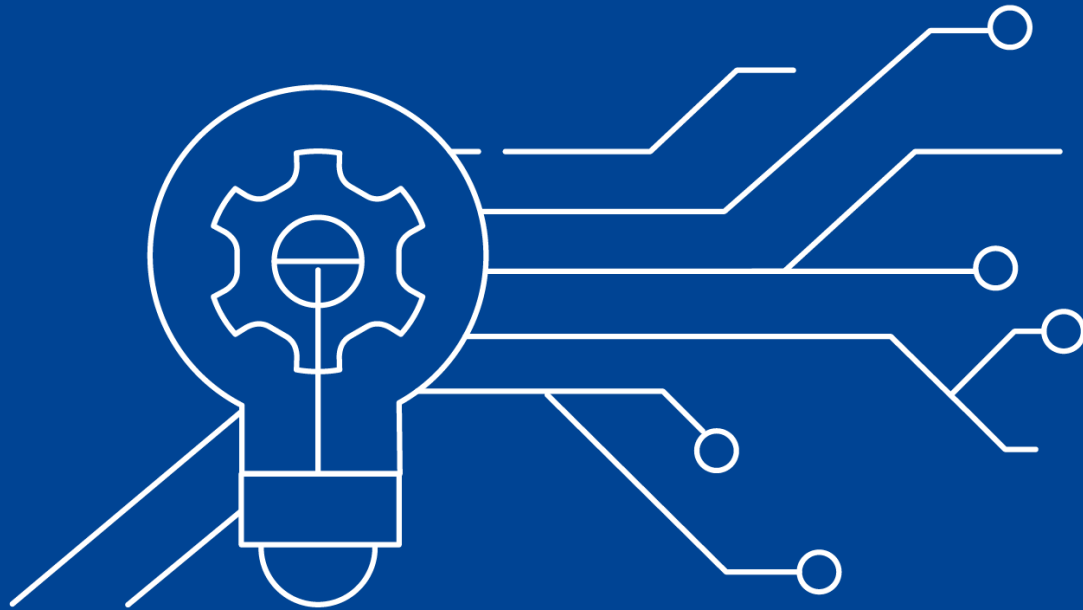
The Compliance (CT) is the phase on which the carrier need to run a set of minimum scenarios to get certified and ready for production

The environment used for compliance testing is similar to production

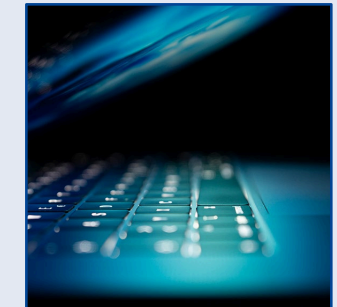
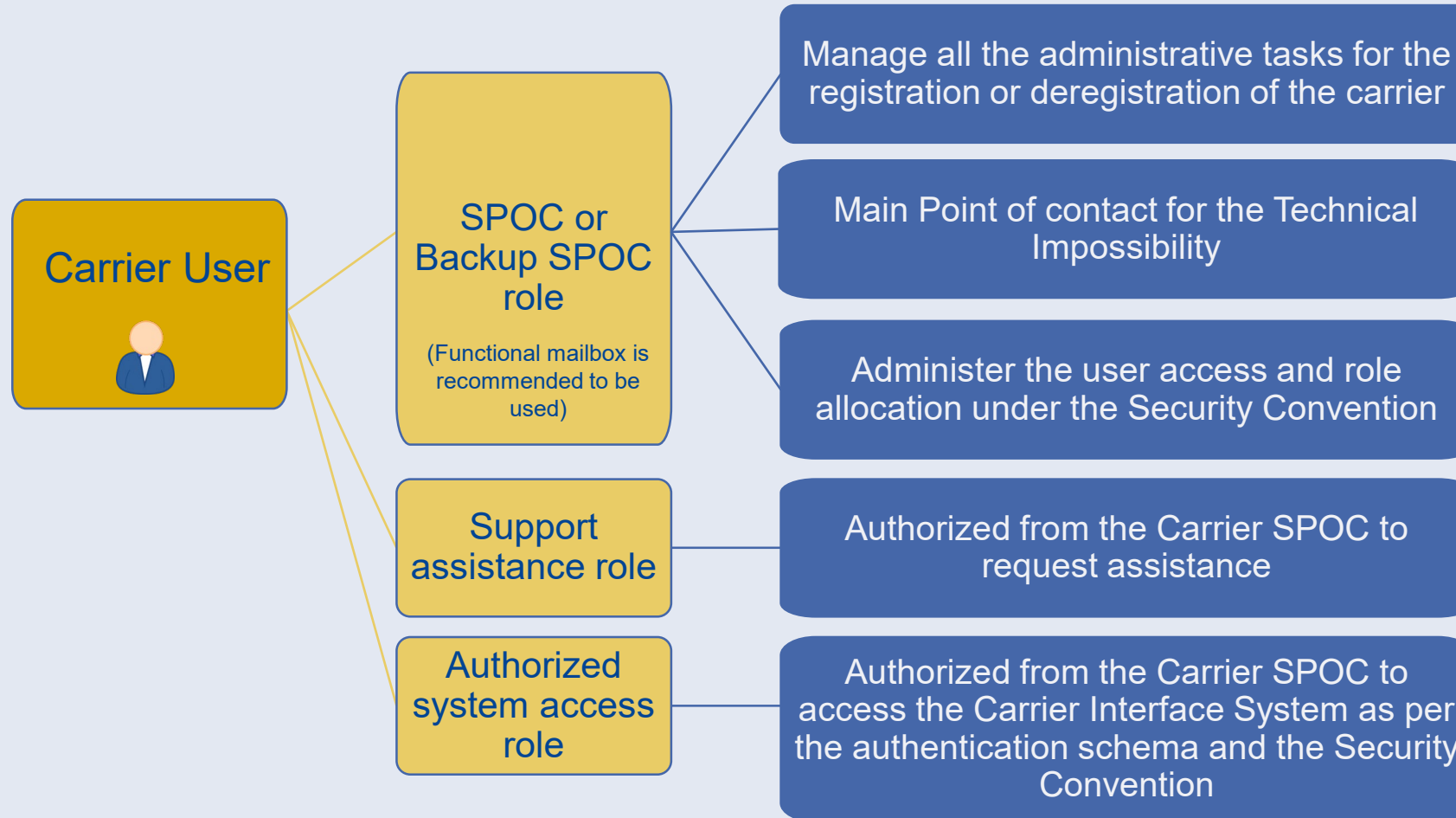
eu-LISA will provide to each registered carrier, testing guidelines and a predefined list of use cases to get a successful result for the certification



# Carrier User Roles



# Carrier User Roles





# Thank you !

eu-LISA

European Union Agency for the Operational  
Management of Large-Scale IT Systems in  
the Area of Freedom, Security and Justice

[www.eulisa.europa.eu](http://www.eulisa.europa.eu)