EES Solutions for Border Security and Passenger Facilitation at land/sea borders

25ᵗʰ September 2018

Land Borders:
The elephant in the room:

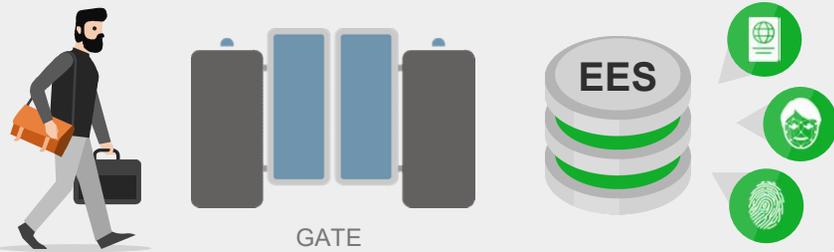What is the benefit of securing air borders
if our land borders are leaking?

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security to be free

EU Pre-Travel information of TCNs planned trips

IF VISA REQUIRED

VIS

Confirmation of fingerprints in VIS using ABC and registration into EES

GATE

EES

IF VISA WAIVER

ETIAS

Registration of 4FP and Face at border control desk into EES

DESK
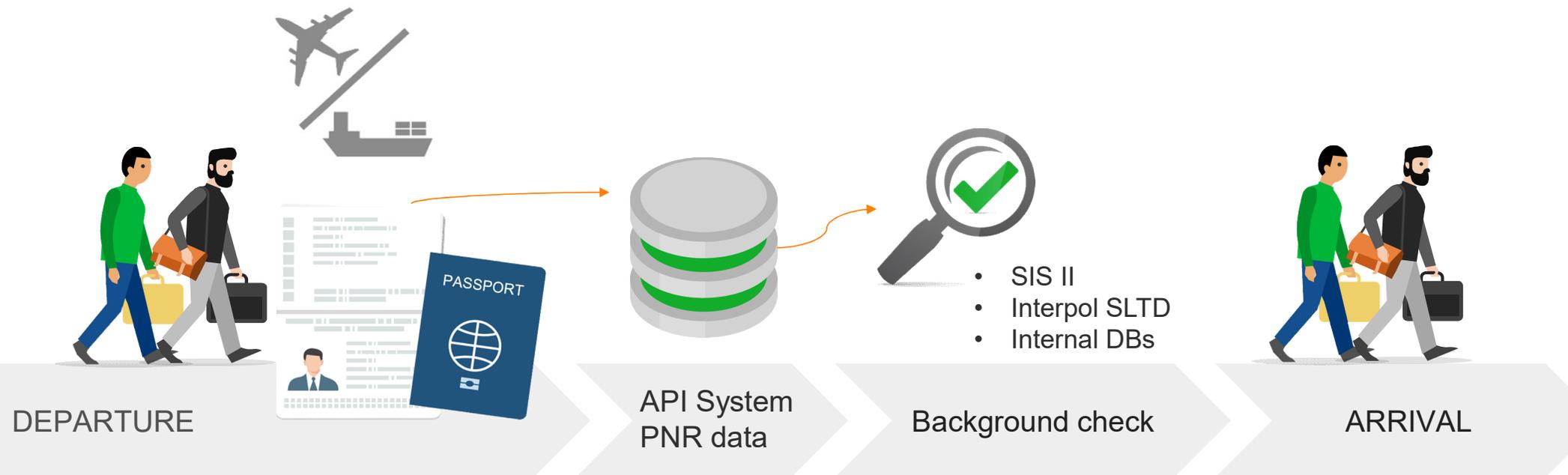
EES

EXPEDITED EXIT :   or   **& NEXT VISITS**

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Air and Sea: API/PNR data to forewarn receiving government

Possibility to focus on high risk travelers by collecting passenger info in advance

PASSPORT

- SIS II
- Interpol SLTD
- Internal DBs

| DEPARTURE | API System PNR data | Background check | ARRIVAL |

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What about Road and Rail?

Challenges with road and rail borders

- **FRAGMENTED**: Road borders are not homogenous – motorways, single lane, country roads

- **ENVIRONMENTAL CHALLENGES:** freezing temperatures, rain, darkness, vibration

- **EFFICIENCY:** FastPass trial showed it can be done, but slow and expensive

- **IMPLEMENTATION:** Collecting 4FP + Face from cars/trains presents massive logistical challenges
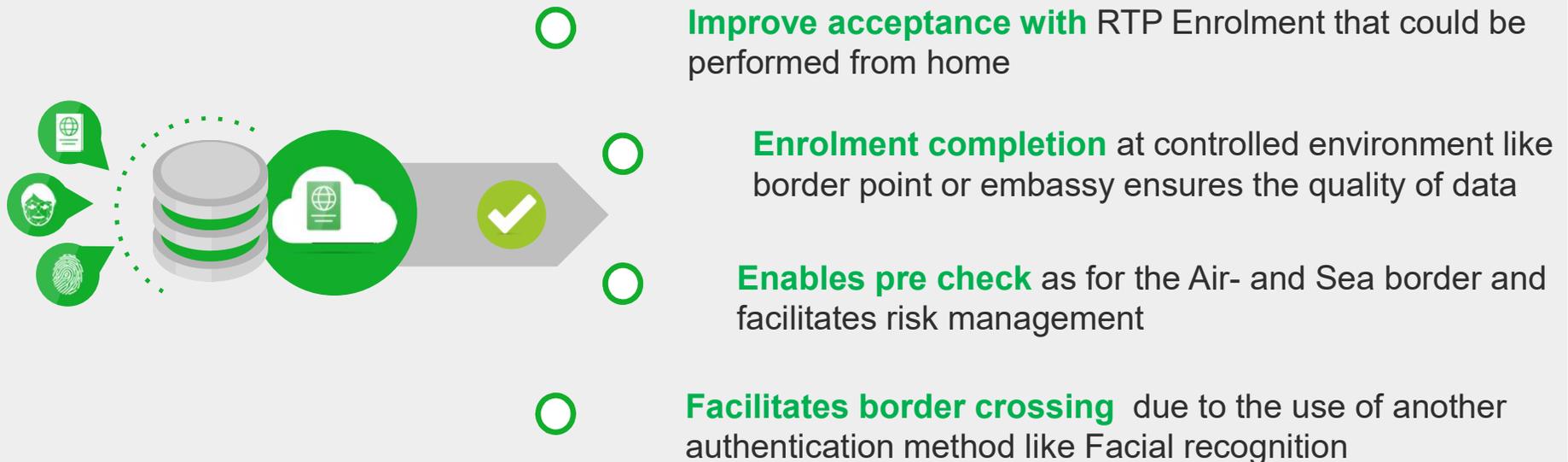
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Problem Definition

How can the requirements of EES be met at ROAD and RAIL borders

- ✗ Without compromising security
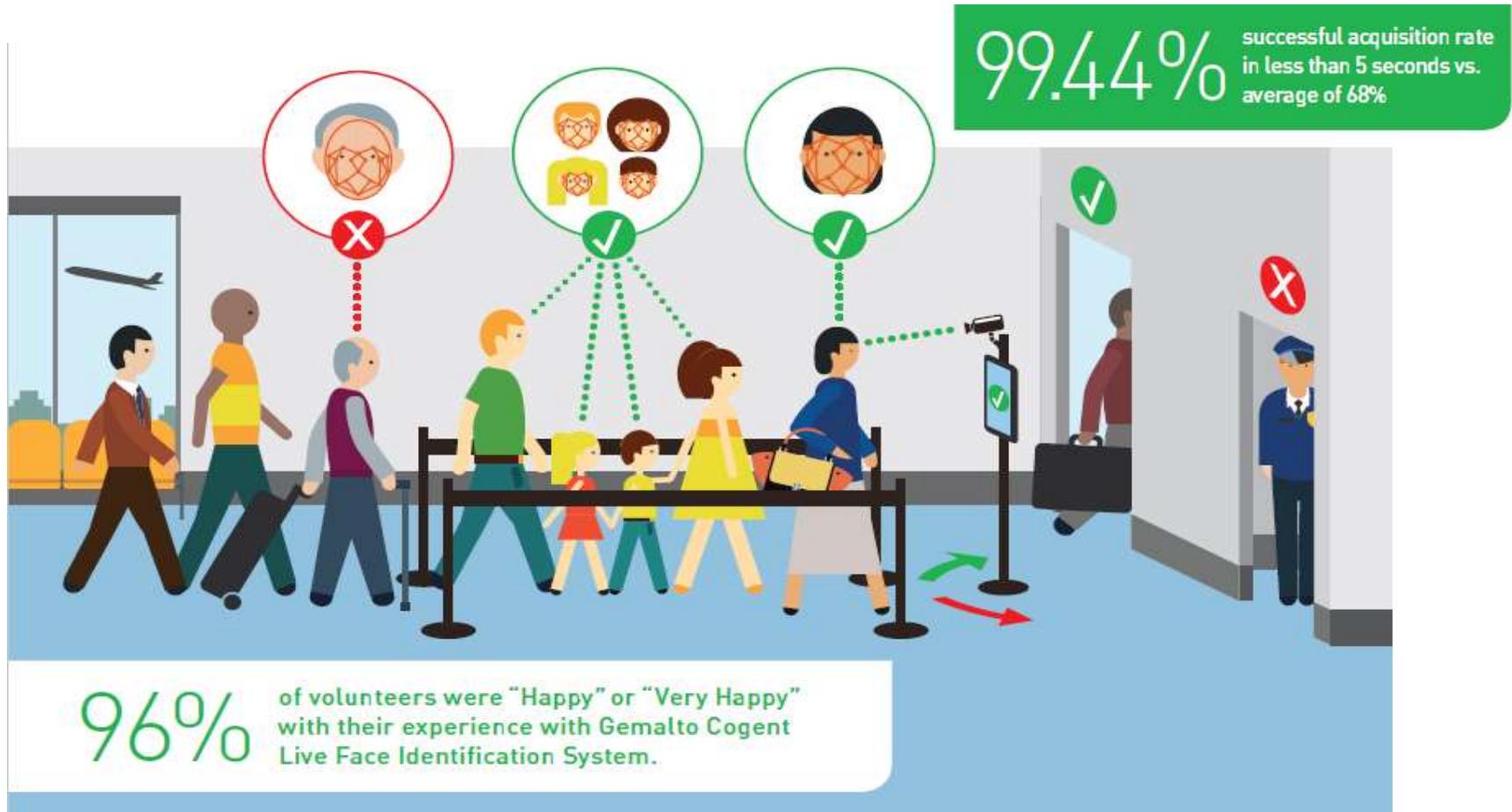
- ✗ Without delaying traffic unnecessarily

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Registered Traveller Programs could be part of the solution

Member States may introduce a national **Registered Traveller** Scheme if they wish

Improve acceptance with RTP Enrolment that could be performed from home

Enrolment completion at controlled environment like border point or embassy ensures the quality of data

Enables pre check as for the Air- and Sea border and facilitates risk management

Facilitates border crossing due to the use of another authentication method like Facial recognition

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DHS 2018 Biometric Technology Rally

99.44% successful acquisition rate in less than 5 seconds vs. average of 68%

96% of volunteers were "Happy" or "Very Happy" with their experience with Gemalto Cogent Live Face Identification System.

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Facial capture in vehicle using Live Face Identification System
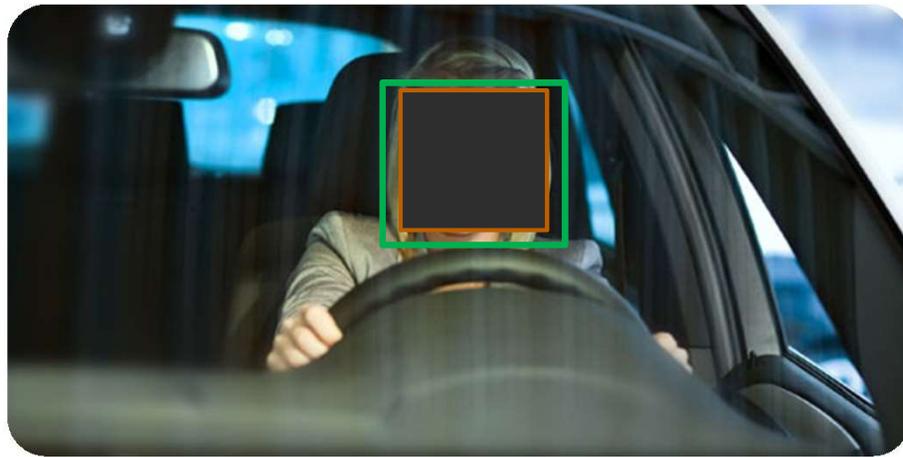
Model
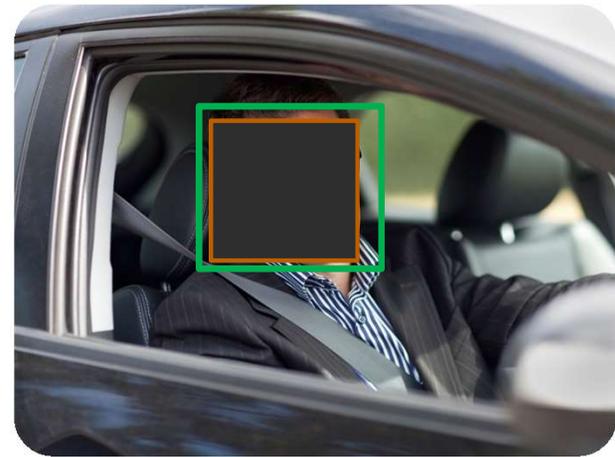
Database

Matching

HIT

Other vendors are available

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We propose to provide all the necessary elements for EES using live facial capture alone

Passport Chip Photo + MRZ + Passive Authentication

Registered Traveller Record

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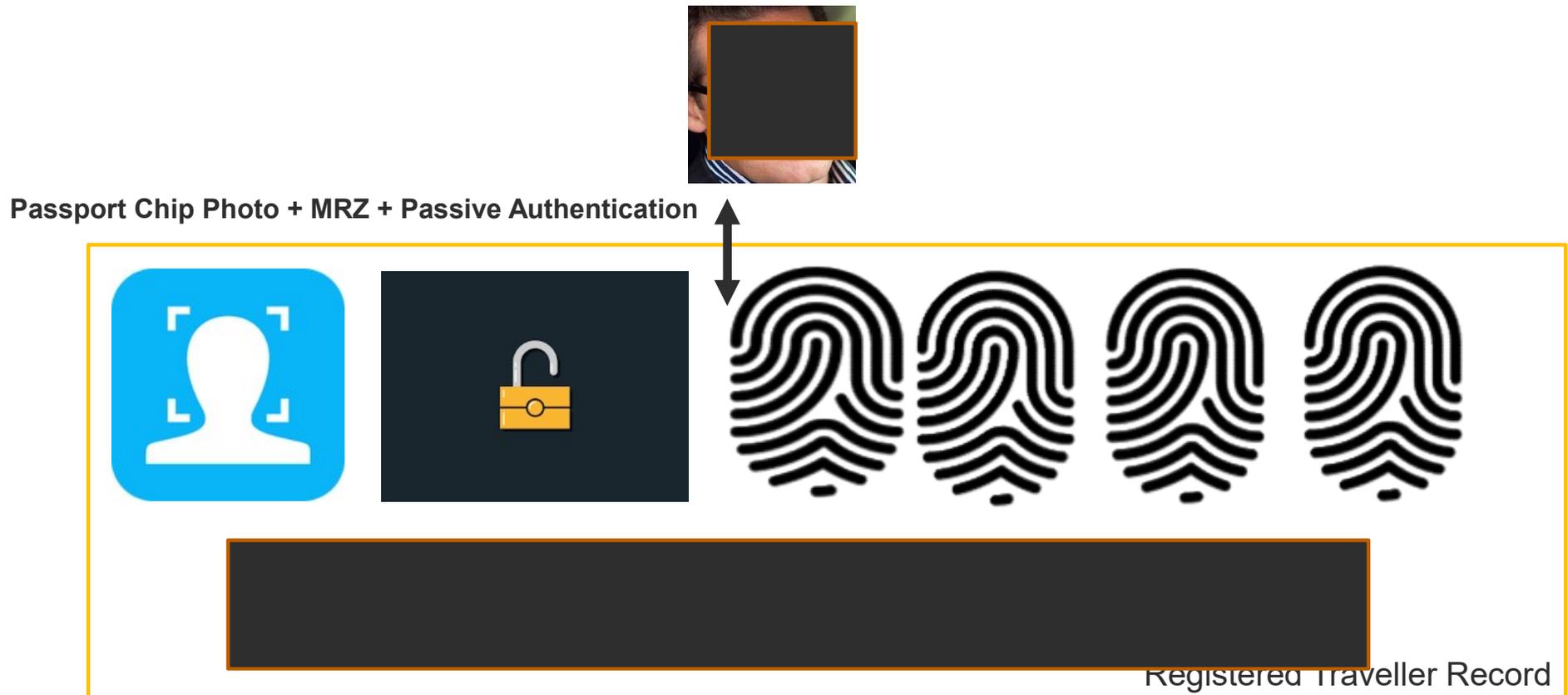
We see a 4-Step process for RTP

1

2

3

4

WEB-MOBILE
PRE-ENROLMENT

ENROLMENT
COMPLETION AT THE
BORDER ONE TIME

WEB-MOBILE
TRIP NOTIFICATION

IN VEHICLE FACE
RECOGNITION

TRAVEL IS
PLANNED FOR
xx / xx / xxxx

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Step 1 – Pre-enrolment from mobile/web

1

WEB-MOBILE
PRE-ENROLMENT

Payment?

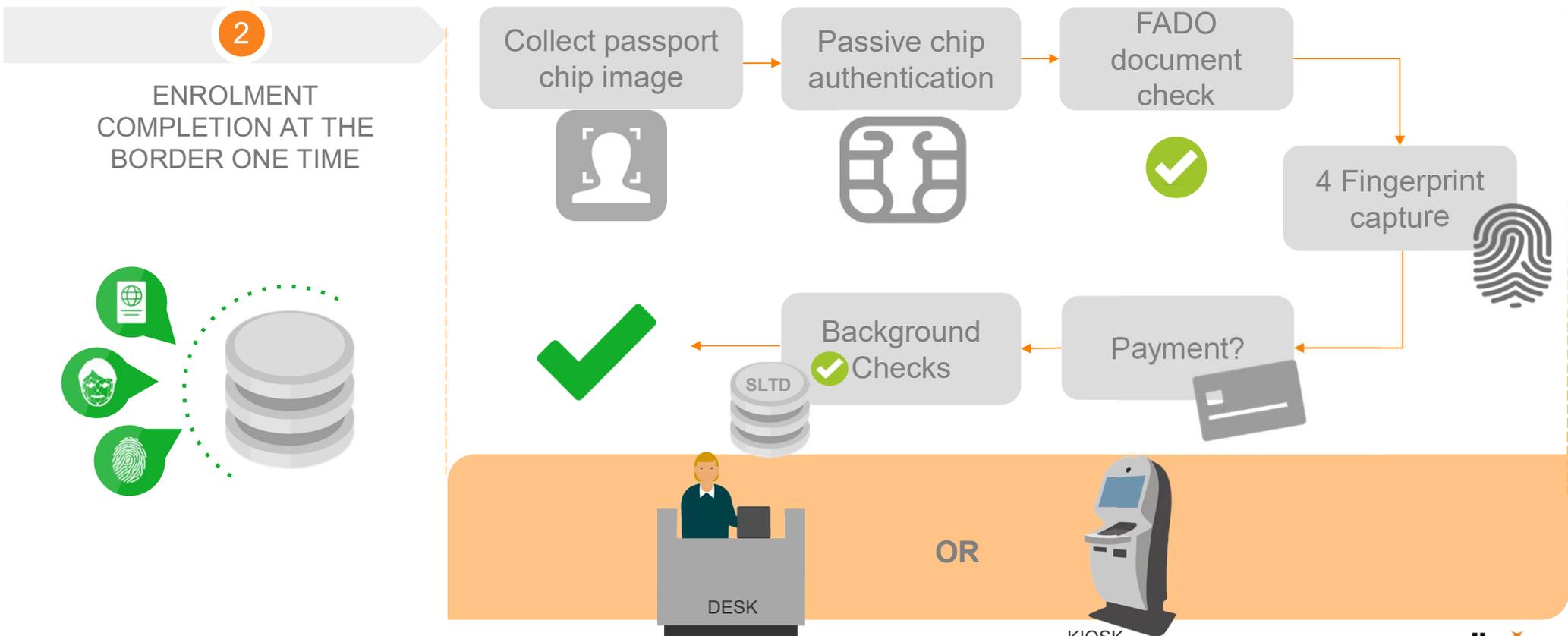SLTD

PASSPORT / ID IMAGE, MRZ
& PHOTO CAPTURE

FACE MATCH, LEVEL 1
DOC VERIF, SLTD CHECK

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Step 2 – Enrolment completion at the border

2

ENROLMENT COMPLETION AT THE BORDER ONE TIME

Collect passport chip image → Passive chip authentication → FADO document check → 4 Fingerprint capture

Background Checks ← Payment? ←

SLTD

DESK **OR** KIOSK

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Step 3 – Trip Notification (Optional step)

WEB-MOBILE TRIP NOTIFICATION

TRAVEL IS PLANNED FOR xx / xx / xxxx

Mobile/web app to notify of trip → Provide licence plate? → Select border point? → Confirm details of other pax with RTP

ABC-123

This step is not essential, but allows the border control to make a risk assessment

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Step 4a – In Vehicle Face Capture – Road or Ferry

4

IN VEHICLE FACE RECOGNITION

Driver selects RTP fast lane	→	Through windscreen or window down	→	Optional licence plate recognition?	→	Random sending to manual check

ABC-123

COLLECT FACIAL IMAGES ON THE FLY

EXTRA LIGHTNING?

LIFT BARRIER

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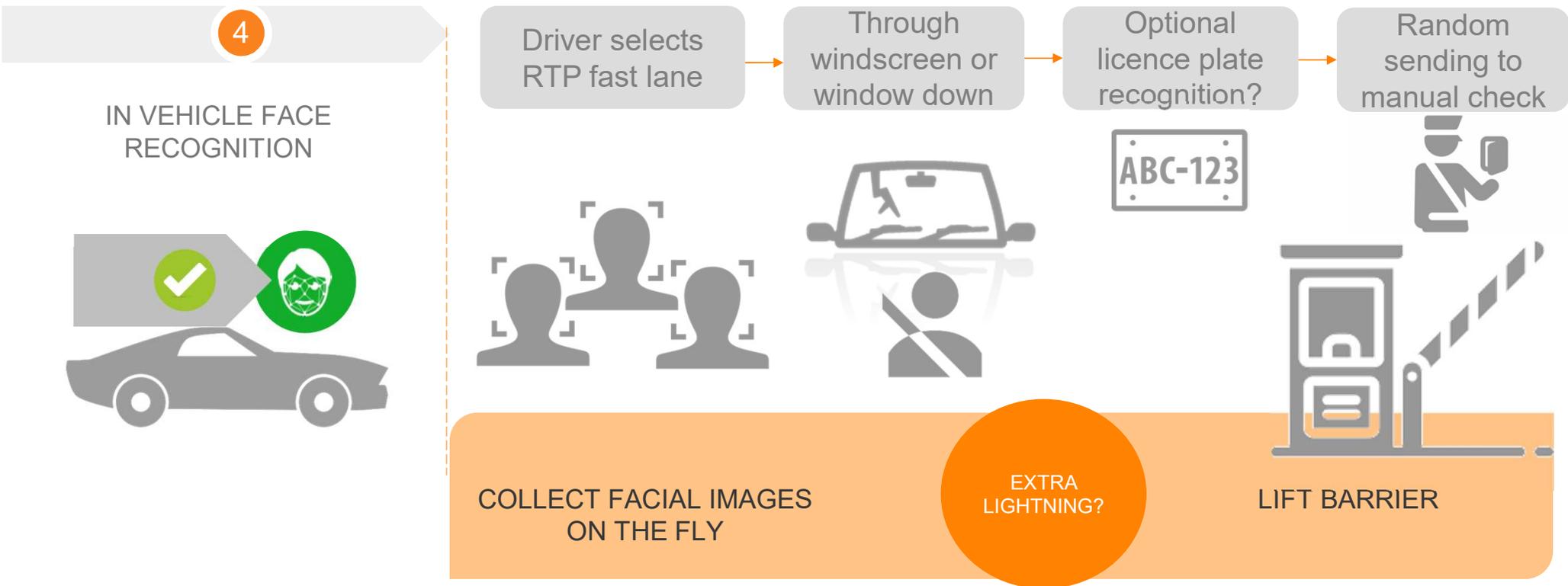
Step 4b – Walking passengers, Cyclists - Officer-assisted

4

WALKING PASSENGER FACE RECOGNITION

Cyclists remove helmets

Special ABC Gate for cycles?

Collect facial image

Random sending to manual check

Remove Motocycle Helmets

EXTRA LIGHTNING?

Fixed cameras

ABC Gates

body worn cameras

handheld devices

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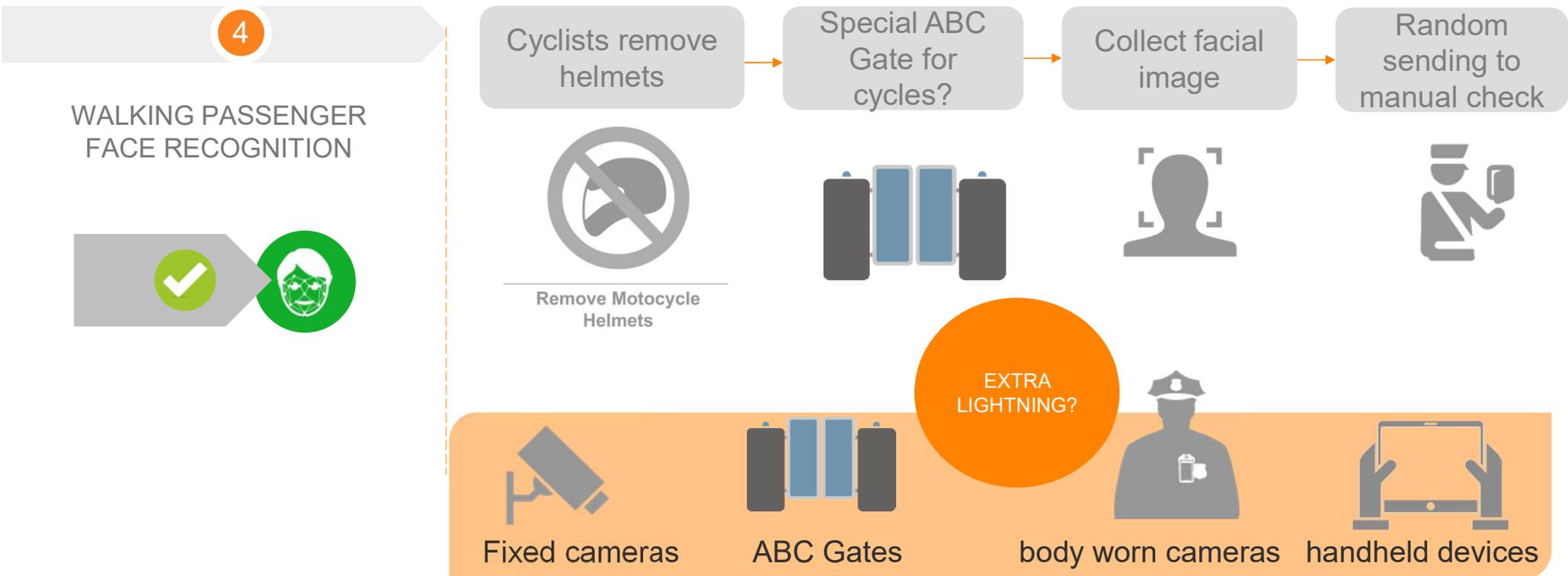
Step 4c – Sitting passengers, train, bus - Officer-assisted

4

WALKING PASSENGER
FACE RECOGNITION

Officer with
mobile device for
Finger print

Officer with
mobile device
for Facial

Collect facial
or FP

ASSISTED
COLLECTION OF
FACIAL & FP

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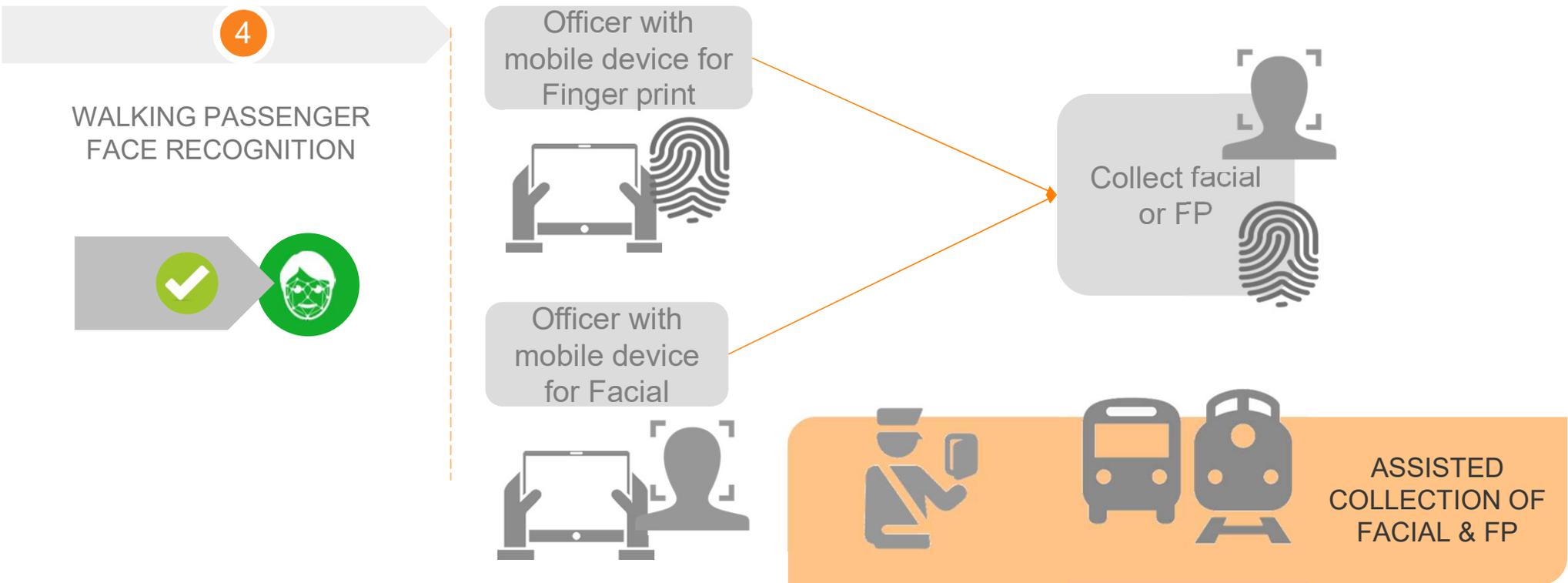
Homogenous approach

	Visa By-Air	Visa-Waiver By-Air	VISA/Visa Waiver by Land/Sea	RTP Member By Land/Sea	RTP Member By Rail
Enrolment point	VISA At embassy	ETIAS Mobile/Web	VISA At embassy	RTP app Mobile/Web + Kiosk at border or rail station	
Trip notification	API & PNR		?????	Mobile/Web?	
Biometric at border	10FP at embassy + face at border	4FP + face at border	10 FP at embassy Or 4 FP at border +face at border	4 FP + face at border first time, then face or 4FP by mobile (train only)	
Doc Check	MRZ + Chip FADO,Pass Auth				
Entry point	Counter		Out of vehicle or officer with mobile	In vehicle	On train
Exit point	ABC				
Next entry					

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Conclusions

Land borders are a weak link to address to close the loop

○ **HOMOGENIZE**: if we are not controlling land borders, solutions at airports have limited value

○ **LOGISTICAL CHALLENGE:** can be addressed by implementing RTP. Legal challenge to adress

○ **EFFICIENCY & SECURITY GAINS:** No passport reading on the border, opportunity for risk assessment

○ **TECHNOLOGY:** Gemalto has a range of technology to help solve many issues at land and sea.

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Thank-You!

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