GRU AIRPORT AEROPORTO INTERNACIONAL DE SÃO PAULO

Enhancing Operational Efficiency Through the Implementation of Traffic Management Systems

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Diretor de Operações

Tuesday, 14th October, 2025

AGENDA

SEMINÁRIO PERFORMANCE ATM - 2025

AIRPORT OVERVIEW

COMPREHENSIVE VIEW OF RUNWAYS, TERMINALS, AND ACCESS POINTS

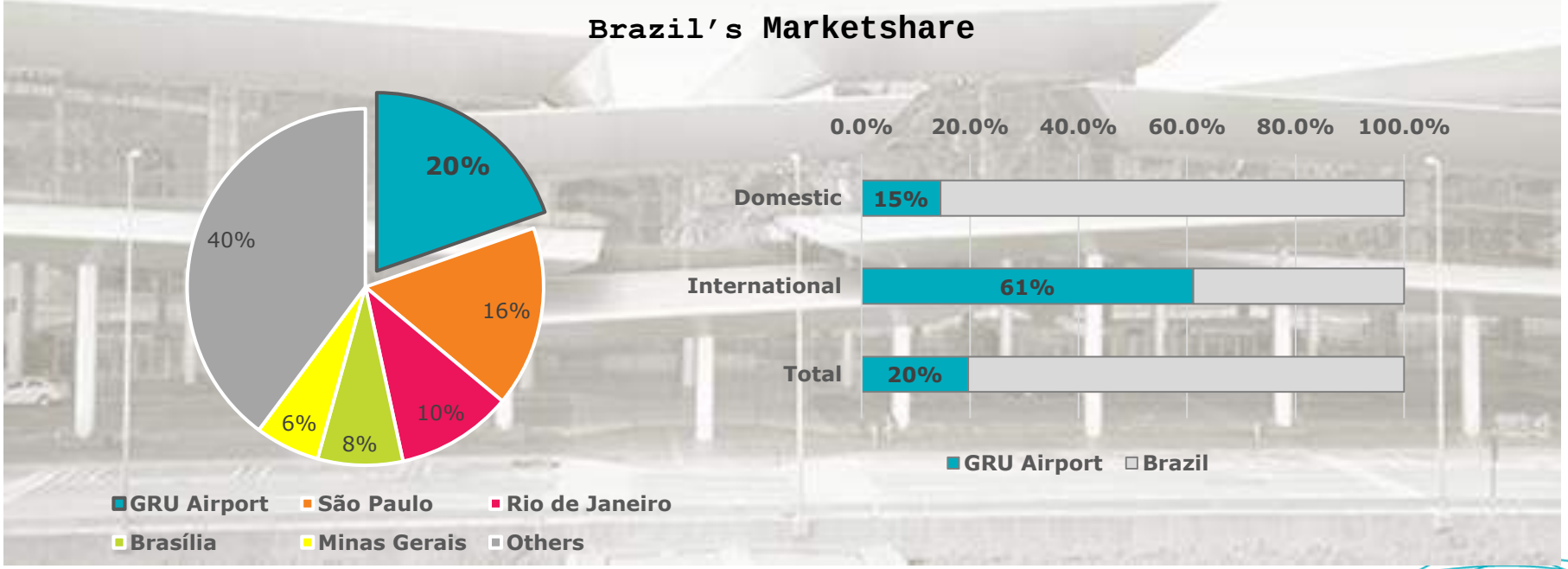
GRU AIRPORT IN NUMBERS

GRU AIRPORT HANDLES ONE OUT OF EVERY FIVE AIR PASSENGERS IN BRAZIL

43.6 *Million Passengers*

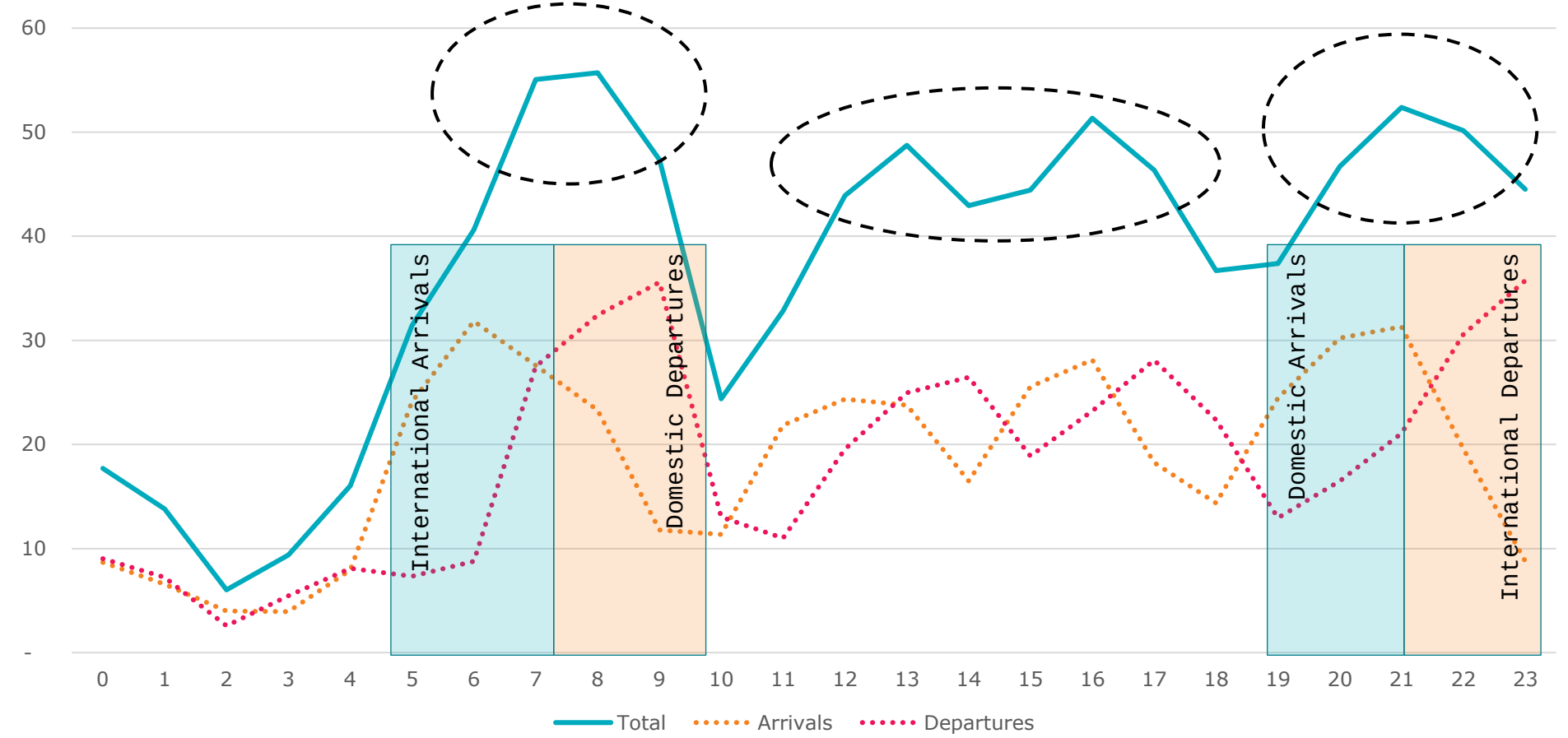
800 *Flights per day*

120 *Thousands pax per day*



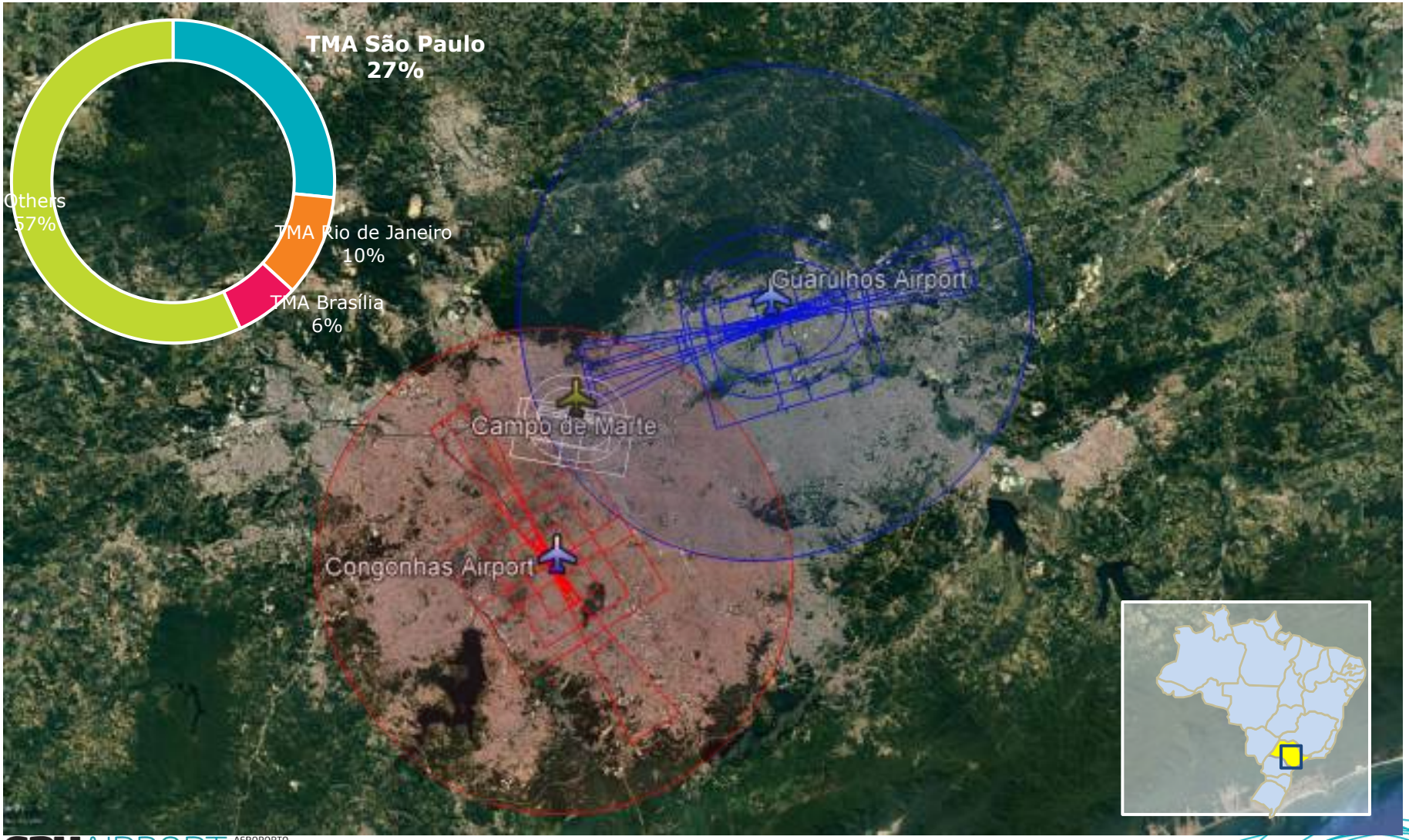
OPERATION PROFILE

COORDINATED ARRIVALS AND DEPARTURES BANKS



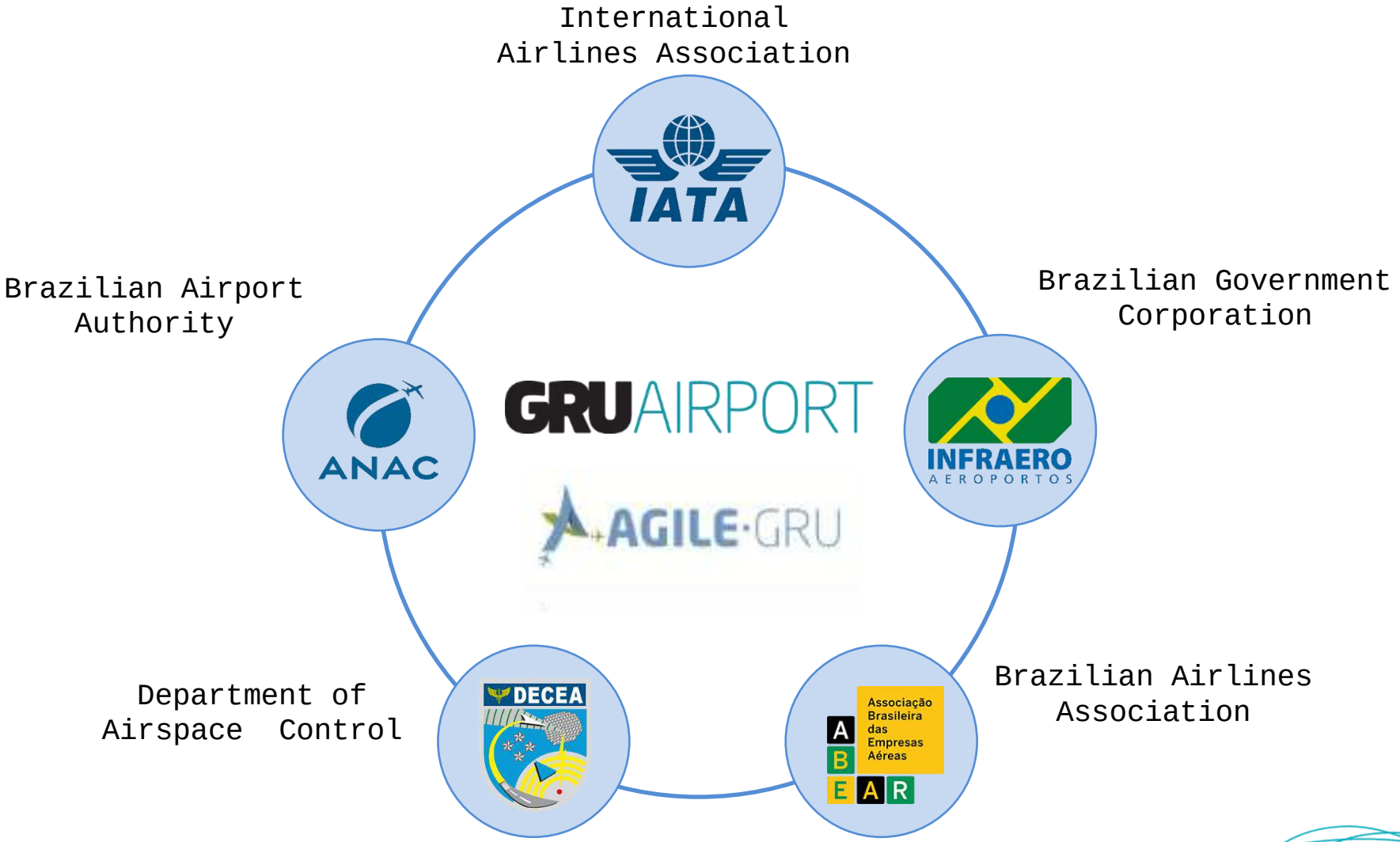
A MULTI-AIRPORT REGION

THE 2 MAJOR BRAZILIAN AIRPORTS LOCATED 15NM APART...



STAKEHOLDERS

...THE STRATEGY WAS COMBINE STRENGTHS.



OPERATIONAL CENTER!

GRU HAS DEPLOYED A MODERN FACILITY IMPROVE OPERATIONAL PERFORMANCE – THE NEW OCC

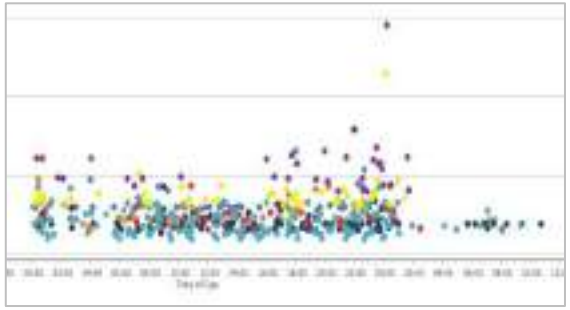
- Change Management.
- Collaborative decision making.
- Passenger Terminal Monitoring.
- New Integrated Airport Management System.
- Daily Predictability.

CONTROL AND COORDINATION

THE PERFORMANCE METRICS AND ANALYSIS

- **On Time Performance, Taxi times and others** analysis and defined metrics and KPIs aiming to maintain a pattern.
- **Simulations** playing a vital role in decision-making.

A-CDM Platform

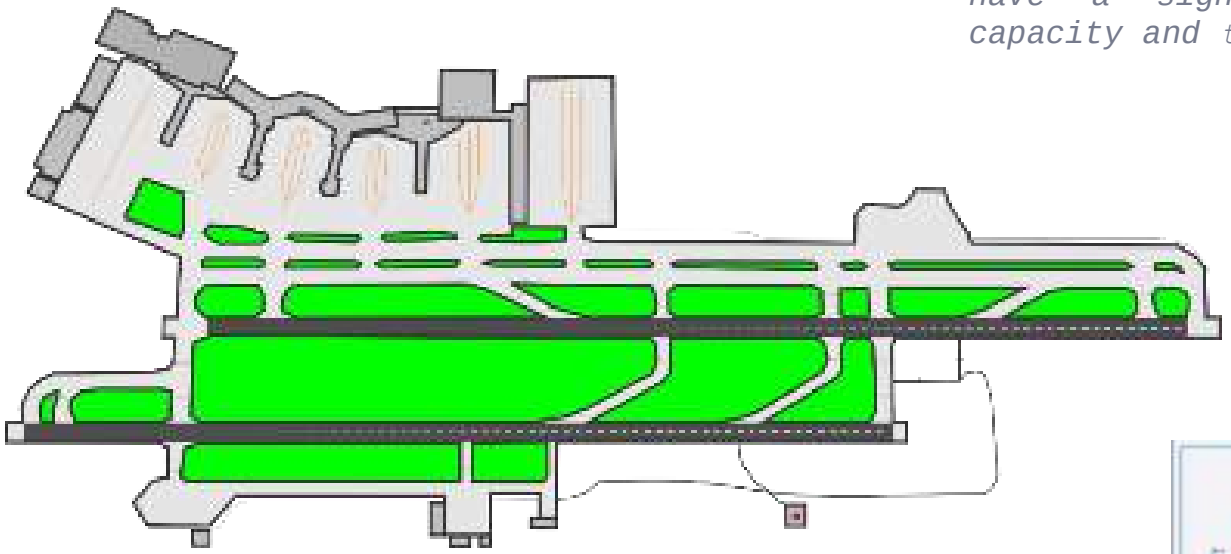


AMS

THE FIRST STEP!

REDUCE THE RUNWAY OCCUPANCY TIME (ROT)

"Even small reductions in the time an aircraft spends on the runway will have a significant impact on the capacity and throughput"

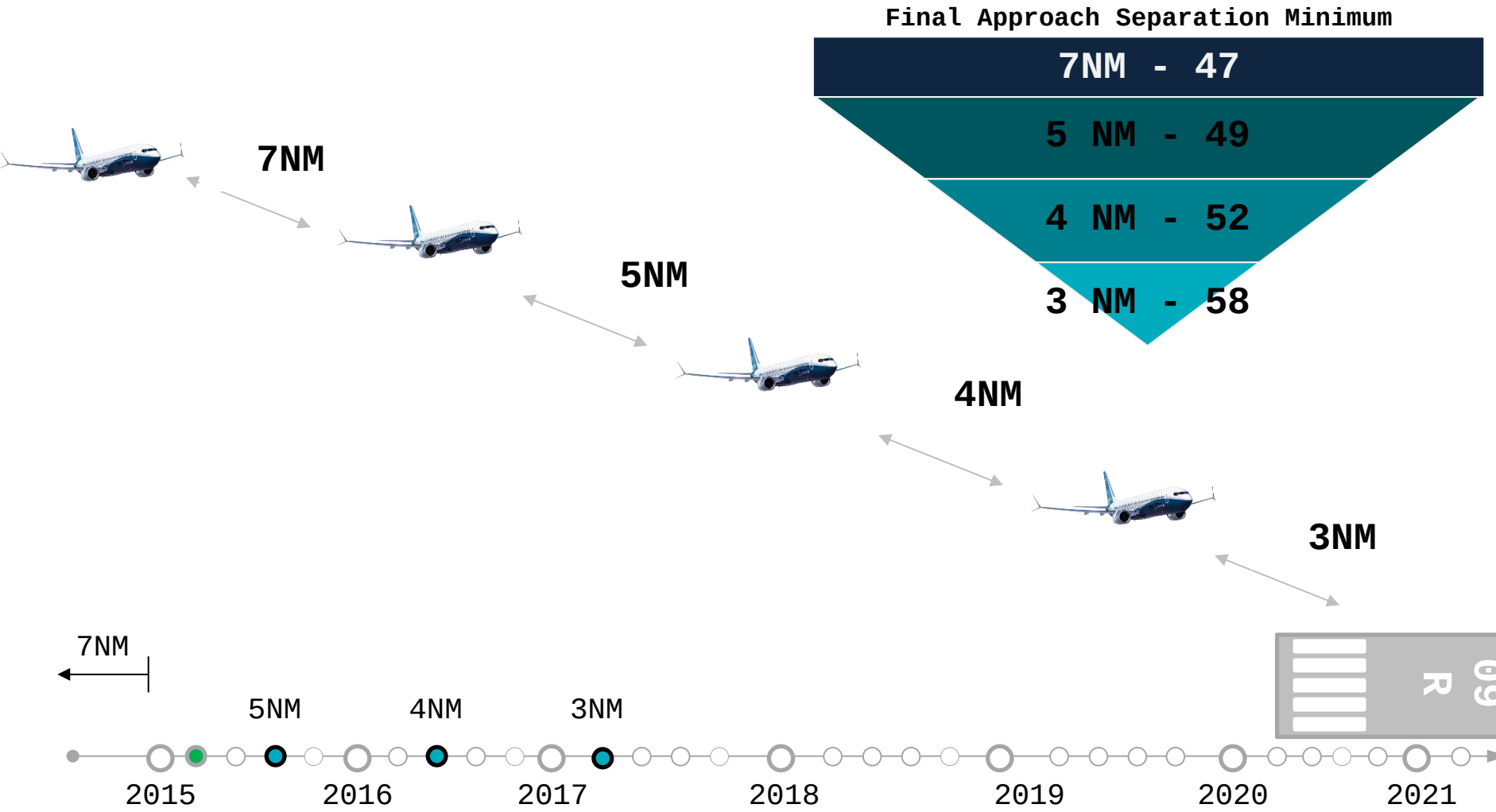


Reduce ROT

2015 2016 2017 2018 2019 2020 2021

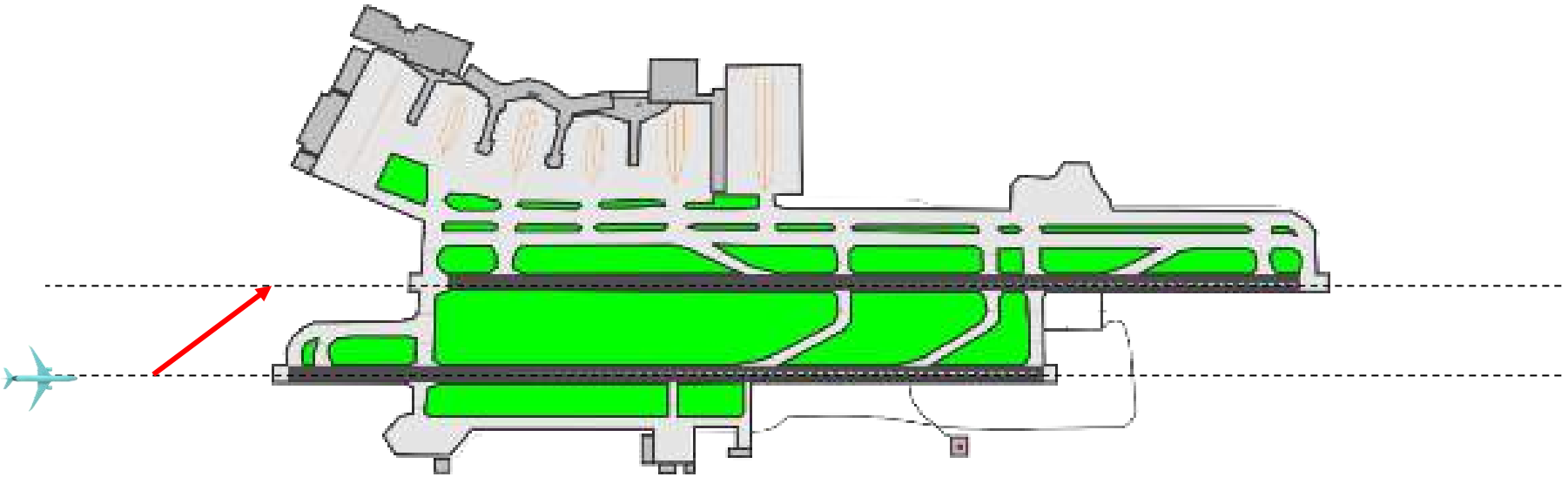
REDUCE SEPARATION

...THE REDUCTION OF ROT COULD IMPROVE THE RUNWAY CAPACITY IN LESS THAN TWO YEARS..

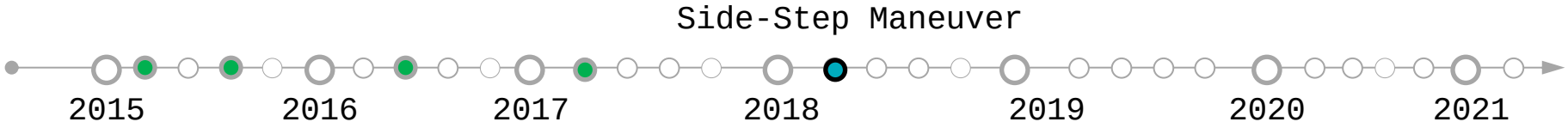


SIDE-STEP IN VISUAL CONDITIONS

SIDE-STEP WITH VISUAL APPROACH TO PARALLEL RUNWAY

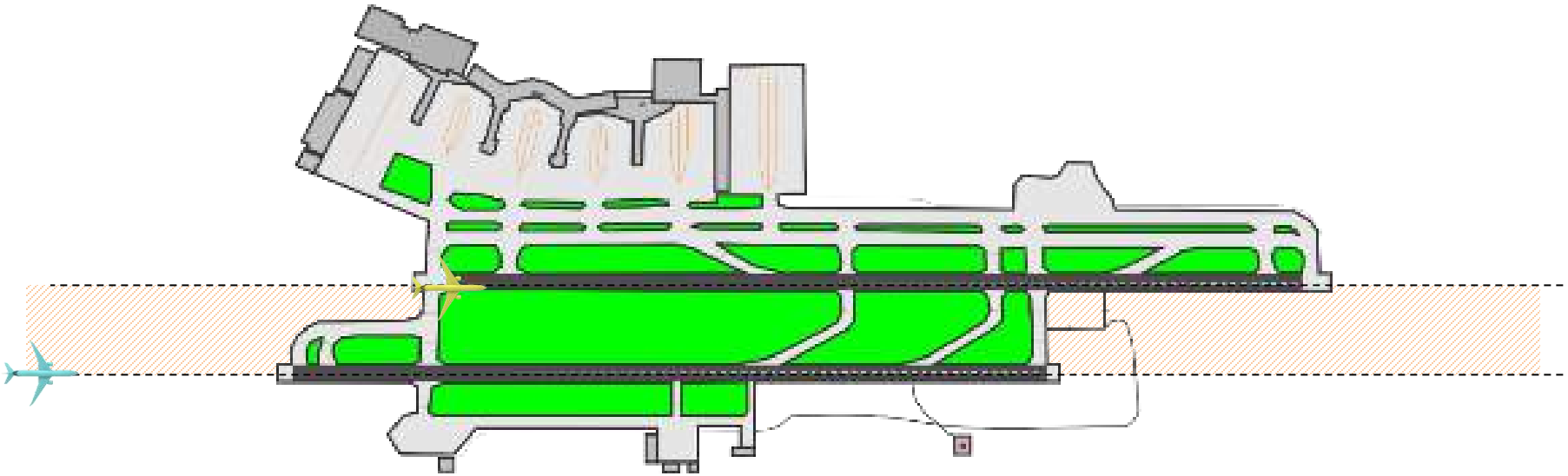


- Development of **new procedures** and **aeronautical charts**.
- **Approach procedure** which serves either one of **parallel runway**.



BECOMING A REFERENCE!

SEGREGATED OPERATIONS UNDER VMC (CURRENT SCENARIO)

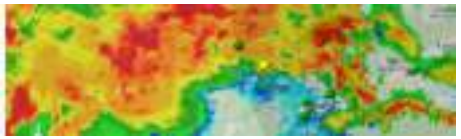


- Increase the recovery capacity caused by **disruptions** during severe weather conditions.
- Increase **capacity** during departing or arriving **time peaks**.

Segregated Parallel Operations

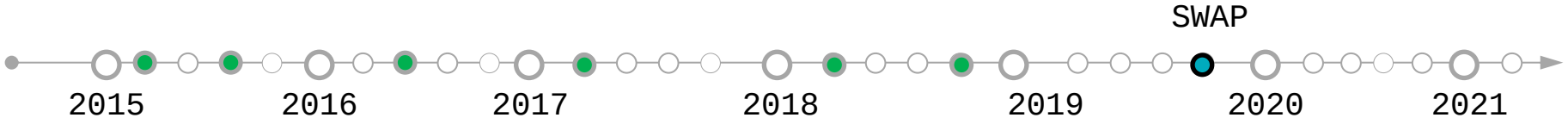
ALREADY IMPLEMENTED!

OTHERS ACTIONS WERE MADE DURING THE PROJECT..



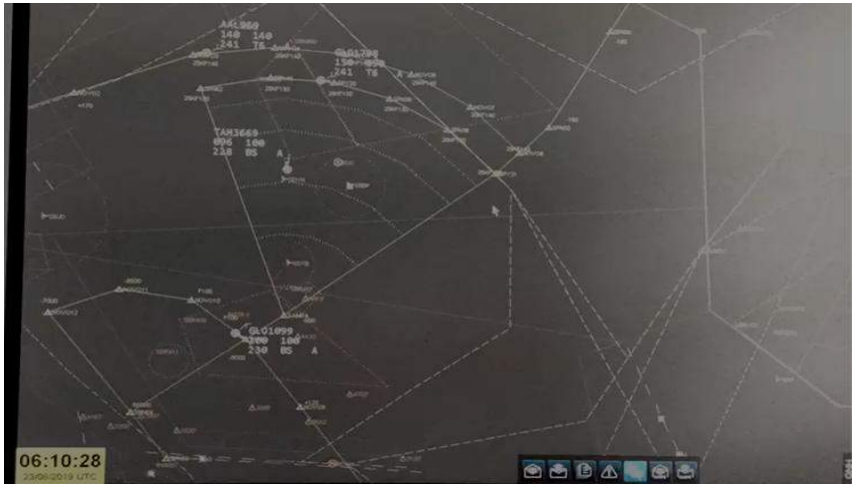
Severe Weather Avoidance Plan (SWAP) – Dec. 2019

- Mitigate the time effects of severe weather upon traffic flow at en route or TMA, with better predictability.
- Maximize declared capacity and reduce ground and ATM congestion.



TMA NEO

A NEW CONCEPT OF AIRSPACE FOR THE TMA SÃO PAULO



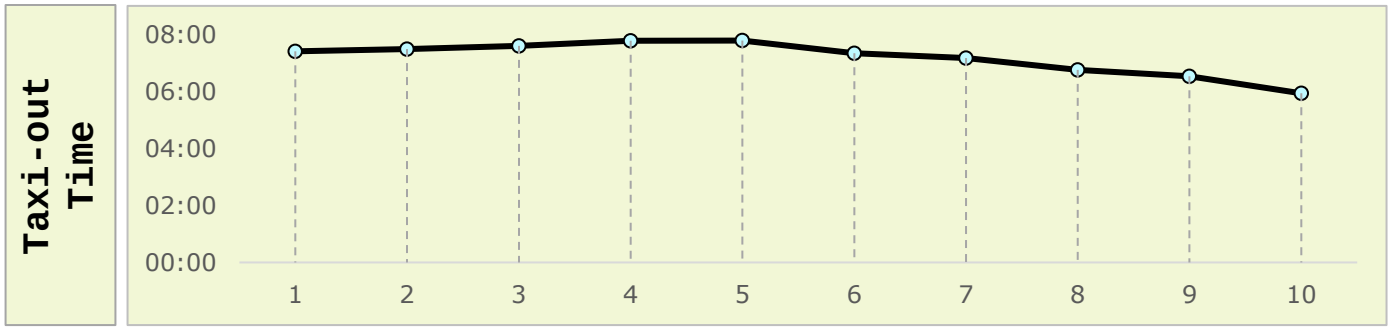
- Increase Sectors capacity and Final Approach, reducing distances and fuel consumption.
- Reducing delays and waiting times related to airspace and airport capacity, improving the balance of arrival flow.

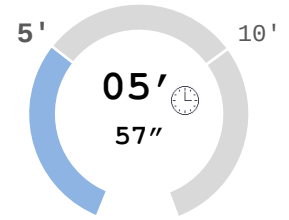
TMA-NEO

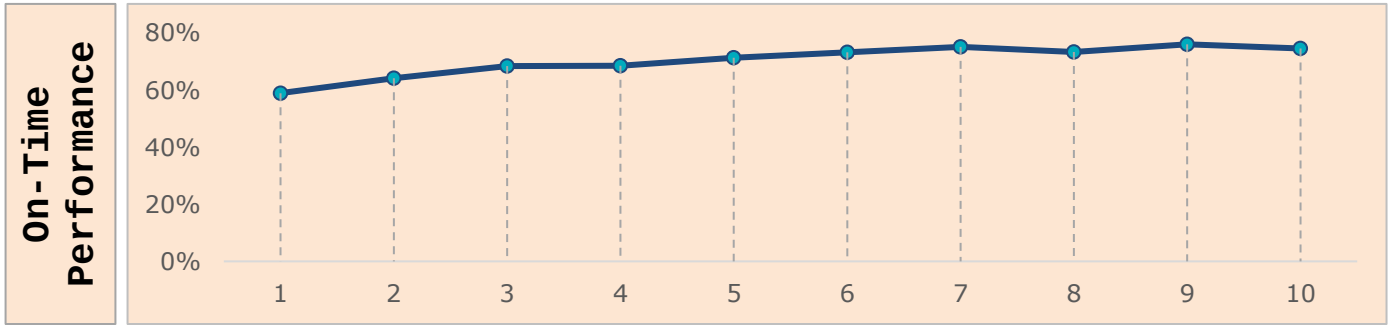
2021 2022 2023 2024 2025 2026 2027

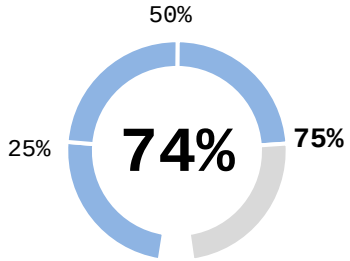
THE BENEFITS STARTED TO SHOW UP!

OTHERS ACTIONS WERE MADE DURING THE STUDIES..



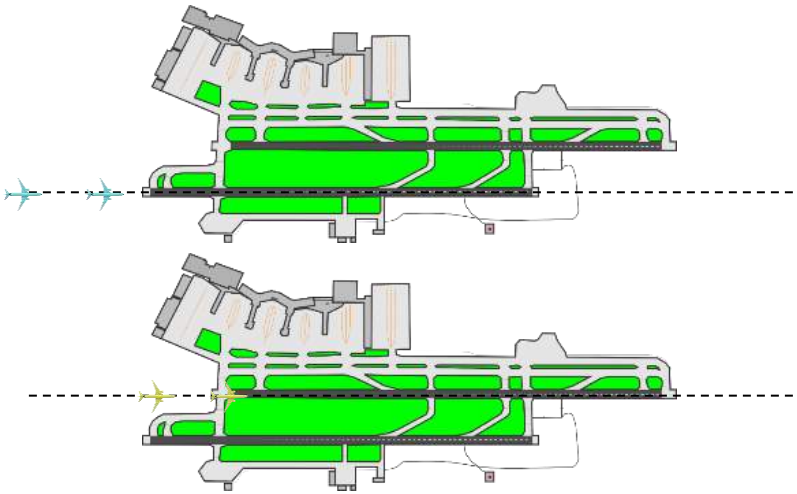






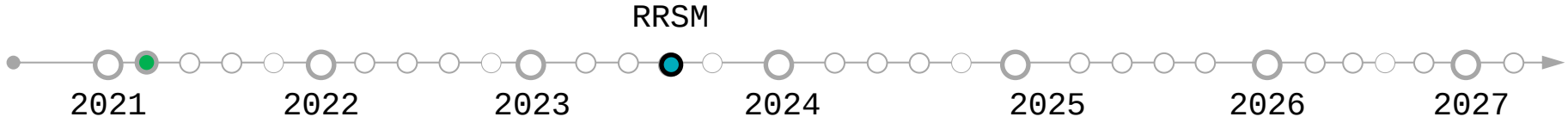
RRSM

ALREADY DEVELOPED AND TO COME UP NEXT SEASON!



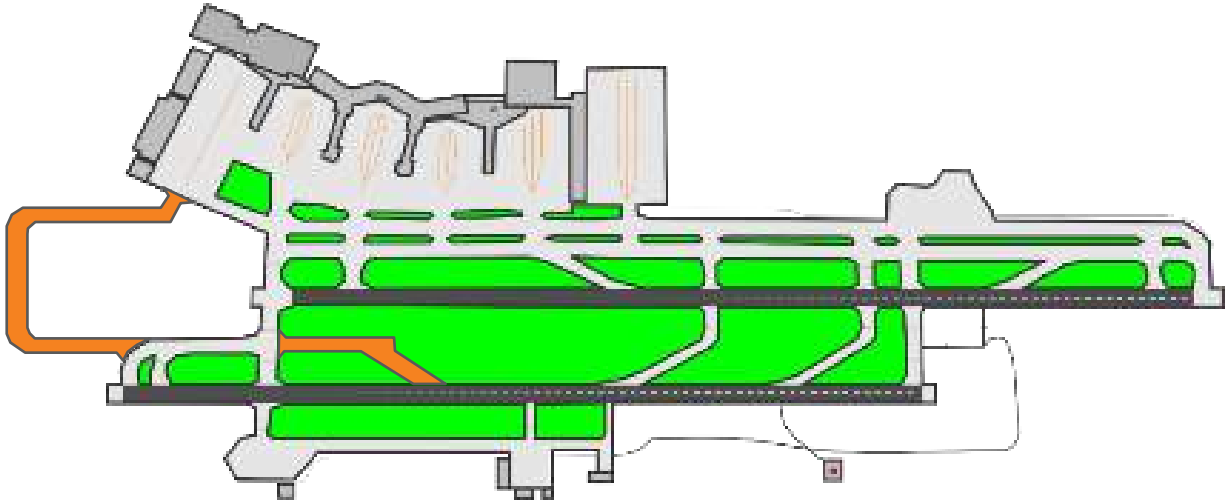
Reduced Runway Separation Minima (RRSM

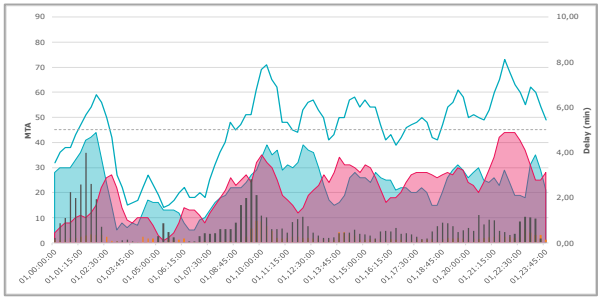
- Increase the efficiency of approach, landing and take-off operations and the consequent improvement in performance and airport operational flow.



INCREASING CAPACITY BY 2026

INFRASTRUCTURE HAS ALREADY BEEN SIMULATED





Delays e constrains evaluated

Infrastructure

- Rapid Exit
- Runway Entrance and Perimenter Taxiways to reduce hotspots

New taxiways

2021 2022 2023 2024 2025 2026 2027

NEXT STEPS

THE MAIN CHALLENGES FACED...

- Increase runway system capacity to accommodate up to 70 million passengers by 2032.

- Reduce delays for passengers, time wasted in the air and on the ground and avoid unnecessary fuel burn.

- Enhance operational safety through procedures and new infrastructure.

Thank You!

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