

# ENTRY-EXIT SYSTEM MOBILE BORDER CHECKS & MORE

FRONTEX INDUSTRY DAYS

7/12/2021, 09:30 – 09:55 CET



The world is how we shape it

sopra  steria



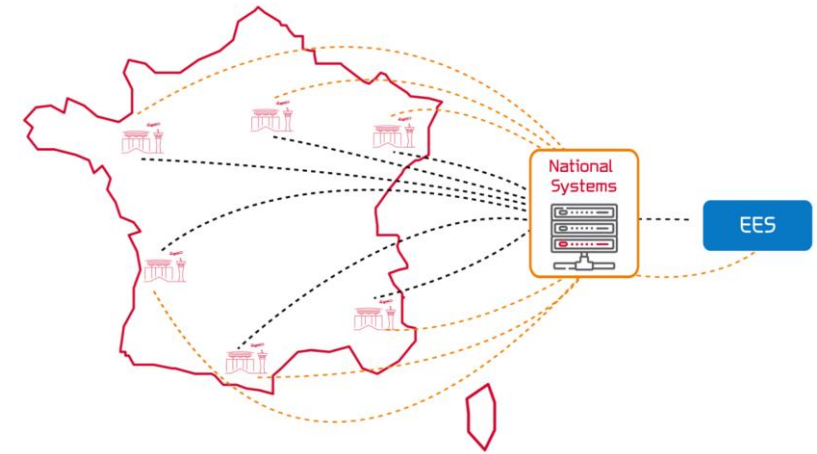
# “EES

**Integrated end-to-end  
modular solution with  
mobile terminals for  
border checks for  
Europe**

# Context and Introduction

French Ministry of Interior Entry-Exit System Programme

- **Operational impact of EES EiO on border controls**
- **Mobile devices for swift EES checks at borders**
  - └ In particular: sea ports, land borders, rail
- **Flexible open-source modular end-to-end solution**
  - └ Hardware agnostic software solution
- **Decoupled hardware & software for better maintainability and evolutions**
- **Wider solution for ID checks within Schengen Area (IOP)**
- **Proof of Concept demonstrated at Milipol 2021**
  - └ ID document check (MRZ & RFID)
  - └ EES check
  - └ Sanitary Pass QR Code check

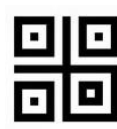




# Mobile Device Key Features & Functionalities

Example of Hand-held Check Device & Enrolment Tablet

- **OCR reader for passport/ID card MRZ**
  - └ Left or right handed
- **IR reader for QR code**
- **FP reader**
- **RFID chip reader (on the back)**
- **Camera (on the back)**
  - └ For 1:1 face matching

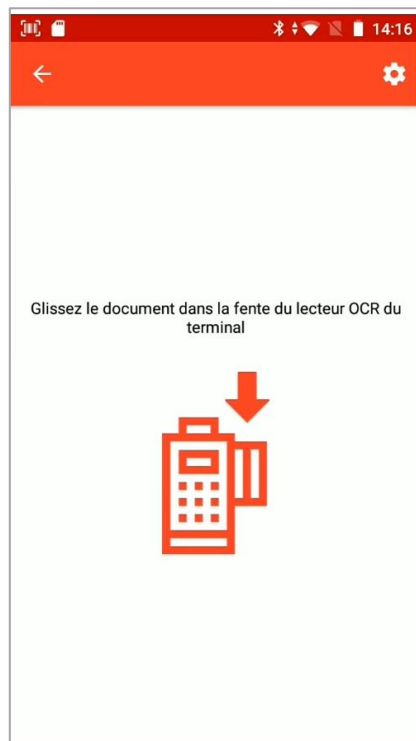


Tablet device for 1<sup>st</sup> enrolment

Images not to same scale

# ID Document Check

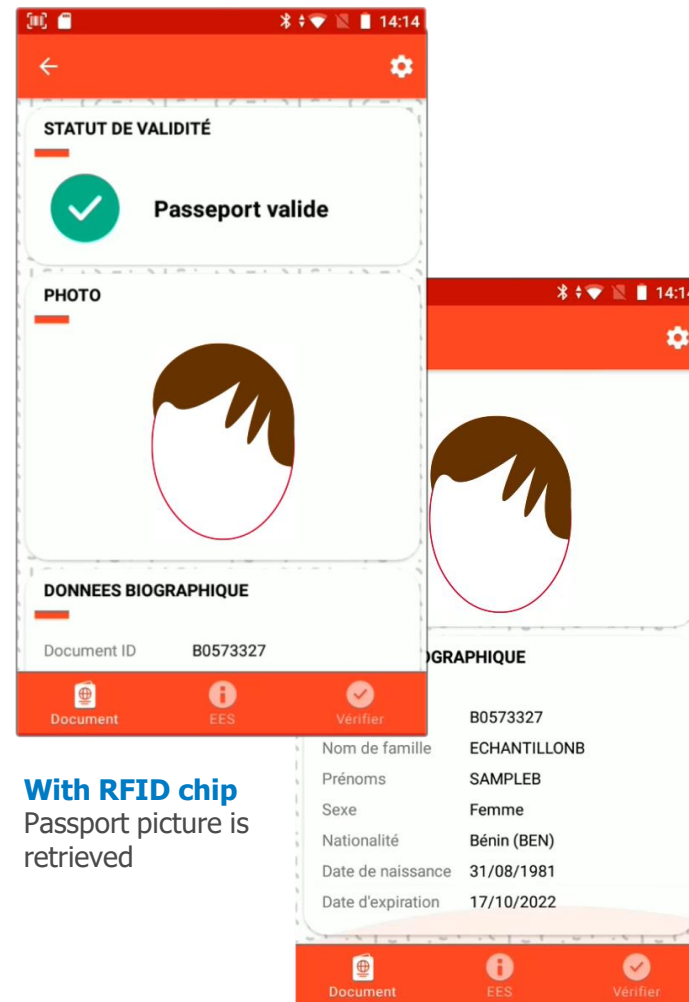
## MRZ & RFID



**OCR Document Scan**  
Passport or ID Card MRZ



**Document RFID reader**  
Step may be skipped if no chip  
passport  
Only 50% of passports have RFID



**With RFID chip**  
Passport picture is  
retrieved



**Only MRZ**  
Biographic information only is  
displayed

# EES Check

## Valid & Invalid Stay



STATUT DE VALIDITÉ

**Séjour valide**

INFORMATIONS EES

Type de passeport	Ressortissant de pays tiers
Séjour autorisé jusqu'au	31/12/2021
Nombre d'entrées	2
Nombre de sorties	1
Nombre de refus	1

ENREGISTREMENT D'ENTRÉE

Poste frontière: AYZO  
Pays: Bulgarie  
Date: 24/09/2021

Document EES Vérifier

### Valid Stay Case

EES data matches passport and stay is valid or Free Movement

Nombre d'entrées 2  
Nombre de sorties 1  
Nombre de refus 1

ENREGISTREMENT D'ENTRÉE

Poste frontière: AYZO  
Pays: Bulgarie  
Date: 24/09/2021  
Séjour autorisé jusqu'au: 31/12/2021

Poste frontière: AYZO  
Pays: Chypre  
Date: 19/02/2020  
Séjour autorisé jusqu'au: 19/03/2020

ENREGISTREMENT DE SORTIE

Poste frontière: AYZO  
Pays: Danemark  
Date: 10/03/2020

Document EES Vérifier

### History Information

Entries, exits, rejections  
Where, when, authorised stay...



STATUT DE VALIDITÉ

**Séjour invalide**

ERREURS

La durée de séjour est expirée depuis 55 jour(s)

INFORMATIONS EES

Type de passeport	Ressortissant de pays tiers
Séjour autorisé jusqu'au	10/08/2021
Nombre d'entrées	2
Nombre de sorties	1
Nombre de refus	1

Document EES Vérifier

### Invalid Stay Case

Stay duration expired of 55 days



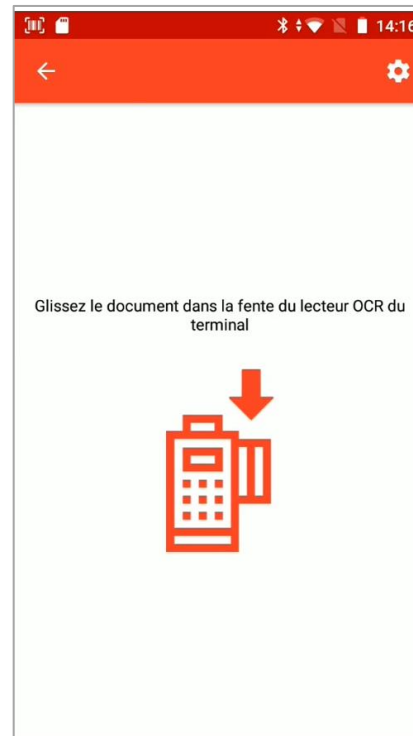
# Sanitary Pass Check

## Successful ID Match



### QR Code Scan

Sanitary Pass QR code is scanned



### OCR Document Scan

Passport or ID Card MRZ



### Successful Check

Sanitary pass QR Code is valid and identity match with passport/ID card  
Retrieves EES information





# Sanitary Pass Check

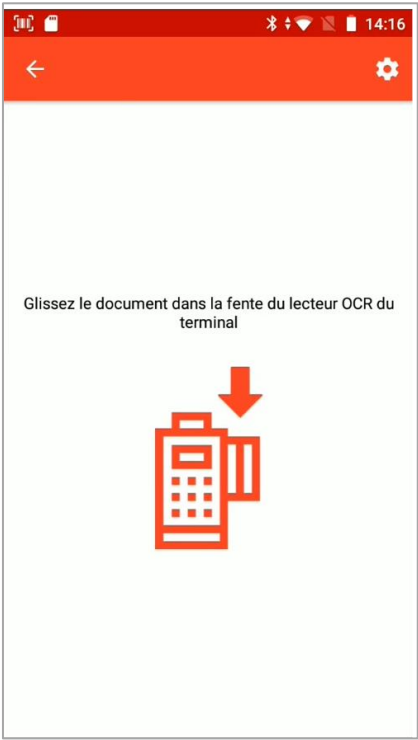
QR Code Invalid or No ID Match



**QR Code Scan**  
Sanitary Pass QR code is scanned



**QR Code Not Valid**  
E.g. not a Sanitary Pass QR code



**Request to scan ID document**  
IF QR code is Sanitary Pass for ID match



**No ID Match**  
Identity mis-match between ID and Sanitary Pass





# Sanitary Pass Check

## Demo: Identity Mis-match

### Mobile Application Display

Identity of ID document and sanitary pass do not match

**STATUT DE VALIDITÉ**

**Identité non conforme**

**DONNÉES PASSE SANITAIRE**

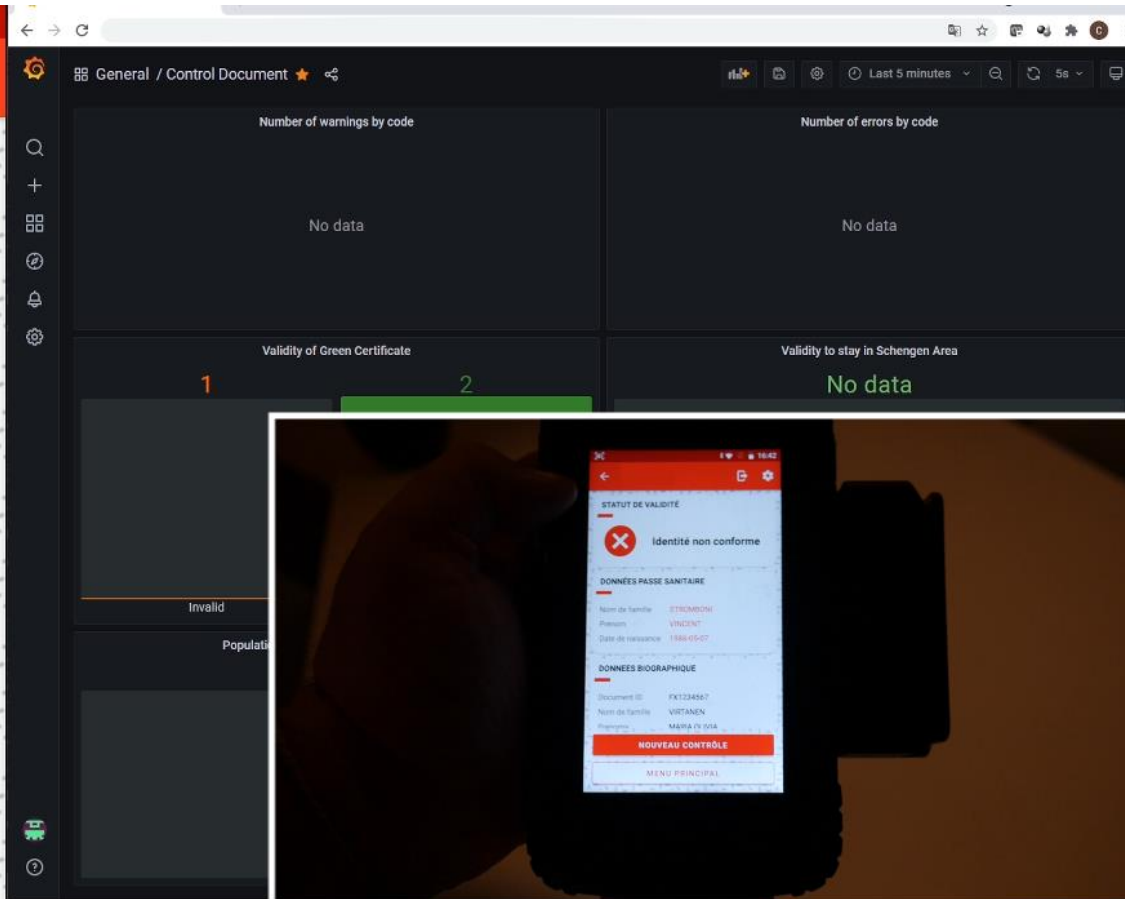
Nom de famille **STROMBONI**  
Prénom **VINCENT**  
Date de naissance **1986-05-07**

**DONNÉES BIOGRAPHIQUE**

Document ID **FX1234567**  
Nom de famille **VIRTANEN**  
Prénoms **MARIA OI IVIA**

**NOUVEAU CONTRÔLE**

**MENU PRINCIPAL**



### Back-end Dashboard

Desktop part of application recording all checks performed  
Provides real-time information on checks

### Video of Demo

Demo performed using sample document and Sanitary Pass

# Solution Back-End Dashboard

Configurable and Customisable

Number of TCN checks sorted by country

## Warning messages

Not matching ID document (scan vs EES), low resolution image, etc.

Leads to 2<sup>nd</sup> line check



## EES services invoked

ID document, Sanitary Pass, Fingerprint, other

## Error messages

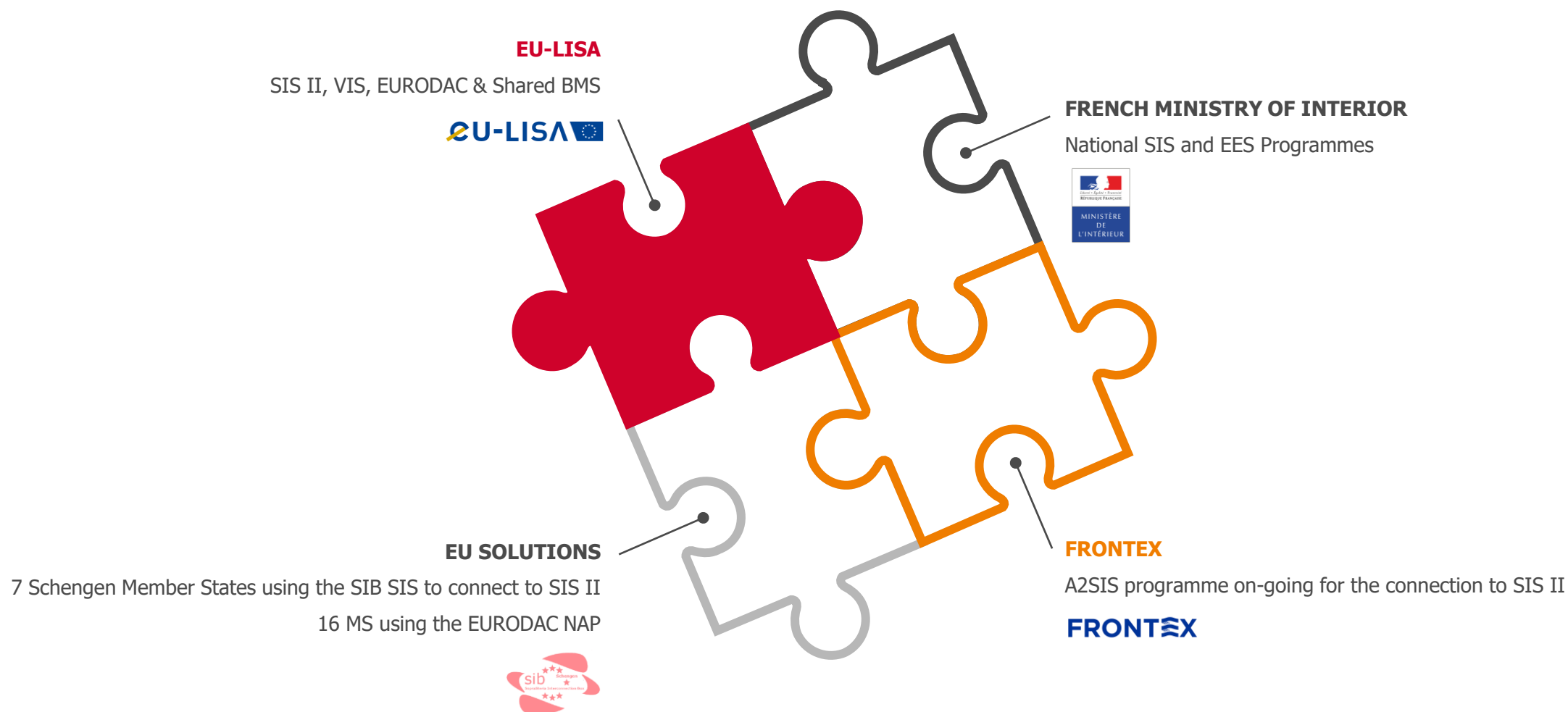
Stay period expired, EES record not found, identity mis-match, etc.

Entry should be refused

Sanitary pass validity (OK/NOK)

Stay period exceeded (OK/NOK)

# The Sopra Steria Schengen Footprint



# Thank You

— Any Questions?

— Interested to see our demo?





# Contact

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