

ICAO TRIP

REGIONAL SYMPOSIUM

BUILDING **FUTURE RESILIENCE:**
THE ROLE OF **SEAMLESS**
AND **CONTACTLESS** TRAVEL



APPLICATION OF BIOMETRIC AUTHENTICATION IN PASSENGER IDENTIFICATION

*JSC “Nursultan Nazarbayev
International Airport”*

*Yergazy Abirovich Zholdassov
Chairman of the Management Board*

December 06-08
Almaty 2023

Date of formation	December 01, 1931
Runway (2004)	3 500 m. x 45 m.
Terminal 1 (2017)	47 000 sq. m.
Terminal 2 (2005)	25 210 sq. m.
Business aviation terminal	2 565 sq. m.
Cargo terminal	3 300 sq. m.
Parking space	83 000 sq. m.

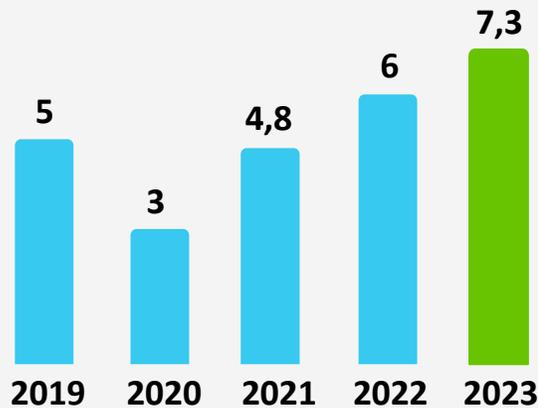


October 18, 2023 - a cooperation agreement was signed with Terminals Holding.

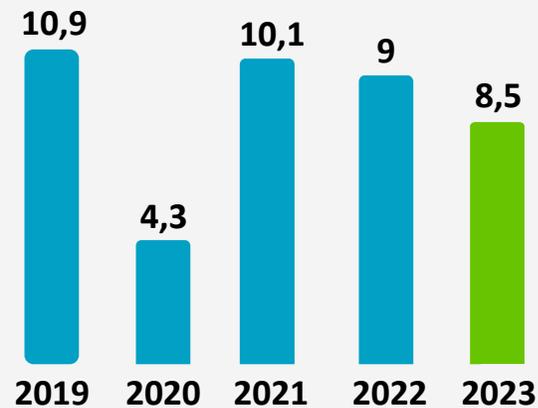
November 7, 2023 – start of joint work with Terminals Holding.



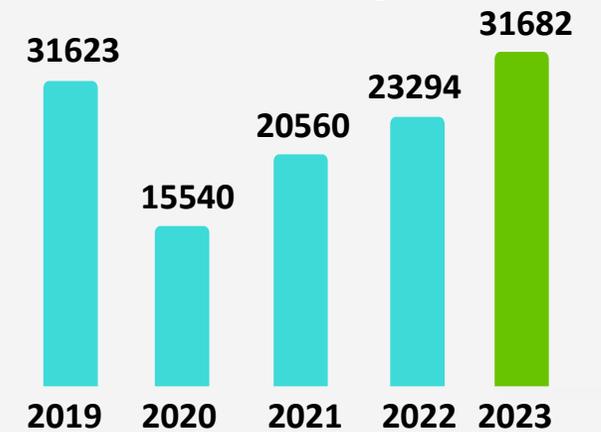
Passenger traffic, million passengers



Cargo flights, thousands of tons



Number of flights



E-DOCUMENT

Confirmation of the electronic ID card during passenger check-in at airline check-in desks and when passing through the security screening area

CHECK-IN DESKS

SELF-SERVICE TERMINALS

APPLICATION OF LEADING SOLUTIONS:

PASSENGER FLOW MANAGEMENT (PFM)

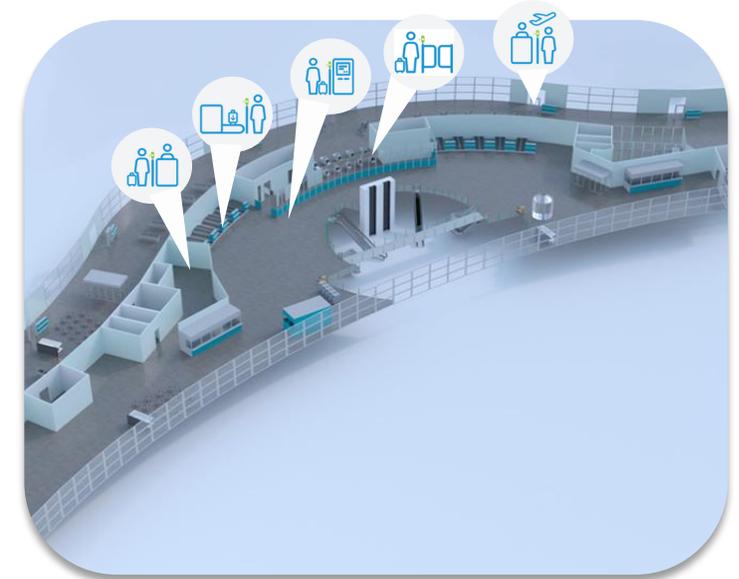
- Passenger flow management system using iValidate technology.
- Collection of passenger information at the pre-flight control stage and automated data verification at control points.

COMMON-USE SELF-SERVICE (CUSS)

- In 2017, 4 CUSS desks with touch screens and graphical user interface were installed.
- Passenger self-check-in system which allows you to issue and print the necessary documents for the flight, without the involvement of ground services personnel.

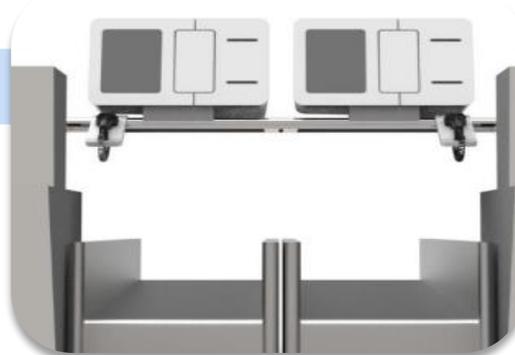
SELF-BAG-DROP (SBD) • 2024

- Automated self-service baggage drop-off counters;
- Speeds up check-in and baggage drop-off procedures, reduces the likelihood of errors and the burden on staff;
- Will be equipped with biometric cameras.



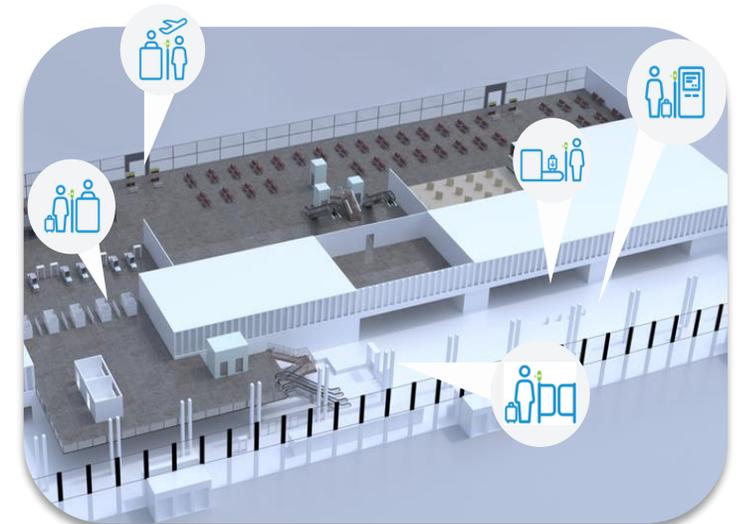
CUSS • 2024

Self-check-in kiosks are supplemented by a biometric camera and scales.



PASSENGER FLOW MANAGEMENT (PFM) • 2025

Retrofitting of turnstiles with biometric cameras.



E-GATES • 2025

- Gates with built-in facial recognition technology;
- Contactless seat control.

IATA:



88% Passengers are satisfied with the overall biometrics process;

75% Passengers would be happy to use biometrics instead of passports or boarding passes.

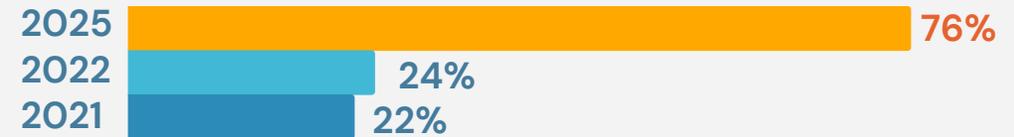
SITA:

99% - Matching frequency for face recognition;

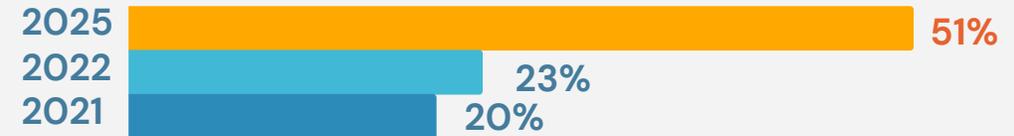
Boarding **240 passengers/10 minutes.**

% of airlines that have already implemented or are planning to implement a passenger identity management solution

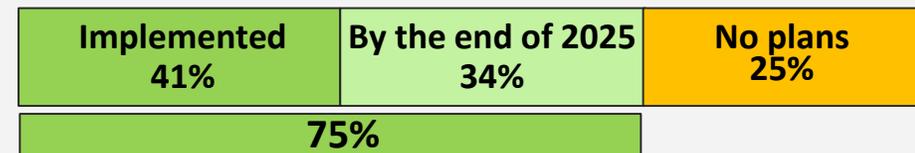
Self-boarding gates, using biometric and ID:



Self-boarding gates using biometrics only:



% of airports with an initiative to implement an innovation strategy by 2025



INTERNATIONAL EXPERIENCE

Beijing Airport



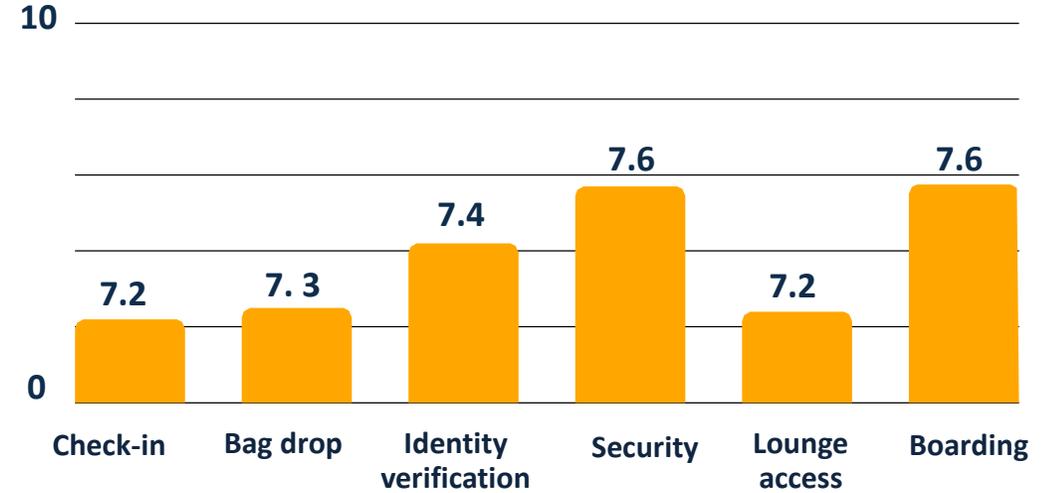
Biometric:

- 240 check-in counters with an agent;
- 100 self-service kiosks;
- 30 self-service baggage drop-off counters.

Biometric:

- 48 check-in counters with an agent;
- 50 self-service kiosks;
- 24 self-service baggage drop-off counters;
- 18 pre-flight control turnstiles;
- 66 boarding gates.

New Jersey Airport



In terms of passenger ratings, according to SITA's annual report, the highest levels of comfort and convenience are found at boarding (7.6), security screening (7.6) and identity confirmation (7.4)



A DOCUMENT



BIOMETRICS



BOARDING PASS



TOKEN



Passenger check-in in seconds at any point



Mobile check-in



Check-in with an agent



Self-check-in



Self-bag-drop



Aviation security



Border control



Lounge access



Services



Self boarding



Boarding with an agent

Recognition of a passenger by an image in token from the first point to boarding

Conclusion of a memorandum



Initiation of processes to amend and supplement existing regulatory legal acts

01
TECHNICAL TESTING ON DOMESTIC FLIGHTS
2024

02
PILOT TESTING ON DOMESTIC FLIGHTS
Approval of a national digital biometric identification platform in the Republic of Kazakhstan
2024



Civil Aviation Committee of the Ministry of Transport of the Republic of Kazakhstan



Ministry of Digital Development, Innovations and Aerospace Industry of the Republic of Kazakhstan



National Security Committee of the Republic of Kazakhstan

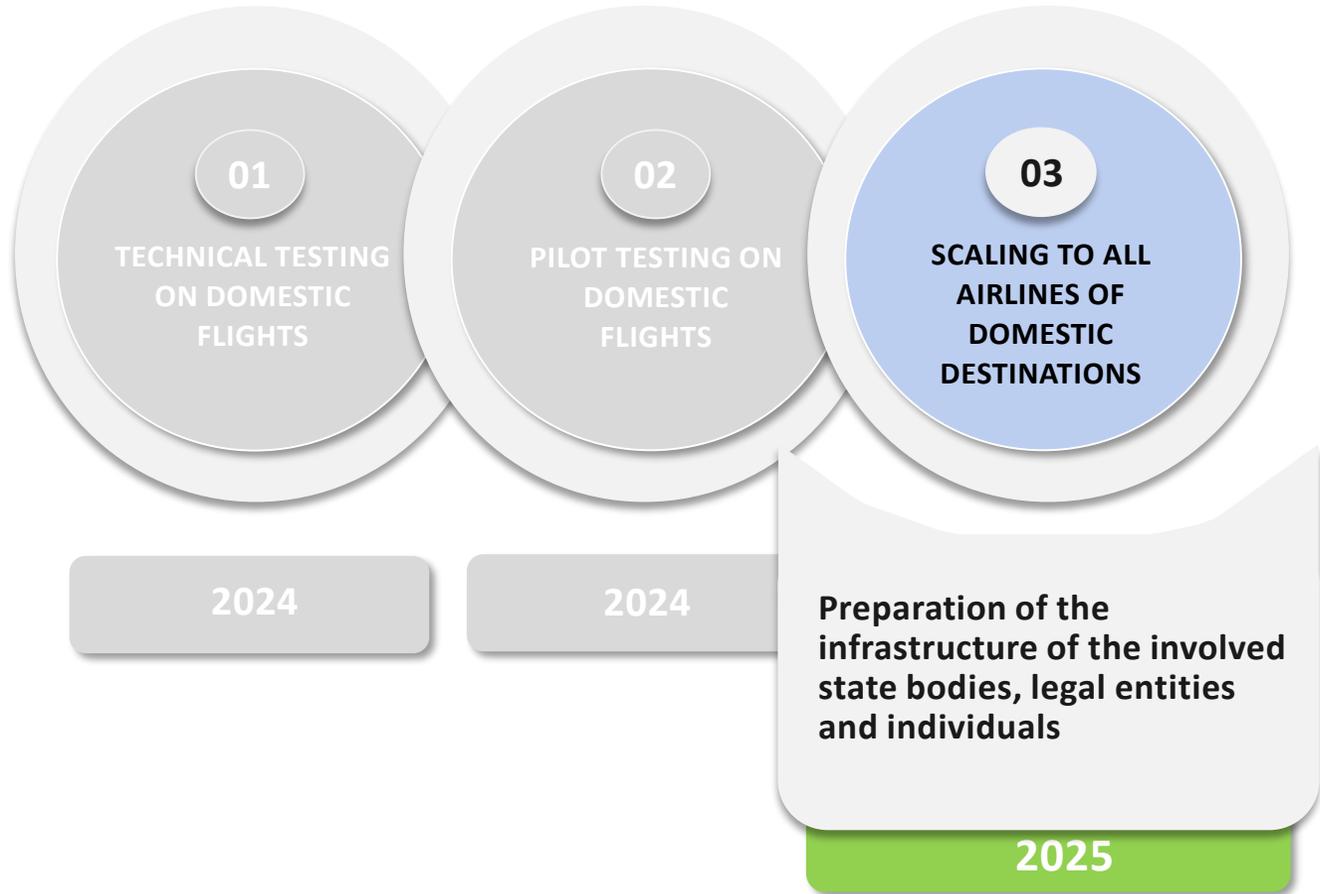


Ministry of Internal Affairs of the Republic of Kazakhstan



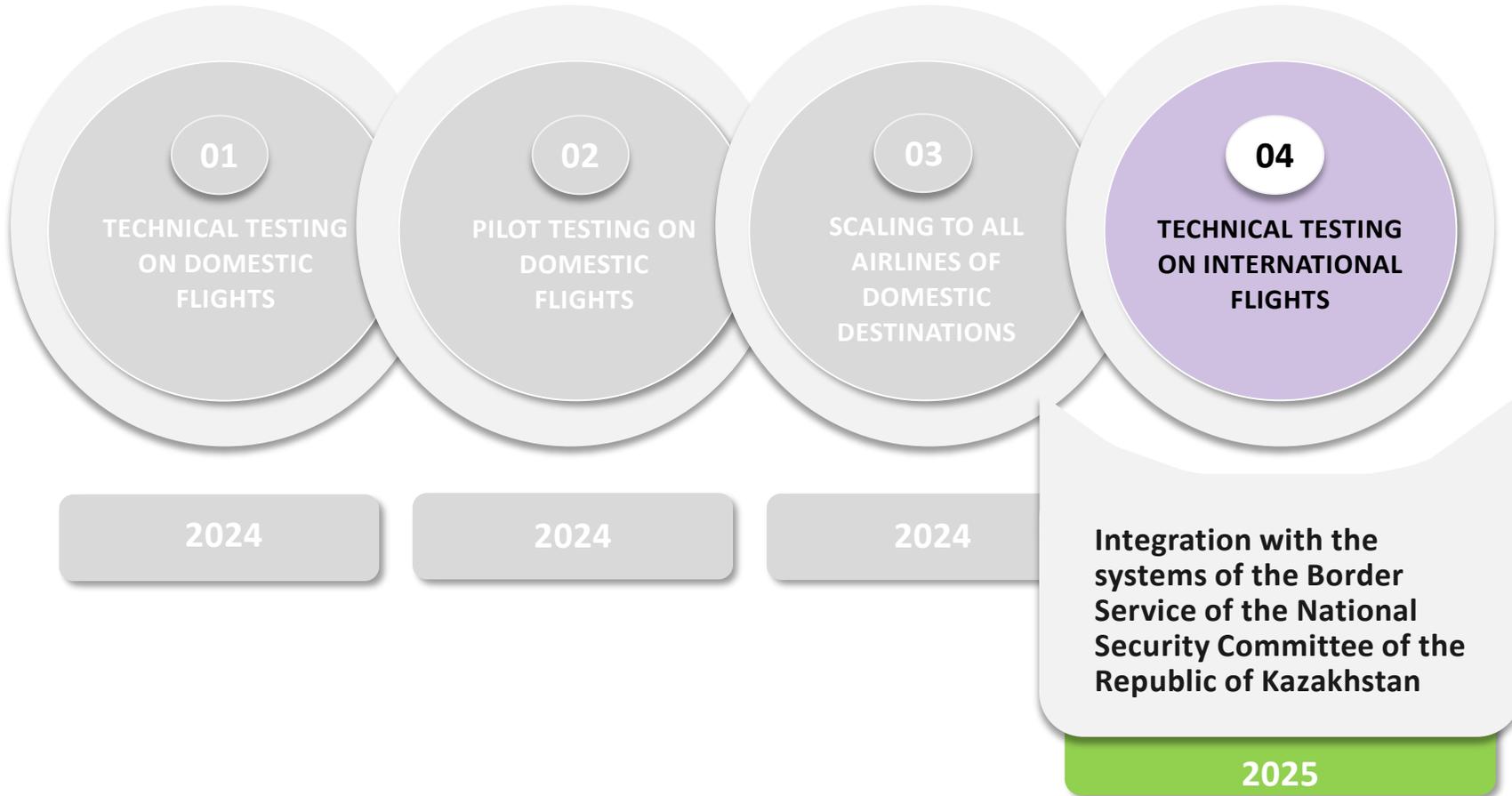
Aviation administration of Kazakhstan

Technical readiness to scaling

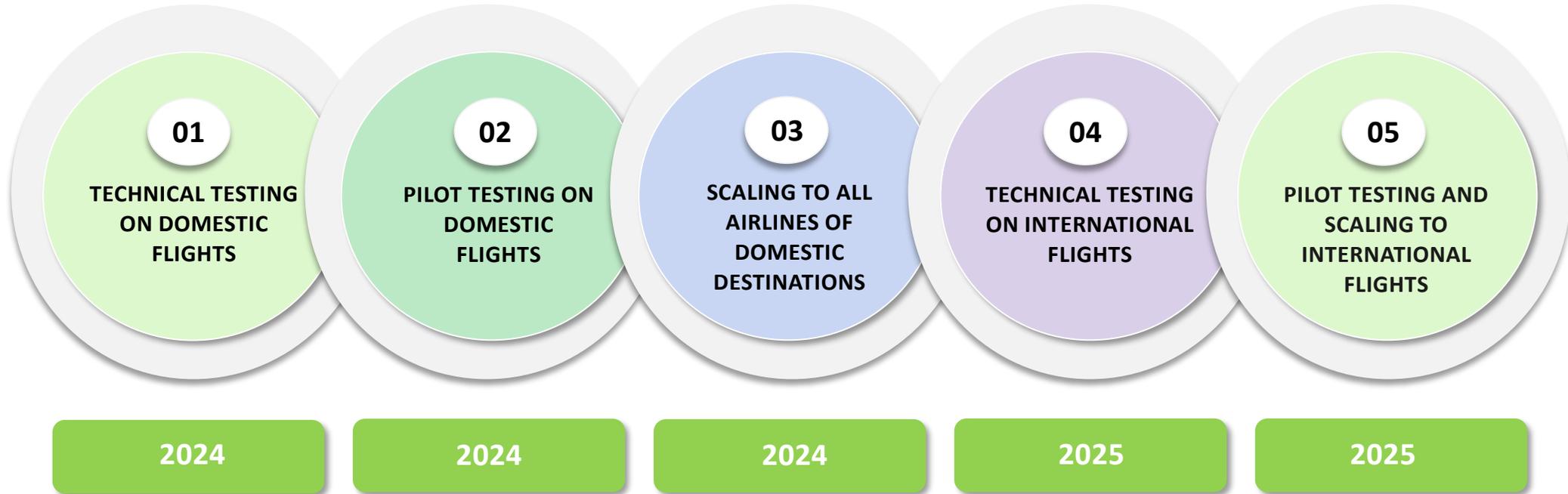




Technical readiness to scaling







**THANK YOU FOR YOUR
ATTENTION!**

**WE INVITE YOU TO AN ADVANCED AND
DIGITAL AIRPORT!**