ICAO 80

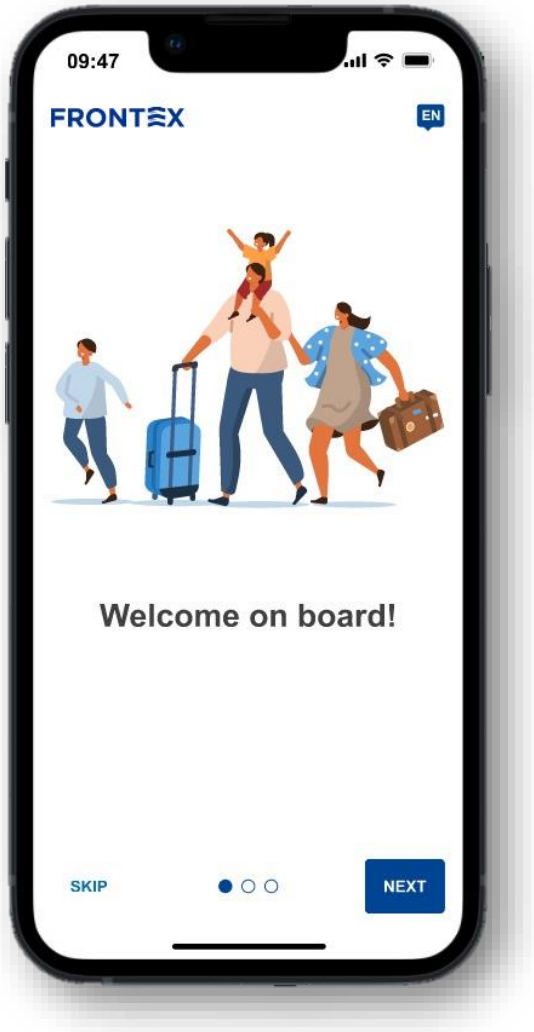
2024 ICAO TRIP SYMPOSIUM

MONTRÉAL , CANADA | NOVEMBER 13-15

Joanna Darmos

Research Officer, INNOVATE

Frontex - European Border and Coastguard



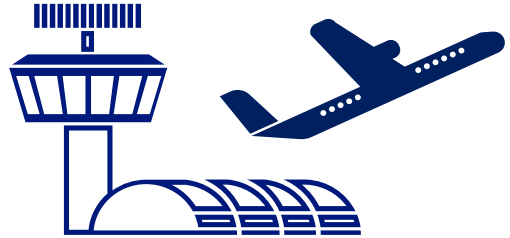
App4EES Pilot Project

Operational trial outcomes

Frontex INNOVATE

Primary user story ”Quick Border”

MOBILE APP



DEPARTURE

ARRIVAL

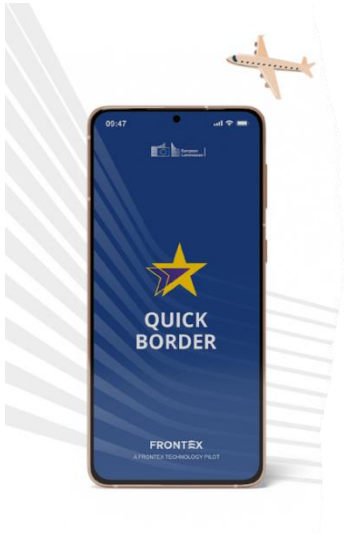
DATA CHECK & COMPLETION

MANUAL DESK

Project timeline

11 October 2023

Start of development work



13 December 2023

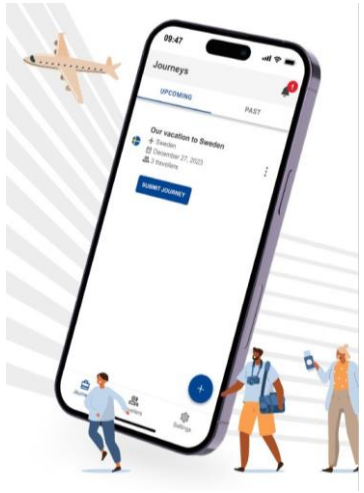
First app release

15-18 April 2024

Pre-UAT Schiphol

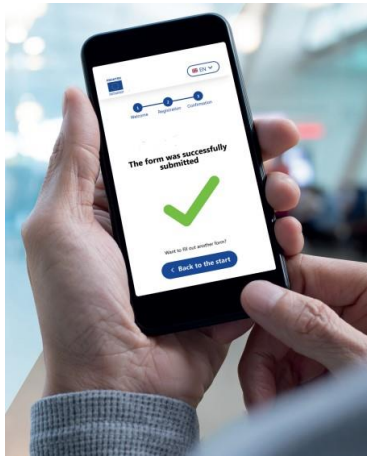
28 June 2024

End of operational pilot



20 May 2024

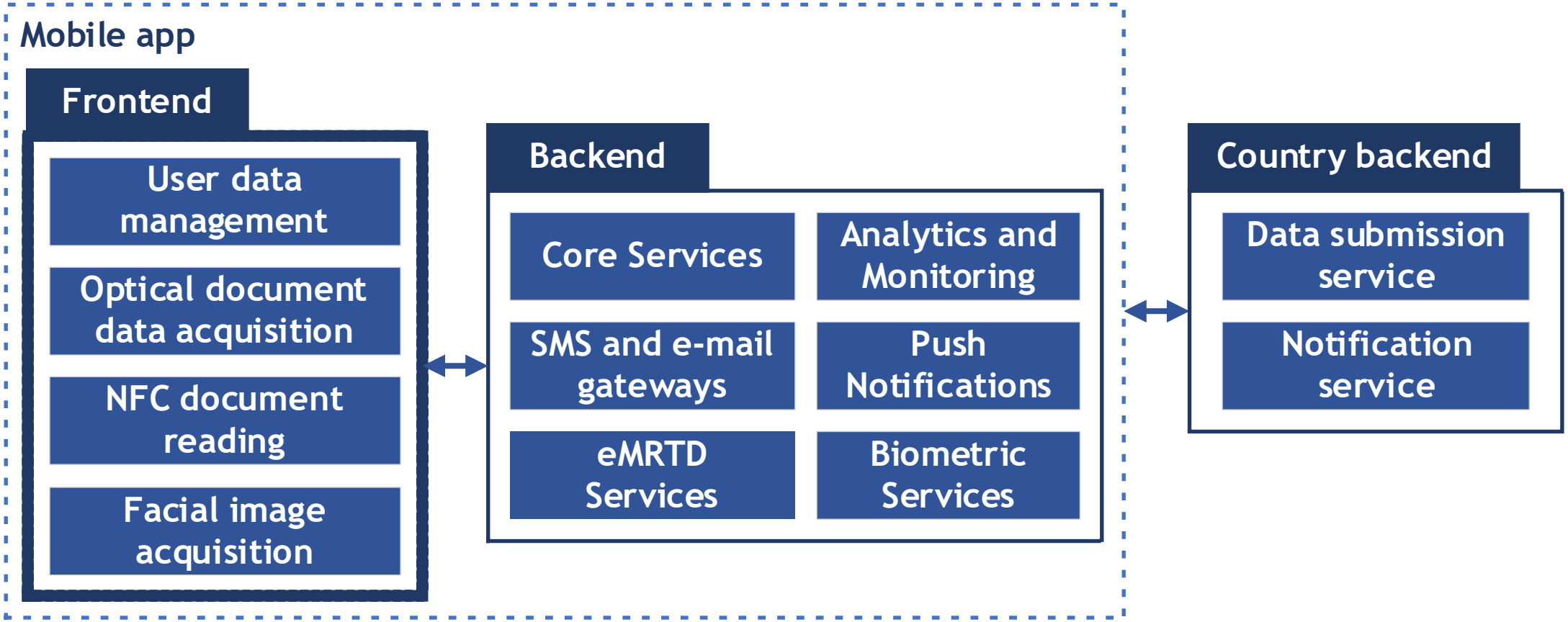
Start of UAT in Arlanda



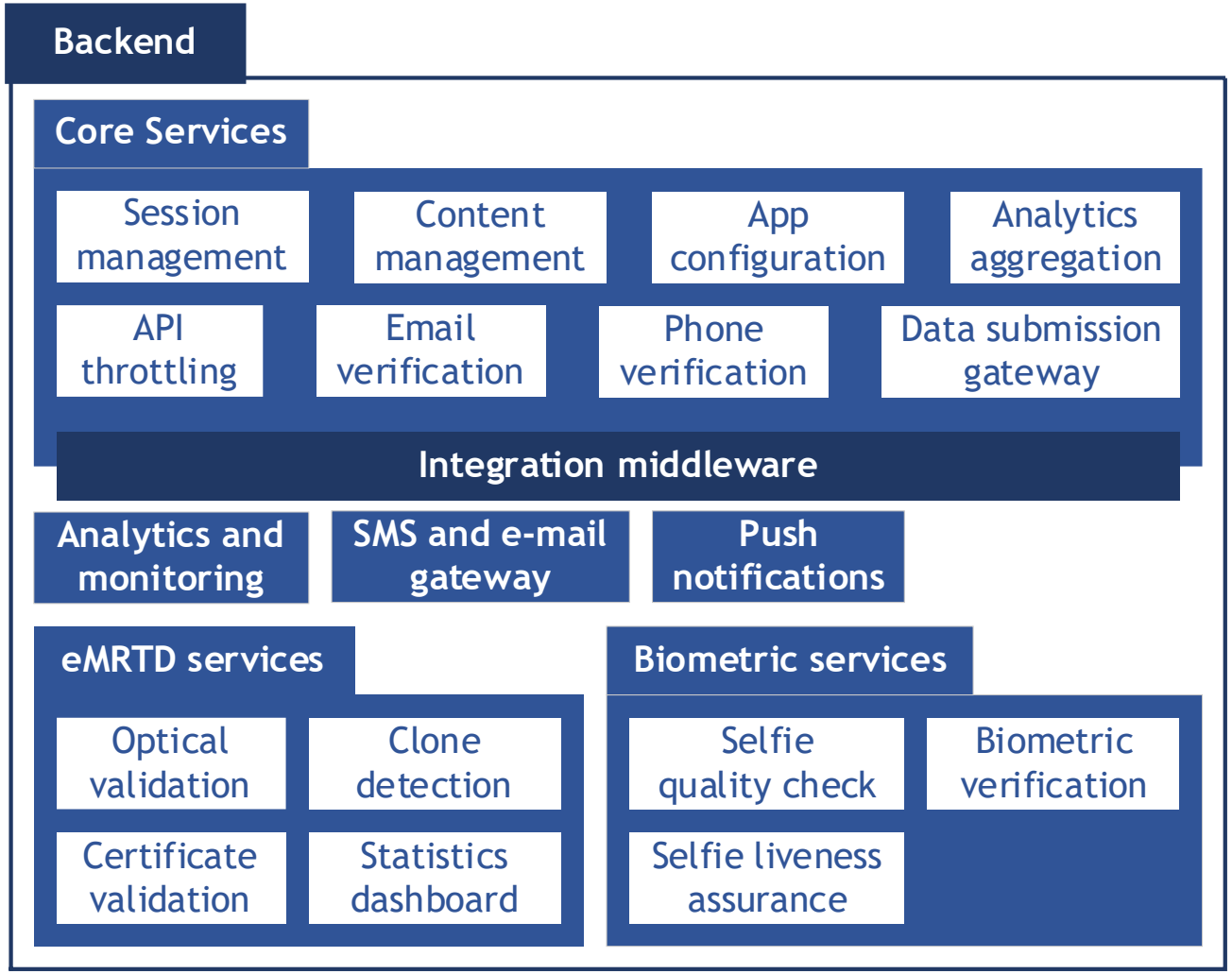
25 September 2024

Submission of report for review

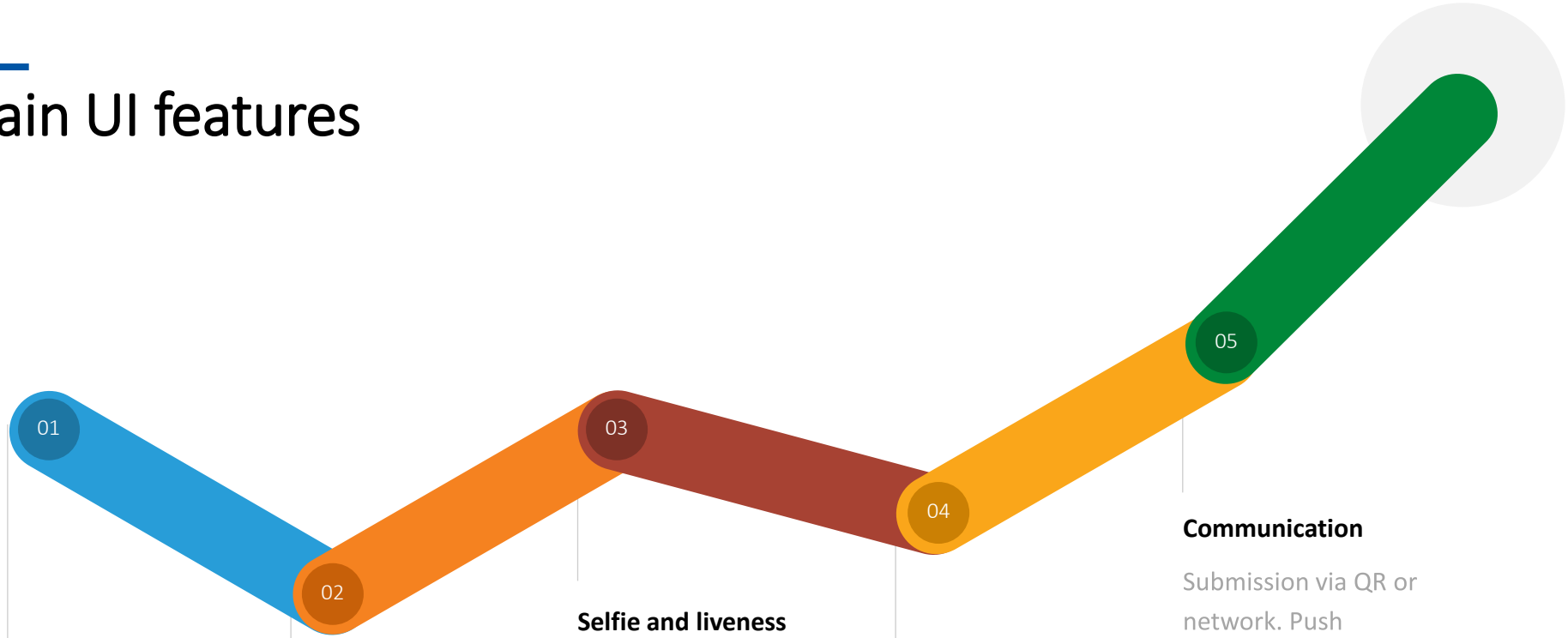
System architecture



App backend


Backend
Core Services
Session management
Content management
App configuration
Analytics aggregation
API throttling
Email verification
Phone verification
Data submission gateway
Integration middleware
Analytics and monitoring
SMS and e-mail gateway
Push notifications
eMRTD services
Optical validation
Clone detection
Certificate validation
Statistics dashboard
Biometric services
Selfie quality check
Biometric verification
Selfie liveness assurance

Main UI features



Exemptions management

Gathering data for improved flow management and privacy

Document reading

OCR and NFC reading and data display

Selfie and liveness detection

Passive verification and photo acquisition

Questionnaire

Conditions of entry

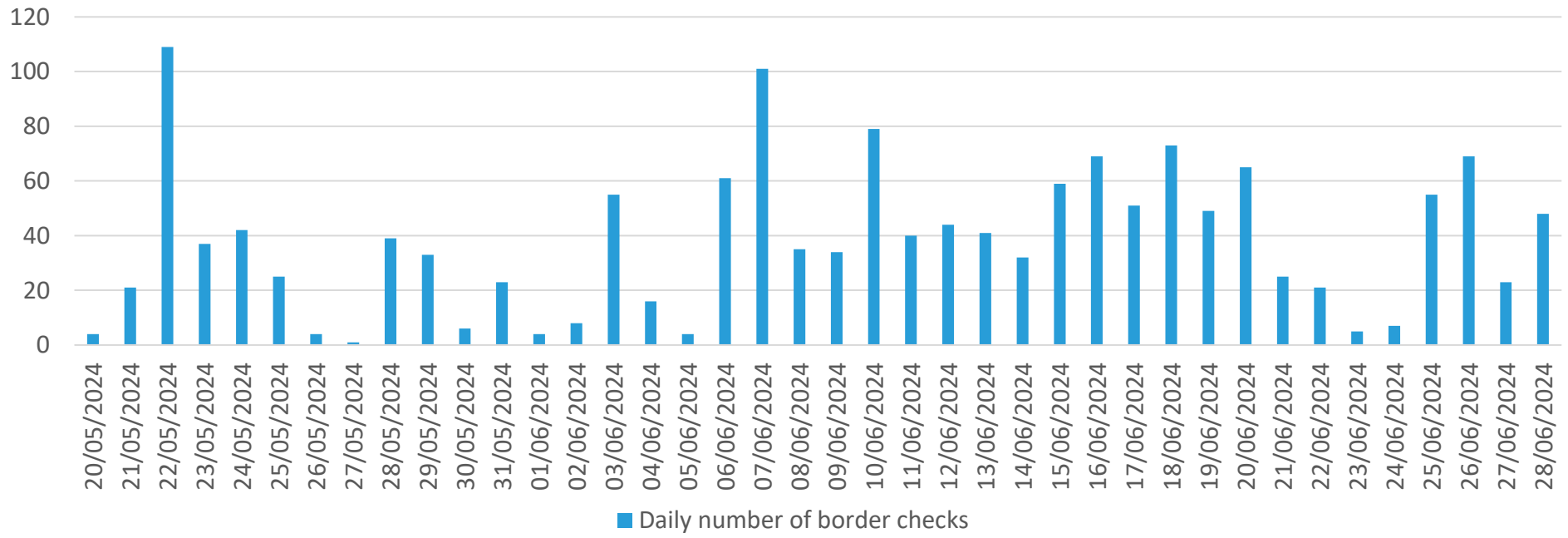
Communication

Submission via QR or network. Push notifications, SMS/email functionality

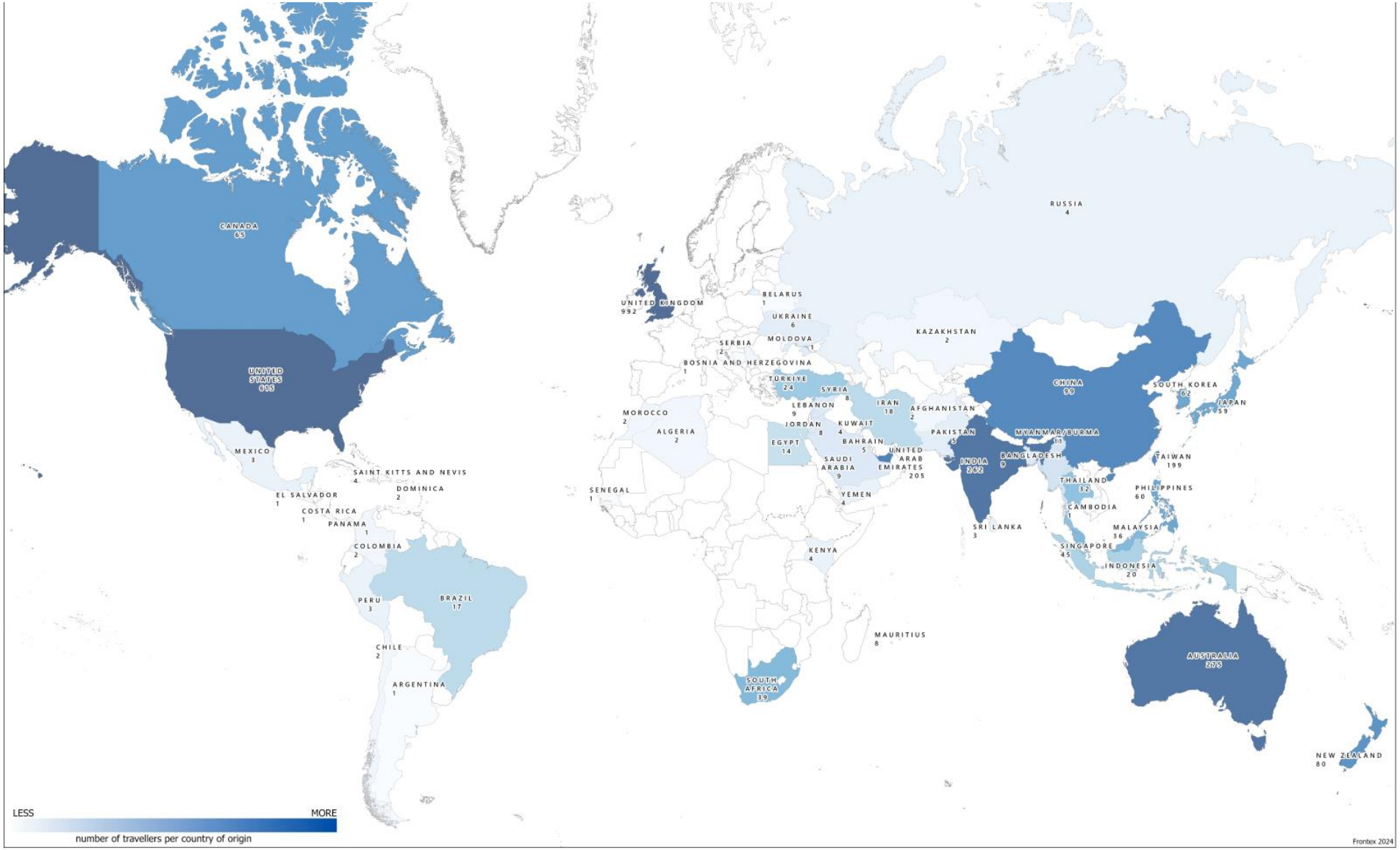
Pilot in numbers

01 02 03 04 05

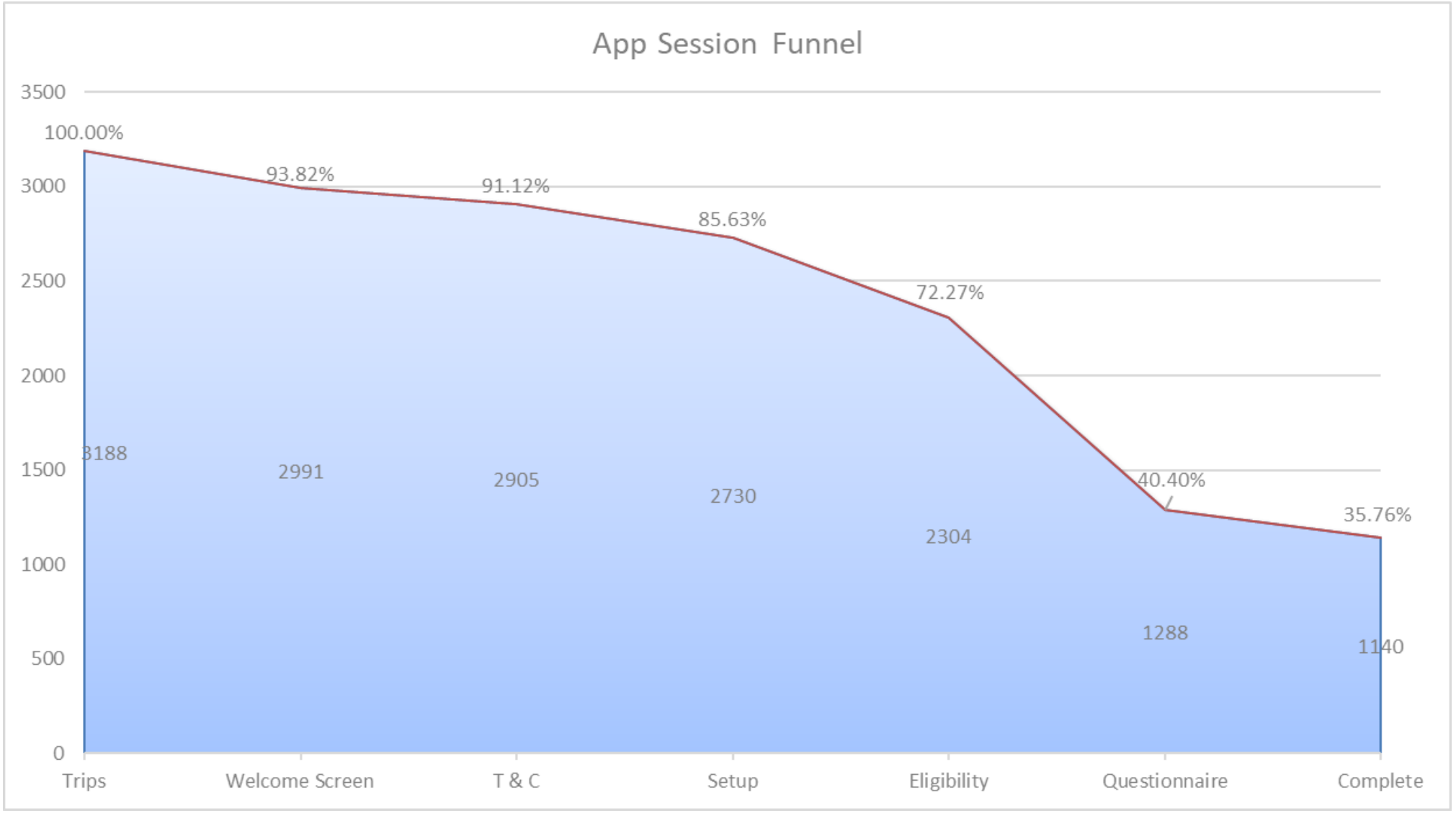
6 weeks | **1683 crossings** | **56 nationalities** | **29% gains VE** | **19% gains VH**



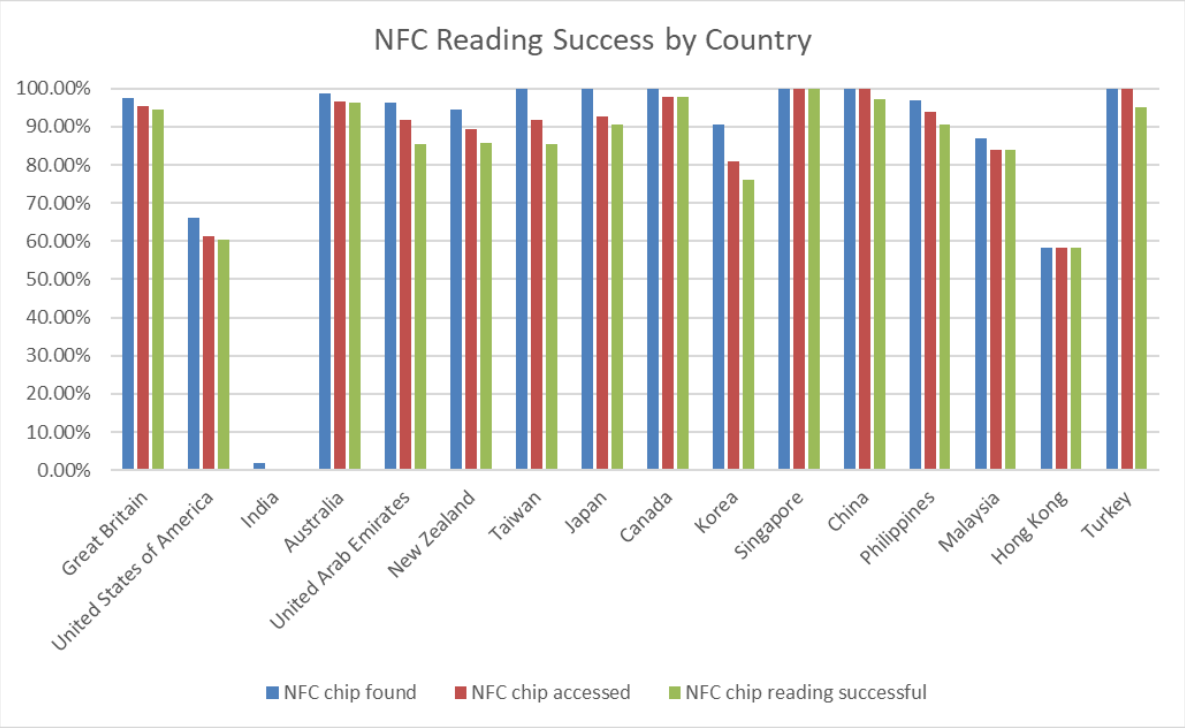
User nationalities

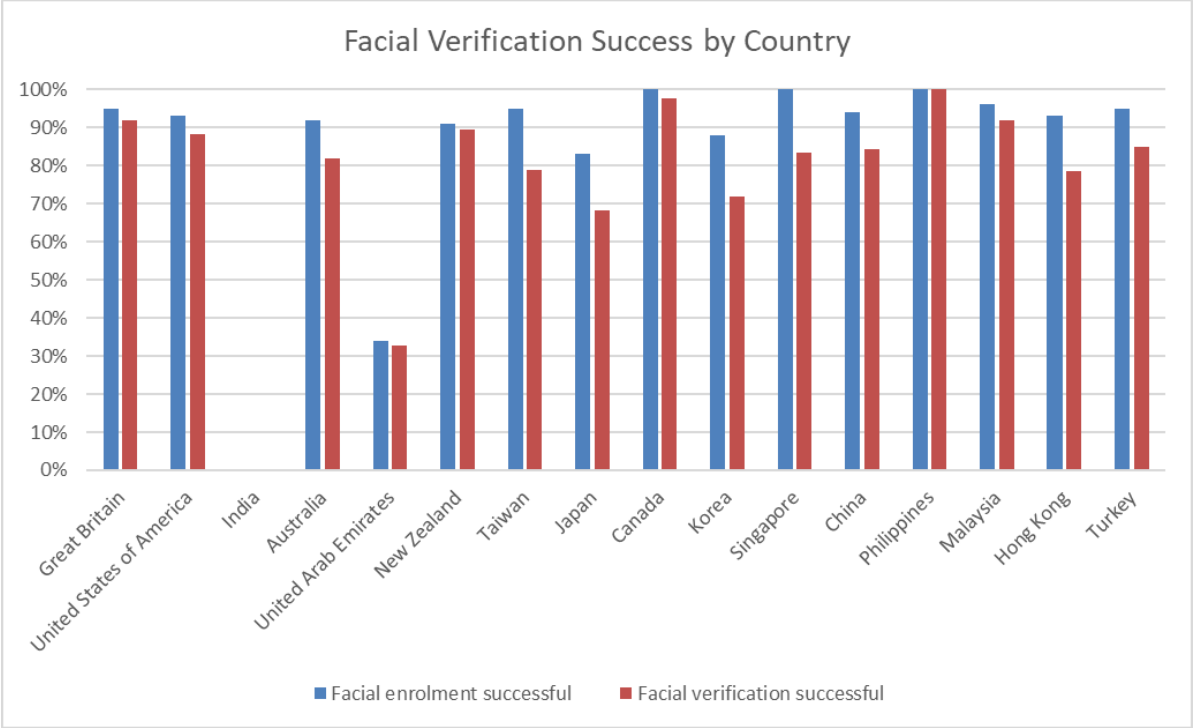


Session progress



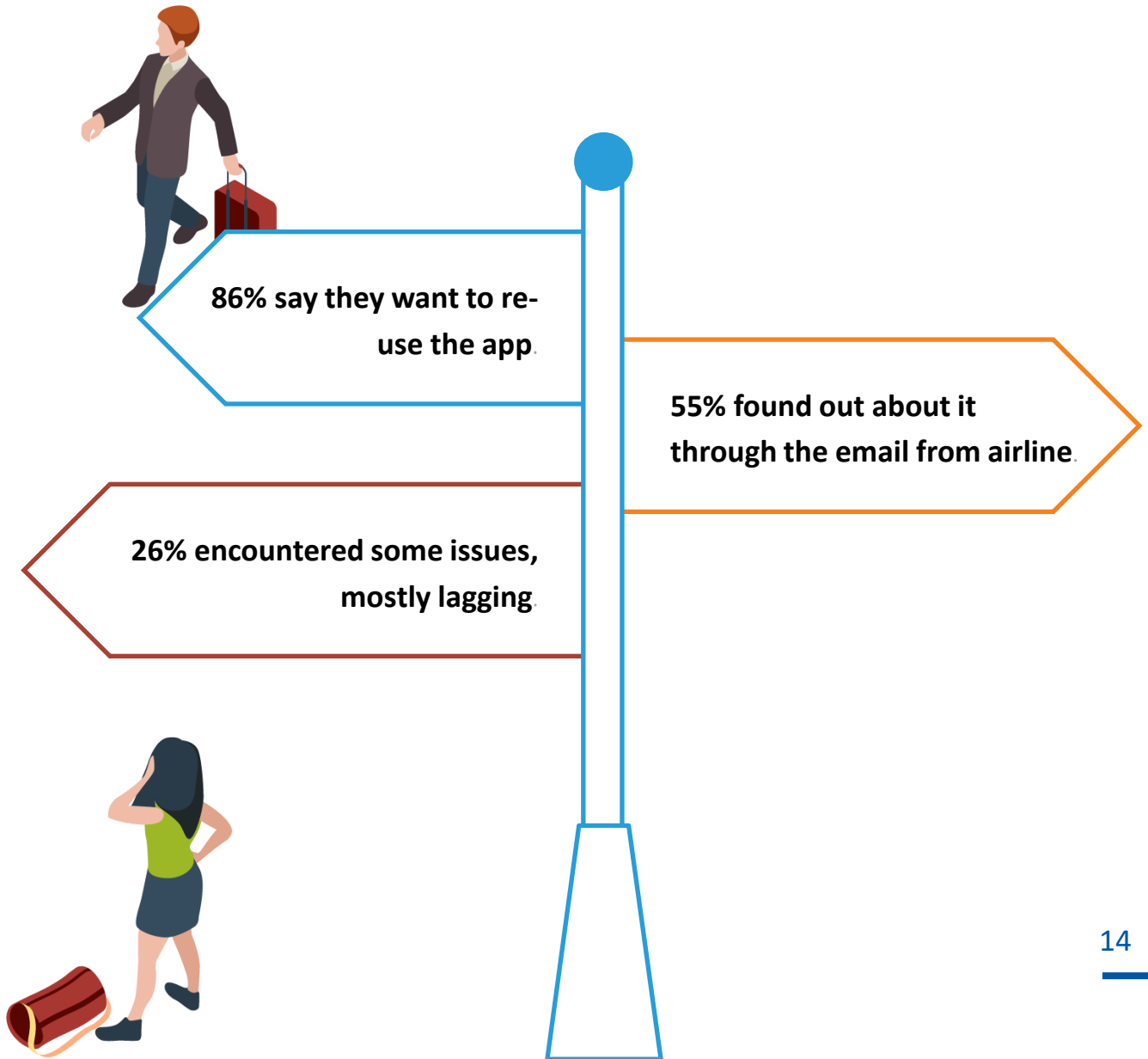
Impact of traveller nationality on success rates





Passenger feedback

Arlanda



Border guard and Airport Staff feedback

60% postively assessed the app

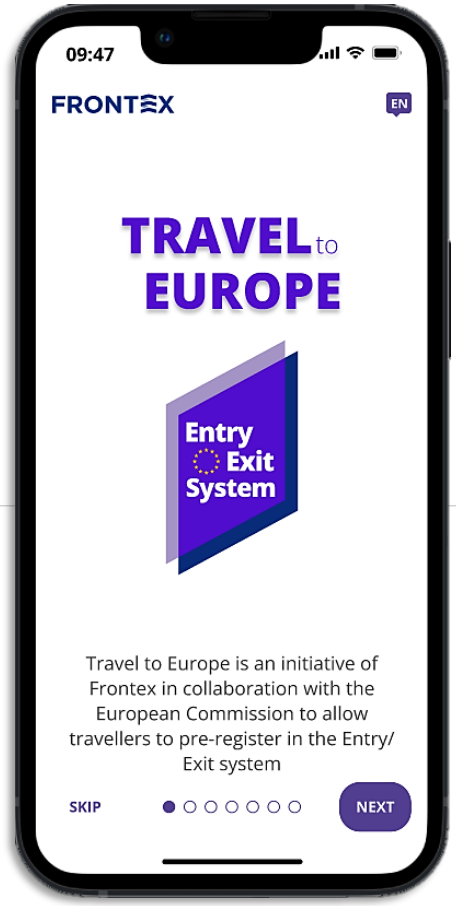
80% found data extraction easy

0% **fully trusted the app data**

69% thought there should be more communication

80% border guards shared a view that the app is a valuable border management tool

Transition to Travel to Europe



Pilot

Quick Border Pilot & Evaluation

23-24

Achieved success criteria

Confirmed app usability
Demonstrated consistent data capture
Integrated efficiently into BCP process
Tested in operations on 1500+

Transition

Travel to Europe App Development

24-25

Goals

Scalable architecture
Enhance in-app flows and security
Align data protection
Roll-out operations in Sweden
On-board new members

Operation

Travel to Europe maintenance

25-30

Aims

Consider new features
Enhance IT infrastructure
Adaptive maintenance
Continued support and on-boarding of Member States

Thank You

ICAO