

30th Carriers Working Group: Technical updates

March 2024

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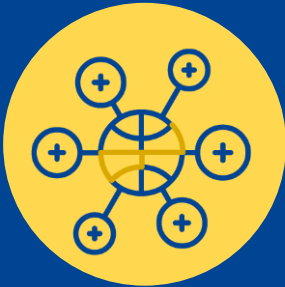
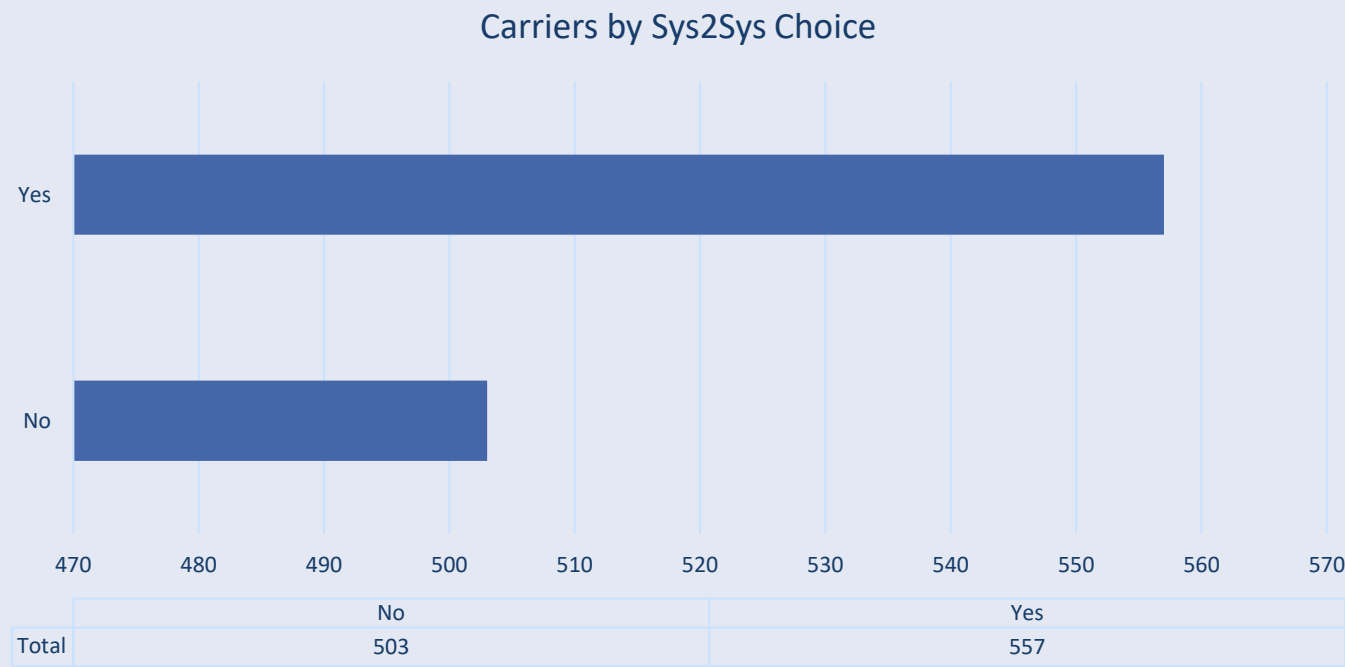
Carrier Implementations

March- 2024

Figures

Carrier Registration by channel

March 2024 – Week 11



557 Carriers for System to System

System to System



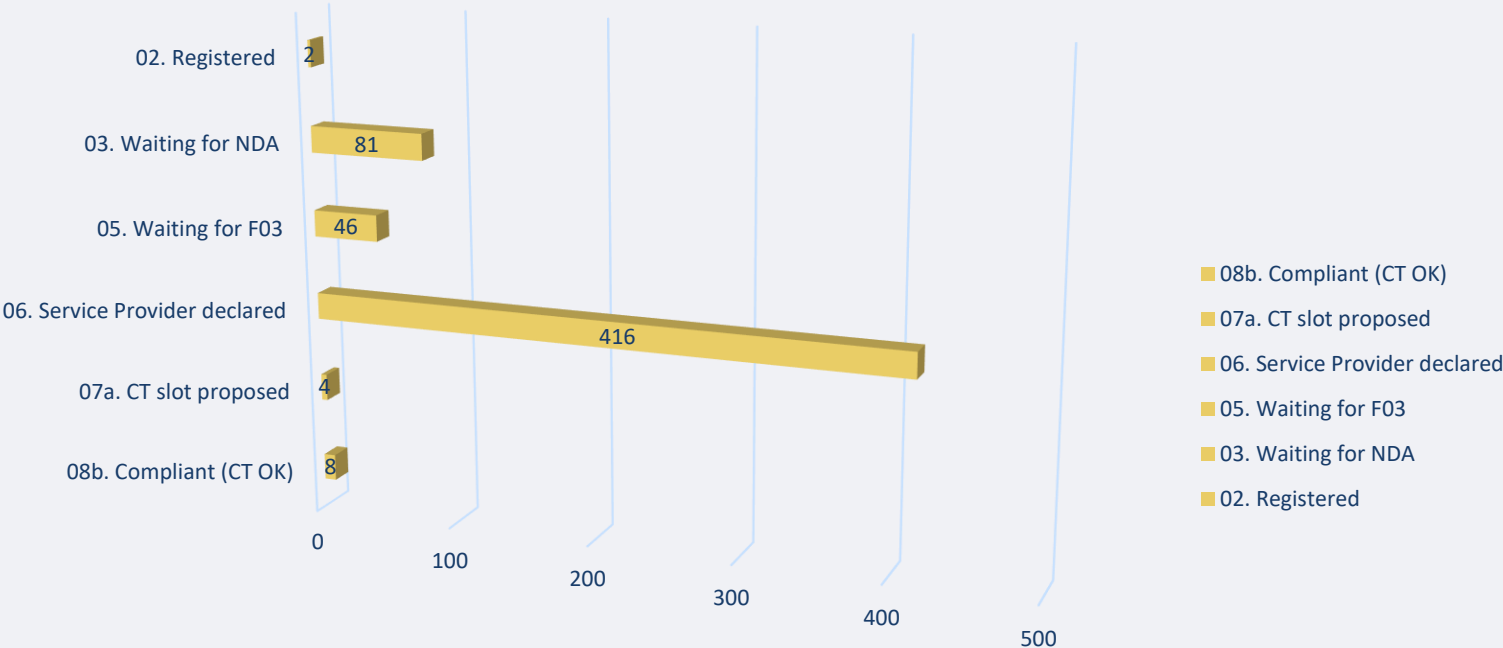
503 Carriers for The Mobile app and Web Portal

Mobile Application and Web Portal

Carrier Status – System to System

March 2024 – Week 11

Status of all Carriers – S2S



	08b. Compliant (CT OK)	07a. CT slot proposed	06. Service Provider declared	05. Waiting for F03	03. Waiting for NDA	02. Registered
Yes	8	4	416	46	81	2

127 Carriers

- Did not yet complete all required forms

345 Carriers

- Ready for tests (but systems not yet compliant)

63 Carriers

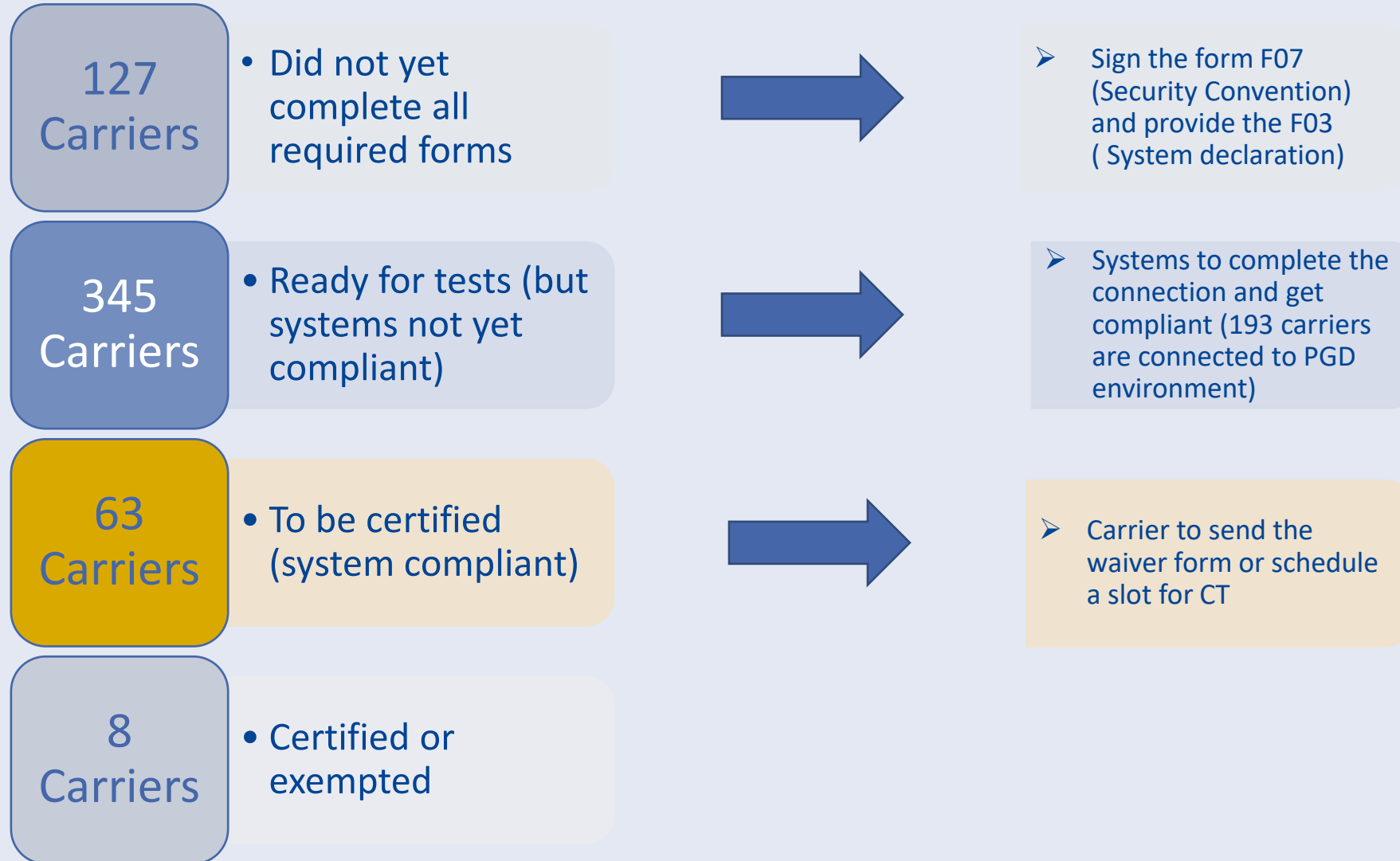
- To be certified (system compliant)

8 Carriers

- Certified or exempted

Carrier Status – System to System

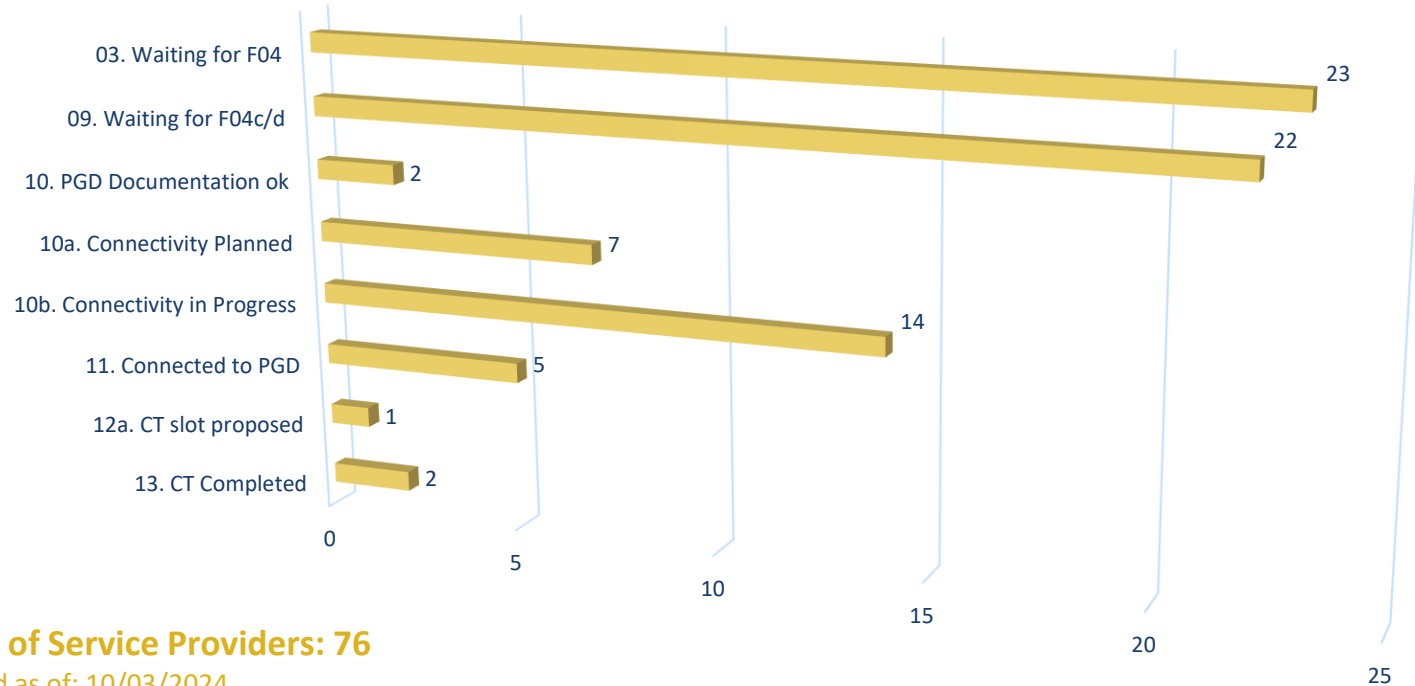
March 2024 – Week 11



System Status

March 2024 – Week 11

Status of all Service Providers



45 Systems

- Not ready to start the System to System Connectivity

23 Systems

- Connectivity testing ongoing

6 Systems

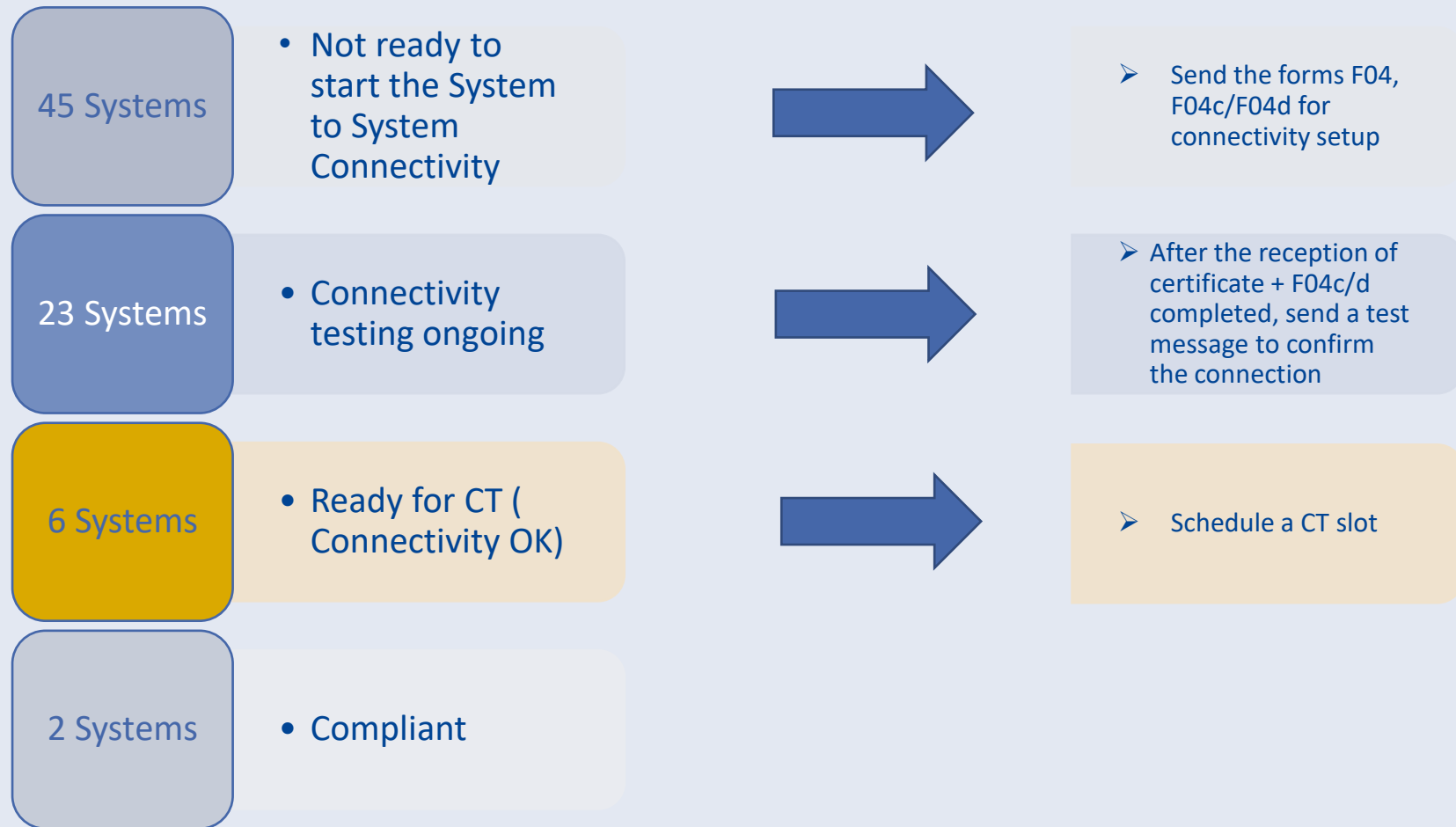
- Ready for CT (Connectivity OK)

2 Systems

- Compliant

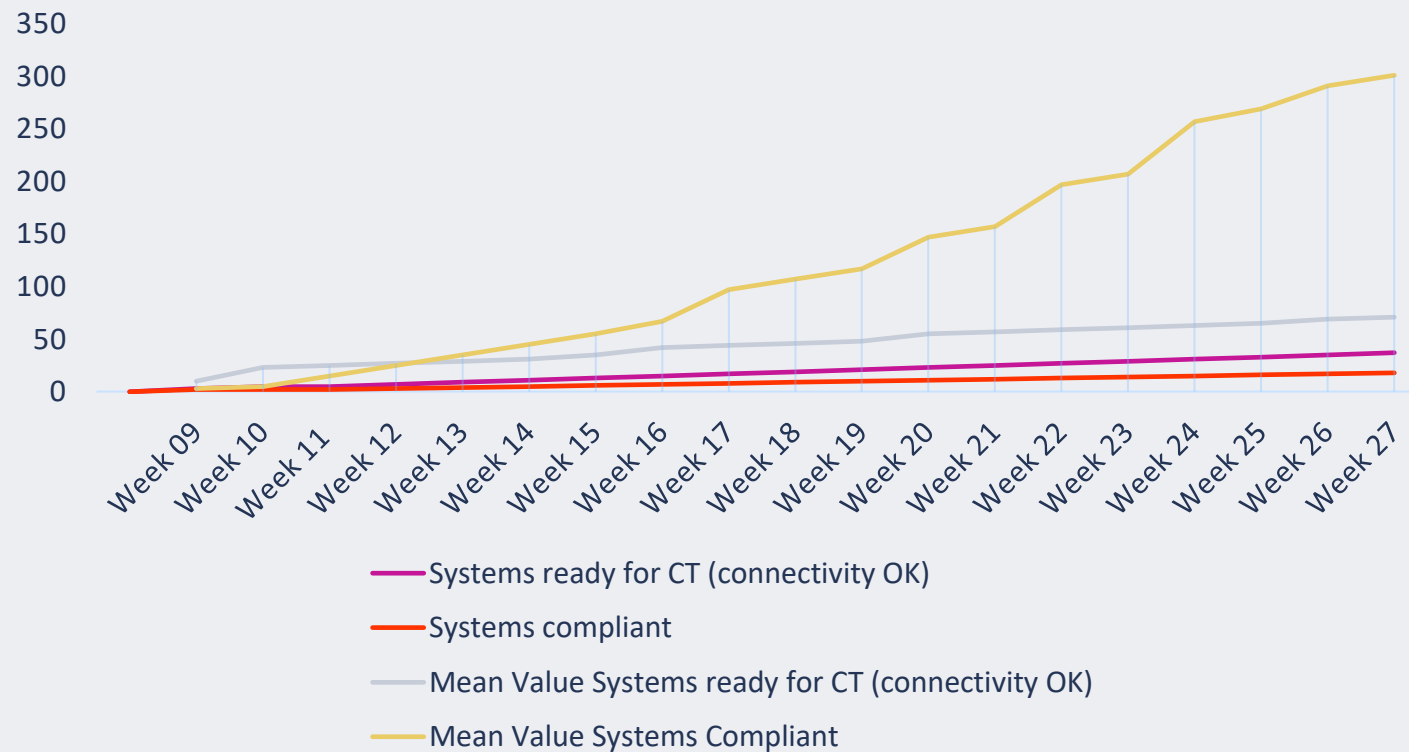
Carrier's System Status

March 2024 – Week 11



Carrier's System to System progress

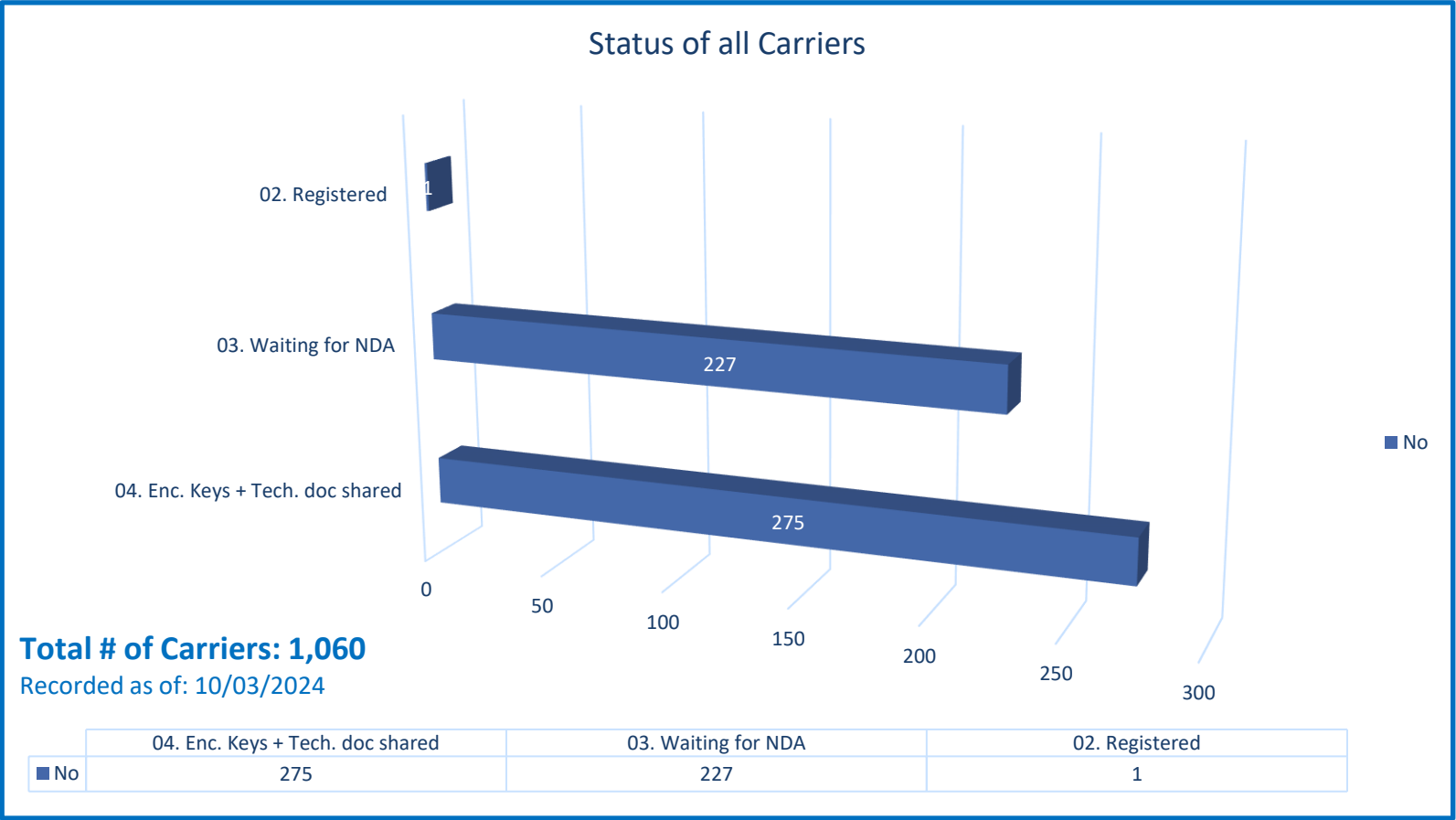
Carrier Compliance - Trend Chart
Current vs Mean values



- The current trend for System Connectivity is slow and eu-LISA wants to support all carriers/Service Providers to increase the trend of these activities
- Regular troubleshooting calls are scheduled with the technical teams to facilitate the connectivity challenges
- Any other suggestion?

Carrier Status – Web Portal/Mobile Application

Mars 2024 – Week 11



228
Carriers

- Carriers did not yet complete all required forms

275
Carriers

- Carriers ready to get the Web portal/Mobile app access

Carrier Technical Guidelines – New version and updates

Carrier Technical Guidelines – Part 1: System to System (S2S)

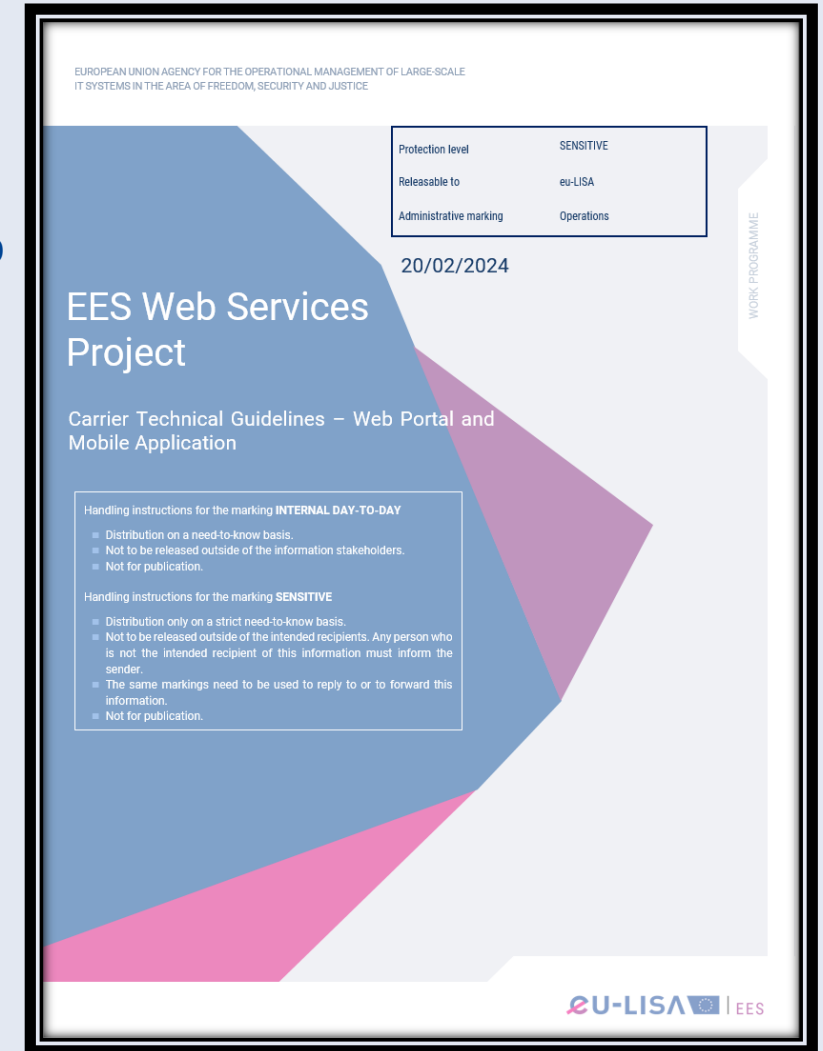
- New Carrier Technical Guidelines version Part1 for System to System will be published under **the Revision Status 25_00_00 on Q1 2024**
- The updated version of the document is shared with all Carriers SPOCs with 'System to System' selection, to be shared with the authorised staff and declared service providers
- The new version of the CTG S2S takes into consideration:
 - ✓ Variable Geometry scenarios and transit handling in PAXLST based on the outcome of the analysis done with the air industry
 - ✓ A table of countries where EES and ETIAS are applied
 - ✓ ETIAS Limited Territorial Validity (LTV) based on the recent legal updates
 - ✓ Information about FNU when missing first name
 - ✓ Information about dummy expiry date when missing in travel document



Carrier Technical Guidelines – Part 2:

Web Portal and Mobile Application

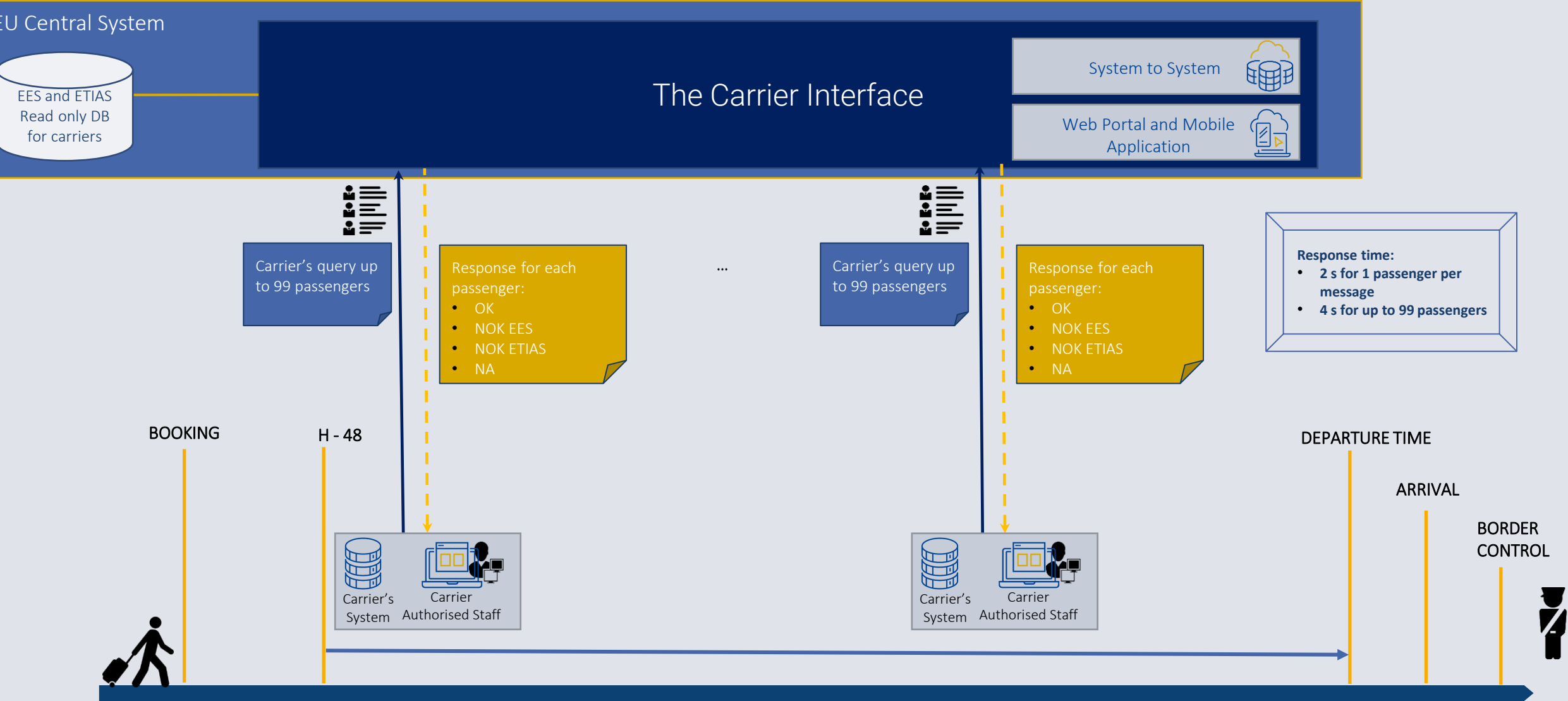
- New Carrier Technical Guidelines version Part 2 for Web portal and Mobile Application will be published under **the Revision Status 5_01_00 on Q1 2024**
- The updated version of the document is shared with all Carriers SPOCs with ‘Web Portal or Mobile Application’ selection, to be shared with the authorised staff
- The new version of the CTG Web portal and Mobile Application takes into consideration:
 - ✓ User Management and User authentication guidance
 - ✓ Business Errors updates
 - ✓ Updated screen shots of the user interfaces



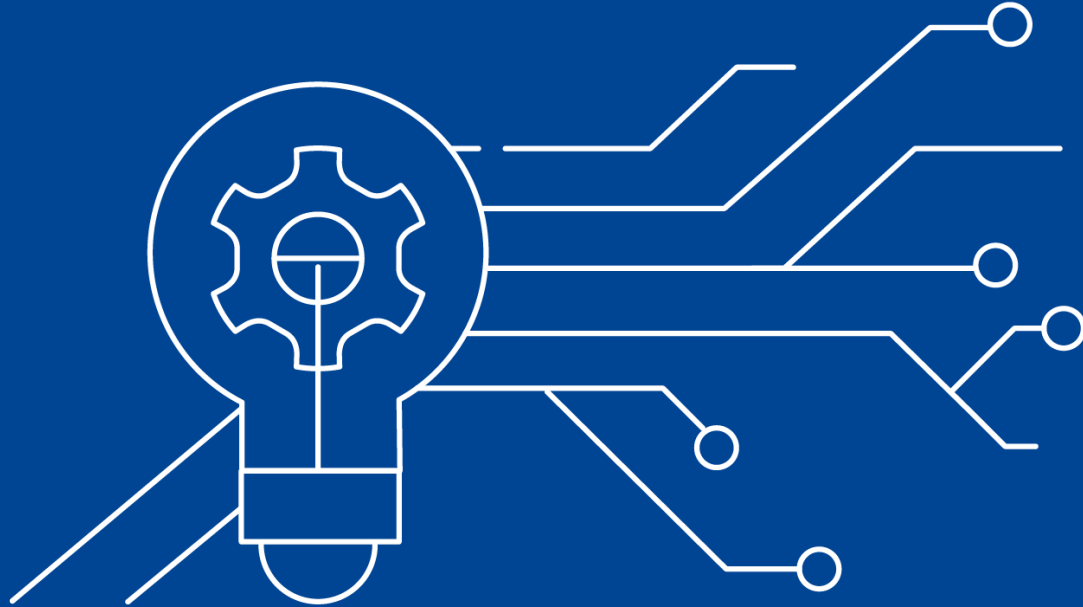
Carrier Interface Overview - Reminder

Carrier Interface

Overview



Carrier Interface – Query/Reply



Query – Passenger Data

#	Attribute description	Mandatory (M) or Optional (O)
1	Surname (family name)	M
2	First name or names (given names)	M
3	Date of birth	M
4	Sex	M
5	Nationality	M
6	Type of the Travel Document	M
7	Number of the Travel Document	M
8	Three letter code of the issuing country of the TD	M
9	Date of expiry of the validity of the TD	M

Query – Itinerary Data

#	Attribute description	Mandatory (M) or Optional (O)
10	Scheduled location of entry	M
11	Scheduled local date and time of arrival at a location	M
12	Scheduled local date and time of departure	M
13	Identification number of scheduled means of transportation	M
14	Carrier operator	M (applicable for Sys2Sys channel)
15	Traveller in transit flag	O (if applicable)
16	Traveller out of scope flag	O (if applicable)
17	Query submission date and time in UTC time	M (applicable for Sys2Sys channel)
18	Passenger request identifier	M (applicable for Sys2Sys channel)
19	Notification request identifier	M (applicable for Sys2Sys channel)
20	Multiple entries required	M (if applicable) for land and maritime carriers only

Traveller classification as per EES and ETIAS EU regulations

EES

Travelers with visa in scope of EES

Third country nationals and holders of single or double entries visas

EES

Travelers - out of scope of EES

Third country nationals as per article 2 (3) of EES regulation, such us:

- Holders of a residence card or residence permit
- Holders of a Long-stay visa
- Holders of Diplomatic passport or laissez-passer
- Persons exempt as per Article 6a(3) of the Regulation (EU) 2016/399
- EU nationals
- Nationals of Andorra, Monaco and San Marino and holders of a passport issued by the Vatican City State or the Holy See



ETIAS

Travelers in scope of ETIAS

Nationals from visa exempt countries and not holders of any ETIAS out of scope category (reference to Article 2(2))

ETIAS

Travelers from countries with visa requirements in scope of ETIAS

Third country nationals exempt from the visa requirement as described in Article 2(1) b and c of the ETIAS Regulation (e.g. school pupils etc.)

ETIAS

ETIAS out of scope

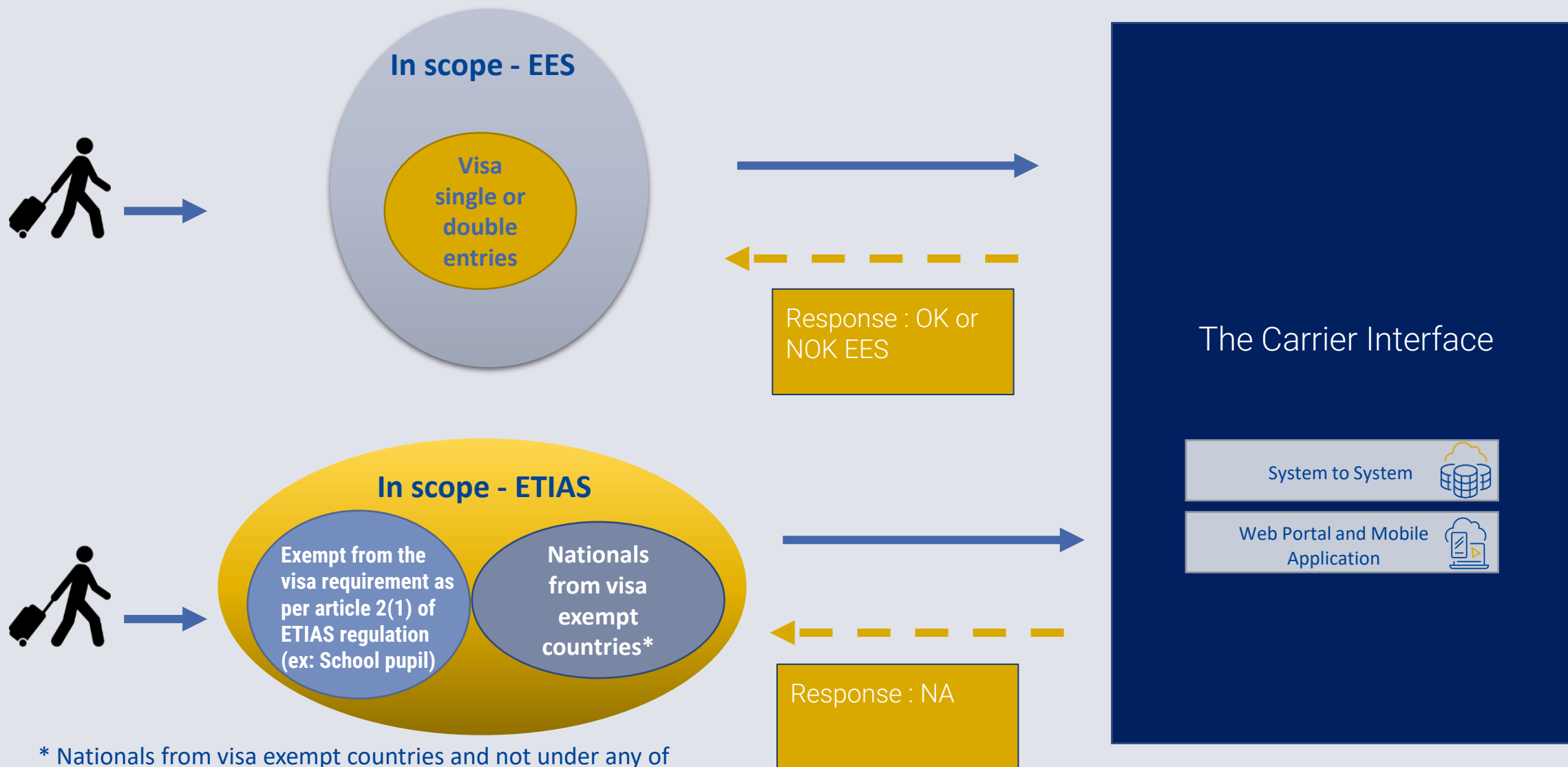
Third country nationals as per article 2 (2) of ETIAS regulation, such us:

- Holders of a residence card or residence permit
- Holders of long-stay visa
- Refugee or stateless persons
- Holders of diplomatic passport or laissez-passer
- EU nationals
- Nationals of Andorra, Monaco and San Marino and holders of a passport issued by the Vatican City State or the Holy See

For more details, please refer to EES and ETIAS regulations

Carrier Interface replies

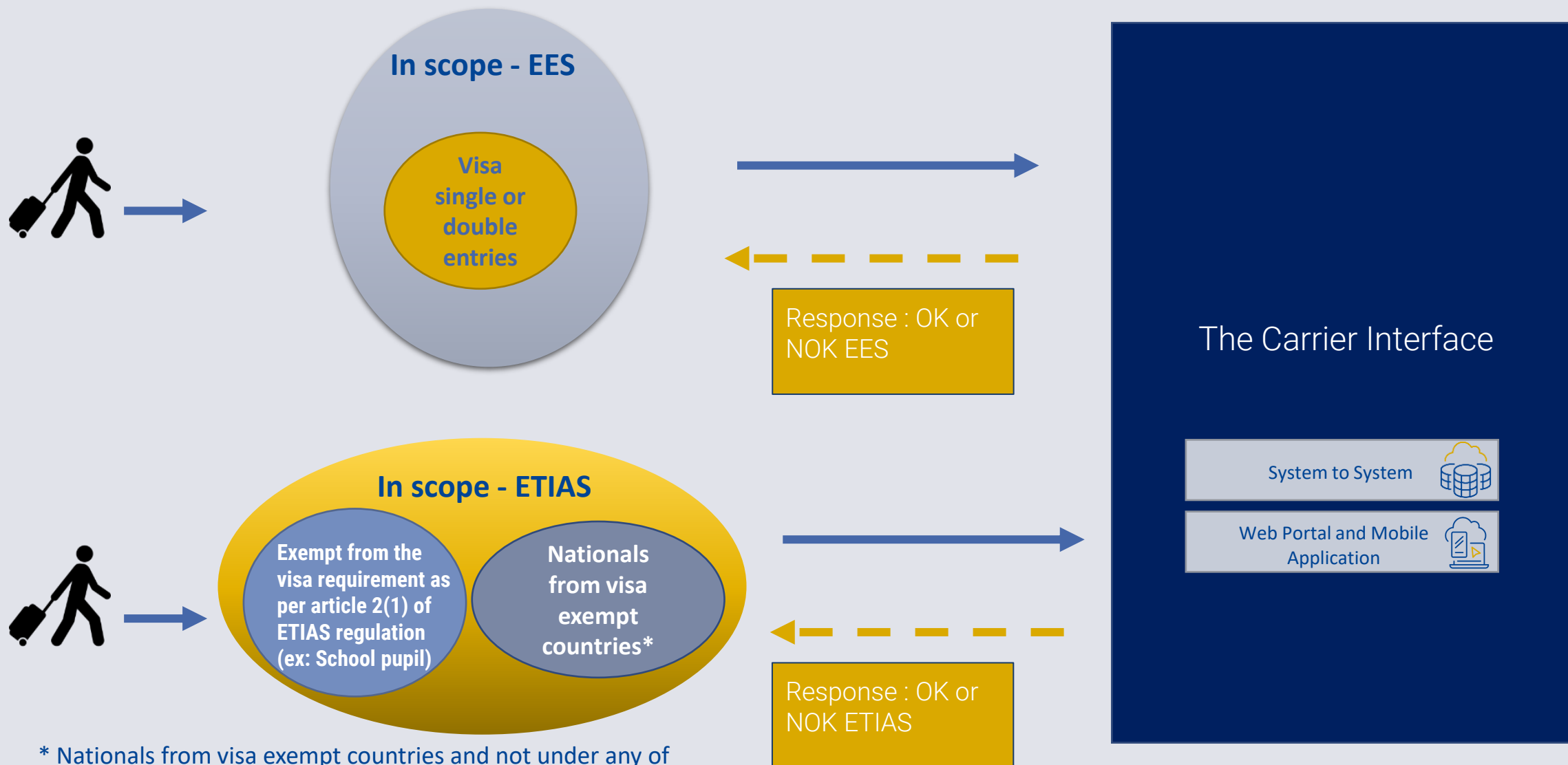
Before ETIAS entry into operation



* Nationals from visa exempt countries and not under any of ETIAS out of scope cases

Carrier Interface replies

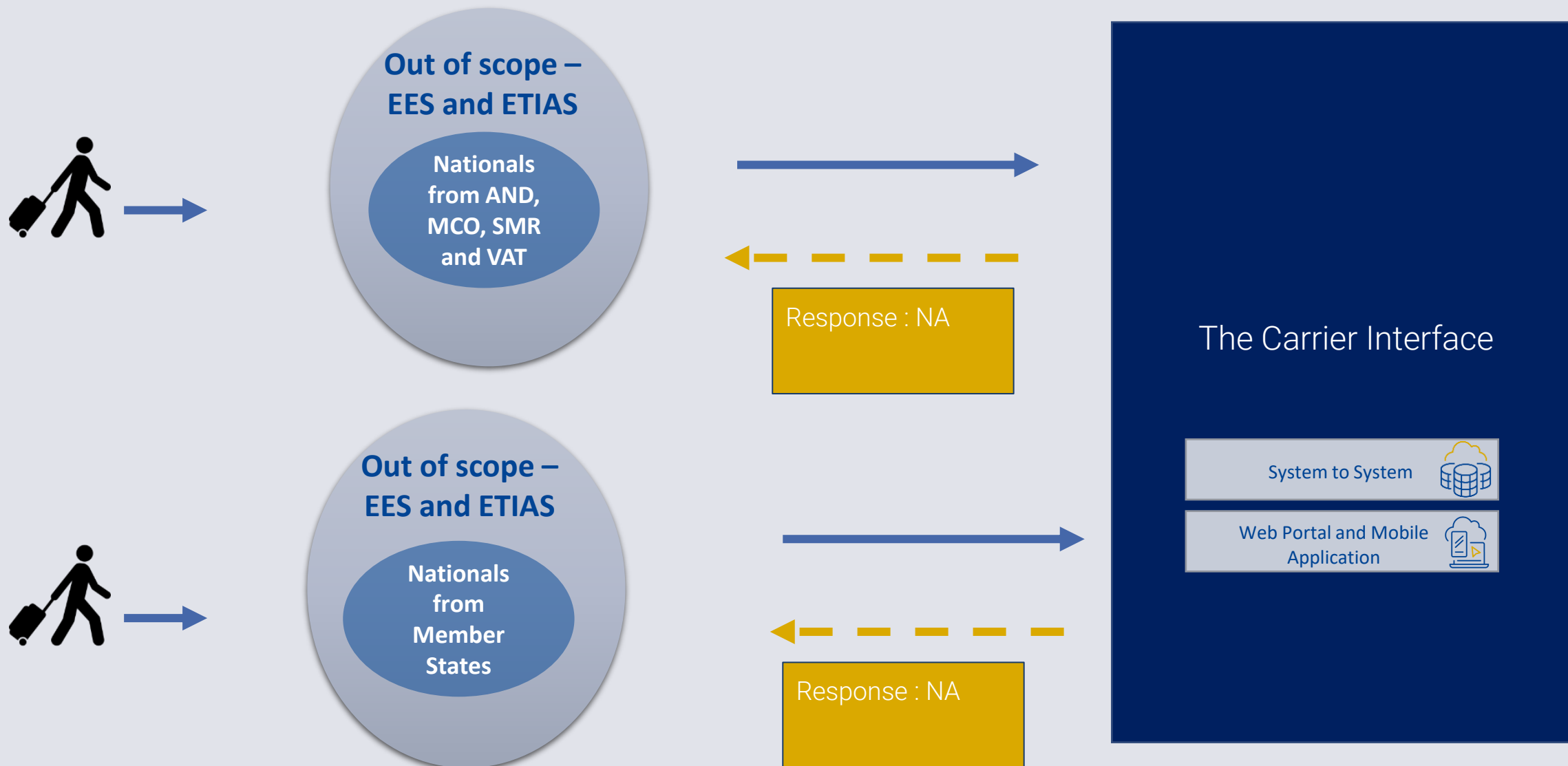
After ETIAS entry into operation



* Nationals from visa exempt countries and not under any of ETIAS out of scope cases

Carrier Interface replies

Nationality checks

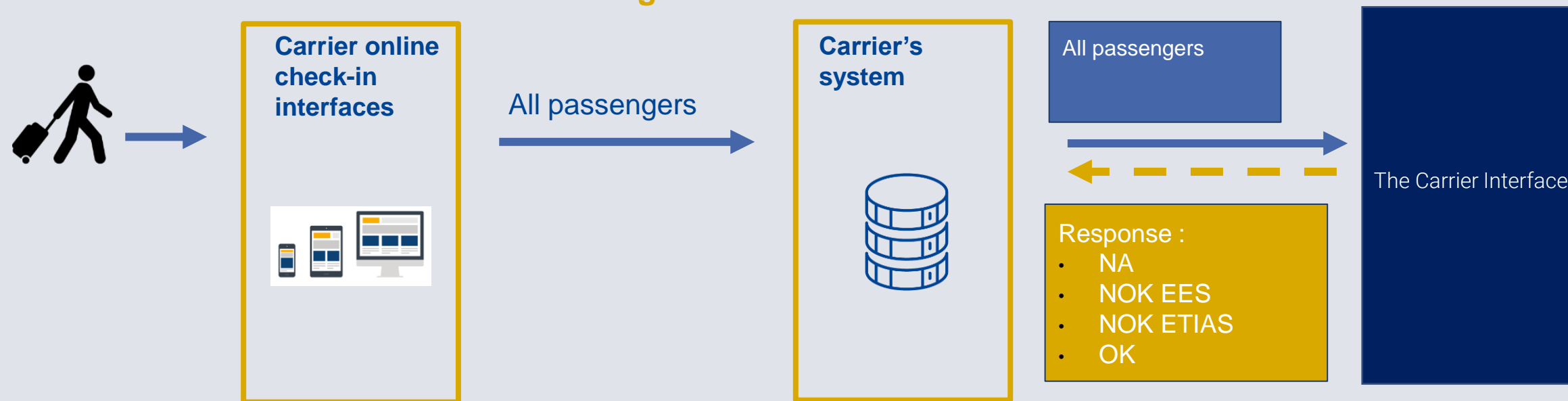


Carrier's queries during the online check-in

Option 1

Proposed option by no means
required by legal base

- During **the online check-in**, carriers may decide to send **all passengers** data to the carrier interface and receive a Not OK EES or Not OK ETIAS for out of scope passengers
- In case a Not OK EES or Not OK ETIAS is returned, carriers **need to check the travel documents of the passengers** to clarify if they **fulfil the conditions to enter the Schengen area**
- If **verification** of travel documents reveal that traveller has no such documents (example: Resident Permit, Long stay Visa...etc), meaning traveller is **in the scope of the carrier interface**. And by receiving a previous Not OK, it would mean that the traveller has **neither** a single and double entry visa **nor** ETIAS and therefore **not able to enter the Schengen area**

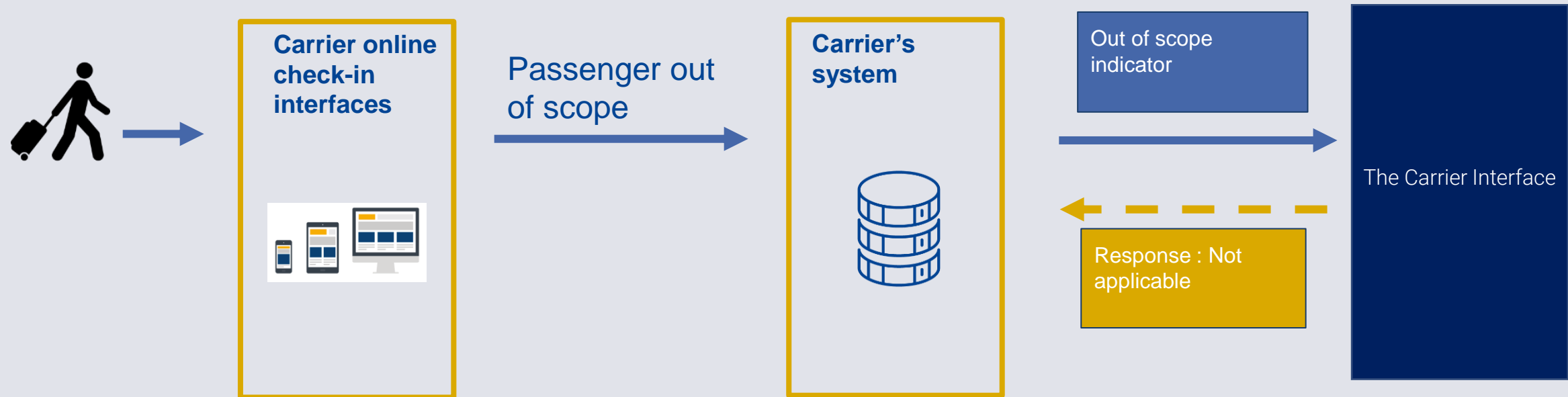


Carrier's queries during the online check-in

Option 2

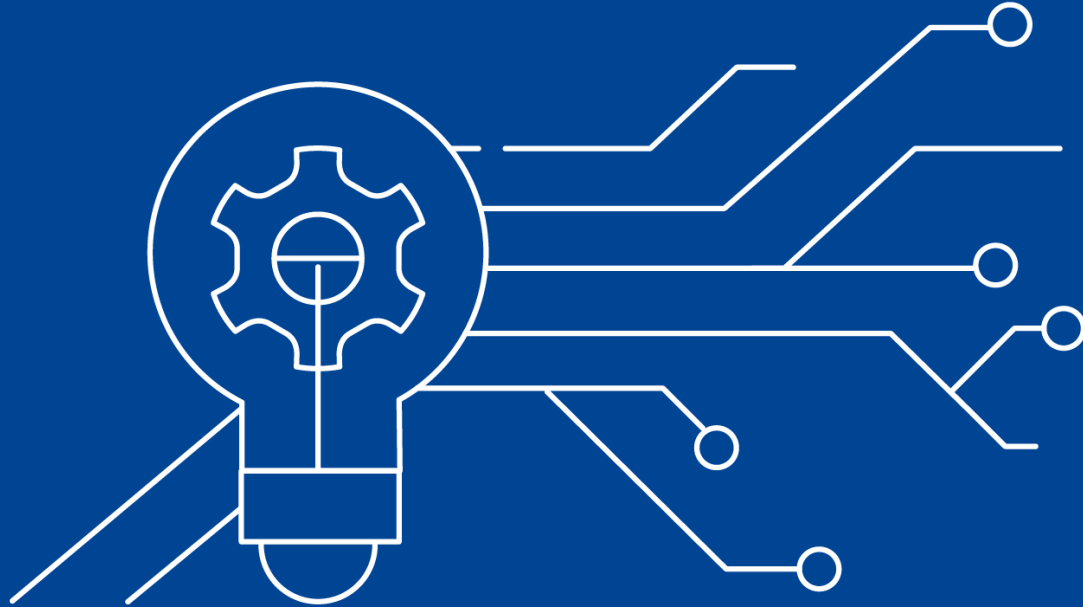
Proposed option by no means
required by legal base

- During the **online check-in**, carriers may decide to ask the passenger if he/she **is out of scope before submitting the query** to the carrier interface
- Carriers may decide to submit or not queries with out of scope passengers. If the carrier sends a query for out of scope passengers, the query should **include the out of scope indicator**



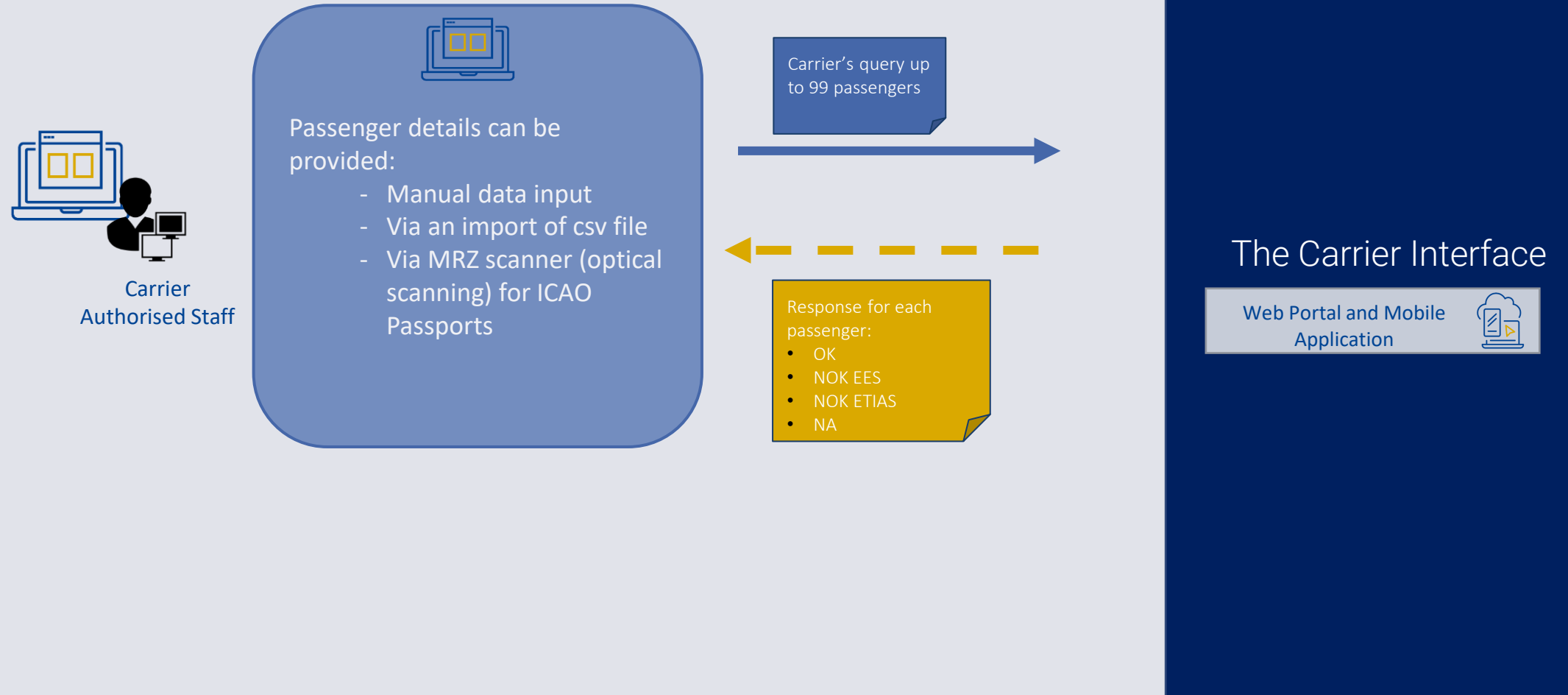
Carrier Interface

Web portal and Mobile Application



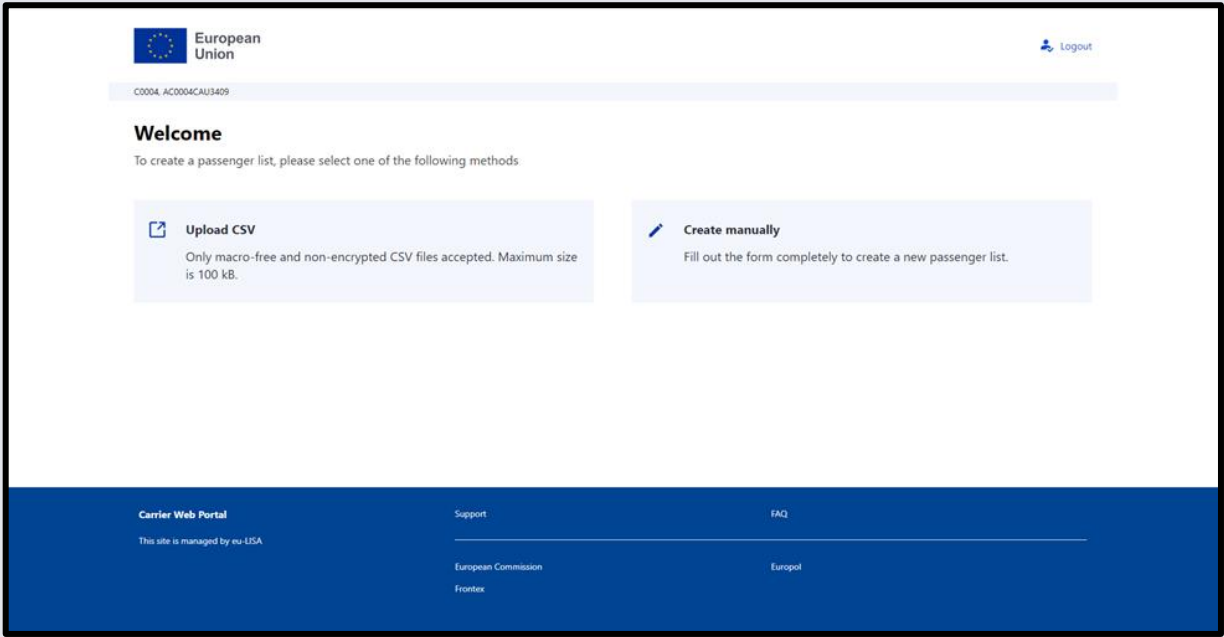
Carrier Web Portal and Mobile Application

Input Data

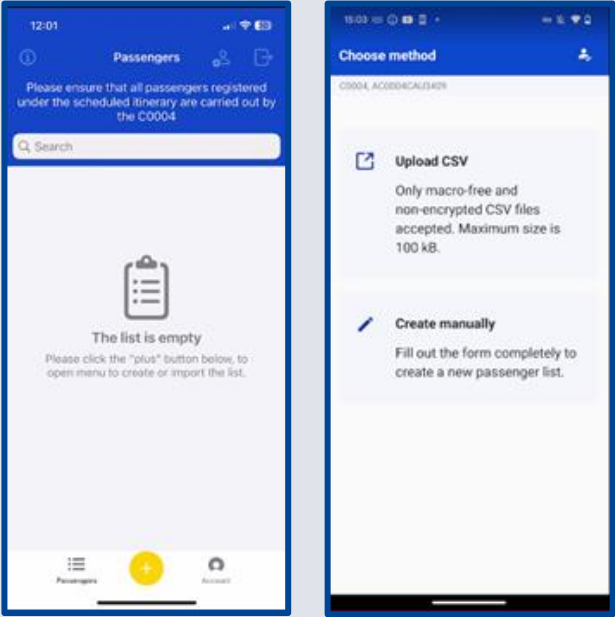


Carrier Web Portal and Mobile Application

Input Data



Carrier Web Portal Home Page




Carrier Mobile Application on iOS (left) and Android (right) Home Page

Carrier Web Portal and Mobile Application

Option 1: Manual Data Input



Carrier
Authorised
Staff



European Union

Logout

C0004 AC0004CAU3409

New travel itinerary

Each itinerary requires a separate passenger list

Country of destination *

DEU

Identification number *

XYZ67321

Scheduled local date of arrival *

2023-10-10

Scheduled local date and time of departure *

2023-10-10 11:35

Double entry required

Back

Continue

Carrier Web Portal

This site is managed by eu-LISA

Support

FAQ

European Commission

Frontex

Europol

Carrier Web Portal New Travel Itinerary

12:07

Cancel

New travel itinerary

Done

Country of destination *

DEU

Scheduled local date of arrival *

2023-10-24

Identification number *

XYZ67321

Scheduled local date of departure *

2023-10-26

Scheduled local time of departure *

12 07

Double entry required

Back

Continue

15:04

<

New travel itinerary

Country of destination *

DEU

Scheduled local date of arrival *

2023-10-10

Identification number *

XYZ67321

Scheduled local date and time of departure *

2023-10-10 15:04

Double entry required

Back

Continue

Carrier Mobile Application iOS (left) and Android (right) New Travel Information (i.e., about the Itinerary)

Travel information

The carrier's authorised users provide manually the Travel information for all concerned passengers:

Passenger Data 1

Passenger Data 2

Passenger Data 3

Passenger Data 4

Carrier Web Portal and Mobile Application

Option 1: Manual Data Input



Carrier
Authorised
Staff

European Union

C0004 AC0004CAU3409

Add passenger

Surname *
UTOPIA

Given names *
MARIA

Date of birth *
2005-01-14

Sex *
FEMALE

Nationality *
ARM

Travel Document number *
AB1234567

Travel Document type *
PASSPORT

Travel Document issuing Country *
ARM

Travel Document expiry date *
2025-07-16

Back to list

Add to list

Carrier Web Portal
This site is managed by eu-USA

Support
European Commission
Frontex

FAQ
Europol

Carrier Web Portal Manual Input

12:11

Cancel Add passenger 1/99 Add

Scan document

Surname * UTOPIA

Given names * MARIA

Date of birth * 2023-06-20

Sex * FEMALE

Nationality * ARG

Travel Document number * AB1234567

Travel Document type PASSPORT

Travel Document issuing Country * ARG

Travel Document expiry date * 2025-10-09

15:14

< Add passenger

Sex *
FEMALE

Nationality *
ARM

Travel Document number *
AB123456

Travel Document type *
PASSPORT

Date of birth *
2005-01-14

Travel Document issuing Country *
ARM

Travel Document expiry date *
2025-05-12

Back to list

Add to list

Carrier Mobile Application iOS (left) and
Android (right) Manual Input

Passenger information

The carrier's authorised users provide manually the passenger travel document details :

Surname, First name

Date of birth

Sex

Nationality

Number of travel document

Type of travel document

Issuing country

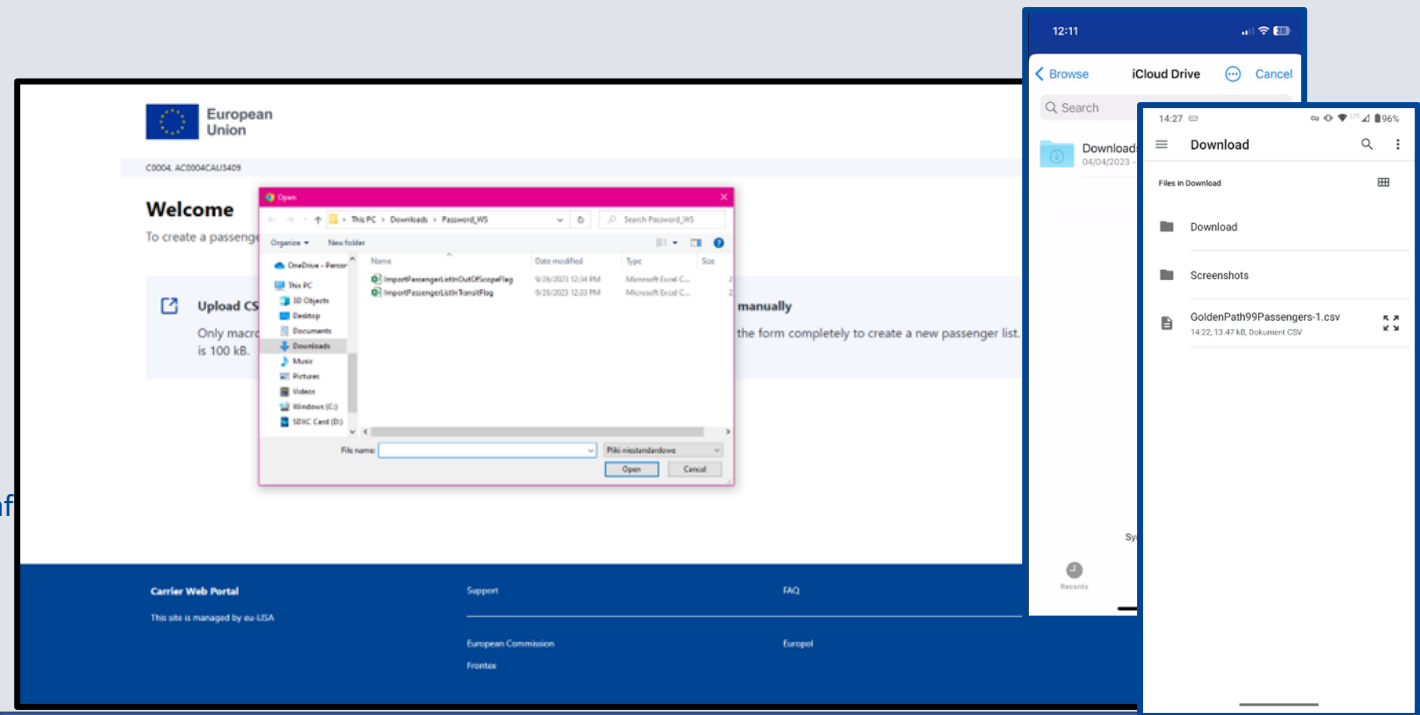
Date of expiration

Carrier Web Portal and Mobile Application

Option 2: Import Passenger List From a File



Carrier
Authorised Staff

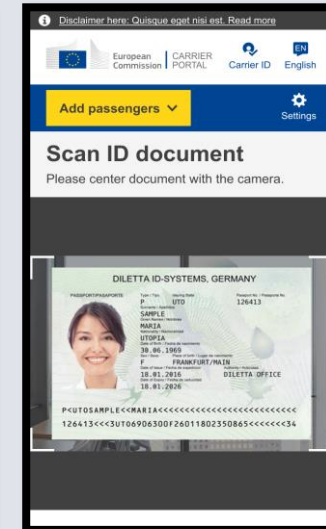
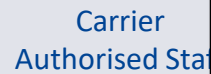


Surname;Given_names;Date_of_birth;Sex;Nationality
;Travel_document_number;Travel_document_type;Is
suing_country_of_travel_document;Expiry_date_of_
travel_document;Target_country;Arrival_scheduled_
date;Transport_idenditication_number;Departure_sc
heduled_datetime;Transit;Out_of_scope;Double_ent
ry_required

Maximum of 99 passengers are allowed to be submitted in one CSV file

Carrier Web Portal and mobile app CSV Upload Screen

Option 3: Input using MRZ Scanner



The Carrier's Authorised users are able to input passenger information by scanning the Travel Document using a MRZ scanner. Imported data can then be manually edited before verification.



Carrier Web Portal and Mobile Application

Browse Results of Verification



European Union

C0001, AC0001CAU6837

Logout

Passenger list

FRA | 6X8912 | 2024-04-01 11:00 | 10 passengers

Please ensure that all passengers registered under the scheduled itinerary are carried out by the C0001

Search passenger

<input type="checkbox"/>	Passenger Name	Nationality	Document	Status	Details
<input type="checkbox"/>	UKUKU UKUKU	ALA	D55D4	NOK EES	View Edit Delete
<input type="checkbox"/>	TRAVELLERFORQUANTITYAA TEST	JAM	100000001	OK	View Edit Delete
<input type="checkbox"/>	TRAVELLERFORQUANTITYAB TEST	JAM	100000002	OK	View Edit Delete
<input type="checkbox"/>	TRAVELLERFORQUANTITYAC TEST	JAM	100000003	OK	View Edit Delete
<input type="checkbox"/>	TRAVELLERFORQUANTITYAD TEST	JAM	K0KH0JH0H0H	NOK EES	View Edit Delete
<input type="checkbox"/>	TRAVELLERFORQUANTITYAE TEST	JAM	100000005	OK	View Edit Delete
<input type="checkbox"/>	TRAVELLERFORQUANTITYAF TEST	JAM	100000006	OK	View Edit Delete
<input type="checkbox"/>	TRAVELLERFORQUANTITYAG TEST	JAM	100000007	OK	View Edit Delete

Verification Results in the Carrier Web Portal

12:19

Passengers

FRA | 6X8912 | 2024-04-01 11:00

Please ensure that all passengers registered under the scheduled itinerary are carried out by the C0004

Search

TRAVELLERFORQUANTITYAA TEST		
Nationality	Document	Status
JAM	100000001	OK

TRAVELLERFORQUANTITYAB TEST		
Nationality	Document	Status
JAM	100000HGFC	NOK EES

TRAVELLERFORQUANTITYAC TEST		
Nationality	Document	Status
JAM	100000003	OK

TRAVELLERFORQUANTITYAD TEST		
Nationality	Document	Status
JAM	100000004	OK

Passengers + Account

13:07

Passengers

FRA | 6X8912 | 2024-04-01 11:00

Please ensure that all passengers registered under the scheduled itinerary are carried out by the C0004

Search passenger

TRAVELLERFORQUANTITYAA TEST		
Nationality	Document	Status
JAM	100000001	OK

TRAVELLERFORQUANTITYAB TEST		
Nationality	Document	Status
JAM	100000002	OK

TRAVELLERFORQUANTITYAC TEST		
Nationality	Document	Status
JAM	100000003	OK

TRAVELLERFORQUANTITYAD TEST		
Nationality	Document	Status
JAM	100000004	NOK EES

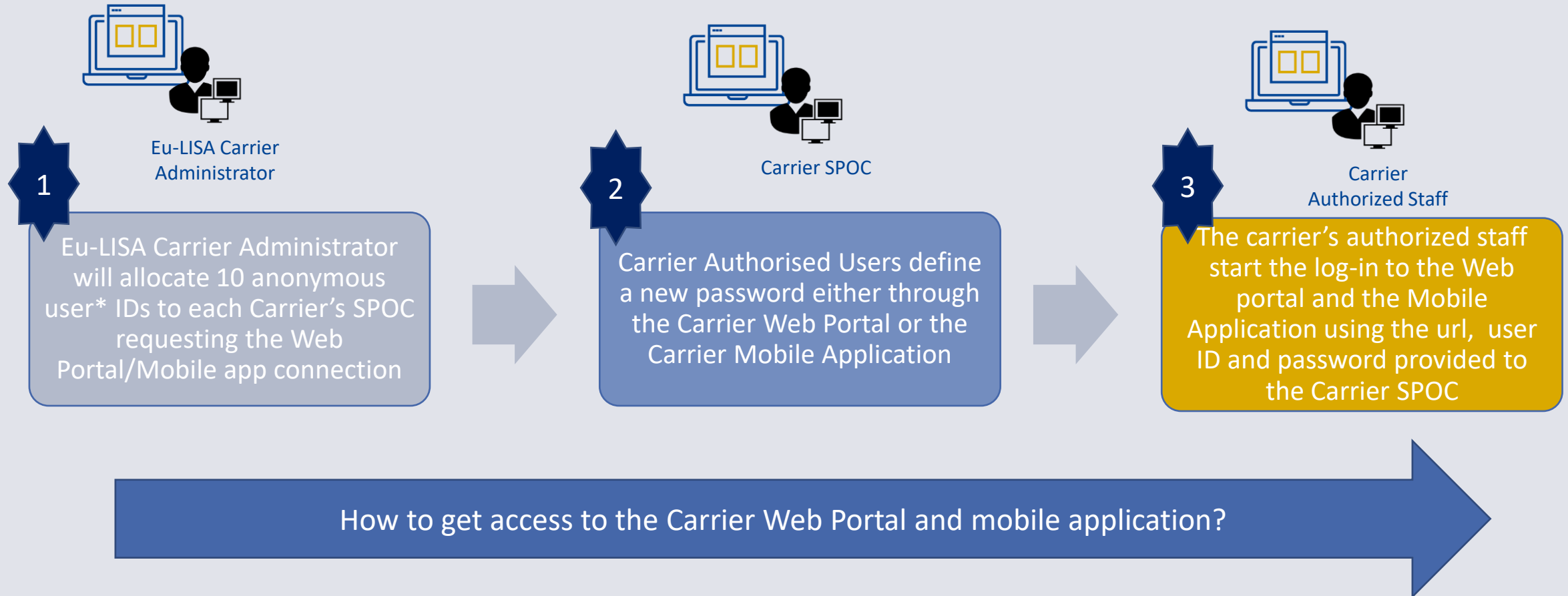
Reset Verify Export

Verification Results in Carrier Mobile Application iOS (left) and Android (right)

Results of the verification can be exported to a CSV file

Carrier Web Portal and Mobile Application

User Management – First Access



(*) Additional users can be added on demand.

Carrier Web Portal and Mobile Application

User Management – First Access



Carrier
Authorized Staff

The carrier authorized staff start the log-in to the Web portal and the Mobile Application using the url, user ID and password provided to the Carrier SPOC

European Union

Log in to start using the application

Login

Initial Password Setup Page

European Union

Update Password

Choose a new password

Password

Confirm Password

Next

First Connection page to update the Password*

(*) The password must contain at least 14 characters and meet at least three of the following requirements:

- UPPER CASE LETTERS (A, B, C, ... Z);
- LOWER CASE LETTERS (A, B, C, ... Z);
- NUMBERS (0, 1, 2, ... 9);
- SPECIAL CHARACTERS (!"#\$%&'()*+,-./:;<=>?@[\\]^_`{|}~).

Carrier Web Portal and Mobile Application

User Management – Carrier SPOC View



Carrier SPOC

Carrier SPOC users are able to browse the list of users under their management

The two-factor authentication using a TOTP-compatible application or a FIDO2-compatible device must be activated for Carrier SPOC to get the access to the User Management Interface:

- TOTP: a QR code is provided by the Web Portal to initialise the TOTP compatible application;
- FIDO2: the SPOC must provide the credentials to initialise the FIDO2-compatible device.

The image displays two sequential screenshots of the Carrier SPOC authentication interface. Both screens feature the European Union flag and the text 'European Union' at the top. The left screenshot shows a dropdown menu titled 'Please select authentication method' with a search bar containing 'type to search'. Below the search bar, two options are visible: 'OTP' and 'FIDO2'. The right screenshot shows the same dropdown menu with 'OTP' selected, and a blue 'Next' button is visible below the dropdown.

Selection of Strong Authentication Method

For more details about the authentication Method, please refer to the Carrier technical Guidelines Part 2 section 5

Carrier Web Portal and Mobile Application

User Management – Carrier SPOC View



Carrier SPOC

Carrier SPOC users are able to browse the list of users under their management

Username	Status	Actions
AC0003CAU5426	Disabled	Enable Reset password
AC0003CAU2863	Disabled	Enable Reset password
AC0003CAU3012	Disabled	Enable Reset password
AC0003CAU5762	Enabled	Disable Reset password
AC0003CAU5533	Disabled	Enable Reset password
AC0003CAU7264	Enabled	Disable Reset password
AC0003CAU8777	Disabled	Enable Reset password
AC0003CAU4530	Disabled	Enable Reset password
AC0003CAU9485	Disabled	Enable Reset password
AC0003CAU7994	Disabled	Enable Reset password

Carrier SPOC Users User Management Screen

- ✓ The Carrier SPOC is able to reset an enable the users under his or her organization.
- ✓ The password reset for authorized staff is to be managed by the Carrier SPOC and not eu-LISA
- ✓ The creation or the deletion of authorized Staff users need to be handled by eu-LISA Carrier administrator upon a reception of the request
 - Before EES EiO, the request of the creation or the deletion of a user is to be sent to the EULISA Carriers Onboarding carriers_onboarding@eulisa.europa.eu
 - After EES EiO, the request of the creation or the deletion of a user is to be sent via the Carrier Onboarding and Support Tool

Lessons learned from the pilot phase

Lessons Learned during the Pilot Phase – Episode 2



Active interactions between the REST/JSON testing experts help shortening the CT Certification (one hour)



Important PAXLST notes about the MQ/EDIFACT message structure to be re-enforced, avoiding 400 Error



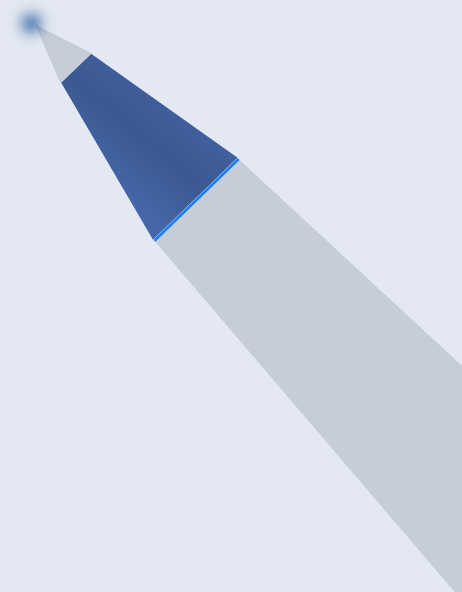
Check the templates provided in the TDD document to ensure that you do not get 422 Error



Use the CorrelationID attribute to follow more easily the test executions (including versioning of Test Cases)



Annex to TDD (SoapUI) and a “template” DTP (Detailed Test Plan) will be provided to clarify the mapping of attributes to respective message structure and format.

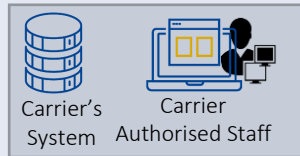


Carrier IDs and Service Provider IDs

Name	PAXLST	Input JSON
<i>Correlation identifier</i>	RFF+TN	correlationId
<i>Passenger in transit</i>	NAD+DDU+++ DDU indicates that passenger is in transit	inTransit = true
<i>Passenger out of scope</i>	GEI+4+176	outOfVerificationScope= true
<i>Passenger Nationality</i>	NAT+2+	nationality
<i>Travel Document Type</i>	DOC+	documentType
<i>Travel Document Number</i>	DOC+P+	number
<i>Reference ID of passenger</i>	RFF+ABO:	tcnNo
<i>Expiry date of travel document</i>	DTM+36:	expiryDate
<i>Issuing country of travel document</i>	LOC+91:	issuingCountry
<i>Arrival date</i>	DTM+232:	arrivalLocalDay
<i>Departure date and time</i>	DTM+189:	departureDateTime
<i>Target MS of entry</i>	LOC+87+	airportOfEntry
<i>Identifier of means of transport (flight number)</i>	TDT+20+ TDT+34+ (if overflight)	scheduleNo
<i>Service provider ID</i>	3 rd value of the UNB header UNB+UNOA:4+S xxx : Where bolded value is the service provider ID	serviceProviderId
<i>Carrier ID</i>	at the end of TDT+20 TDT+20+6X8912+++6 X , where 6X is the Carrier ID (up to 3 characters), in its absence two first characters from Flight ID are used	carrierId

Carrier IDs and Service Provider IDs

REST Channel



Traveller Status Verification with

- *carrierID* (required) in message body
- *serviceProviderID* (optional) in message body
- *serviceProviderID* (required) in HTTP header
X-IBM-Client-Id

The Carrier Interface

System ID (or *Internal System ID*) linked with Carrier TLS Certificate must be the same as *serviceProviderID* from HTTP header

Access Control based on:

- *carrierID* from message body
- *serviceProviderID* from HTTP header

Carrier IDs and Service Provider IDs

MQ Channel



Traveller Status Verification with

- *carrierID* (required) in message body
- *serviceProviderID* (required) in message body



Access Control based on:

- *carrierID* from message body
- *serviceProviderID* from message body


THANK YOU!

eu-LISA

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

Vesilennuki 5, 10415 Tallinn, Estonia

www.eulisa.europa.eu

-  facebook.com/agencyeulisa/
-  twitter.com/EULISA_agency
-  linkedin.com/company/eu-lisa/
-  youtube.com/c/euLISAagency