Assessing Capacity Expansion of Rome Airports

Meeting with users of Fiumicino and Ciampino airports in the framework of annual consultations (EU Directive 2009/12)

25 JUNE 2021
Agenda

1. Introduction
2. Current operations & FCO South Completion Plan
3. Traffic forecast
4. Medium and long term capacity expansion
5. Ciampino Airport
6. Next steps
1. Introduction
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6. Next steps
FCO North Development Plan, unapproved by Environmental Ministry

Development areas acc. to Masterplan 2030

North development area outside the current airport boundary

ca. 540 hectares overall, of which ca. 400 hectares in nature reserve areas

Introduction
Key industry trends and implications for Fiumicino expansion plan

Over the last decade **significant changes in key industry trends** have affected the entire aviation sector modifying demand through a higher connection efficiency and a **rise both in number of seats per aircraft and in average load factor**.

At the same time, the technological and operational progress in airport processes has made it possible to use existing facilities more efficiently, as confirmed by IATA’s **extensive review of planning and design reference standards**.

All these factors have led to a reassessment of capacity requirements.

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**Traffic Movements**

- **Strong increase in pax/mov** compared to the 2012 forecast
- This trend is also expected to continue in coming years due to an increase in the average aircraft size

**Dimensional standards for terminal planning and design**

- **Review of IATA dimensional standards** for terminal design

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**… affecting FCO capacity expansion**

- Downsizing of additional airside capacity compared to initial forecasts
- Re-assessment of **total terminal area required** to guarantee an excellent level of service at FCO
The increase in load factor and number of seats per movement has led to a reduction in movements, thus making it possible to handle traffic volumes expected by 2044 with only one additional runway.
IATA’s reassessment of dimensional standards makes it possible to manage the same passenger flow expected by 2044 in a smaller overall surface area while guaranteeing a level of service in line with the quality standards achieved by FCO in recent years.

**Previous IATA Standard (2004; ADRM IX)**

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**Updated IATA Standard (2014; ADRM X)**

- Development Plan foreseen in the 2012 concession contract based on IATA LoS A
- AdR’s new plan envisions a LoS C = Optimum (i.e. sqm/TPHP reduction of around 50% vs LoS A)
Distinctive elements in ADR’s assessment of capacity expansion: Sustainability

- **Drastic reduction in land consumption**: the project would require the acquisition of a total of 267 hectares, of which only 150 hectares would be in the State Reserve (about 70% less than in the previous project) and would make it possible to give 85 hectares back to the local community in the area South of the current airport grounds, near the archaeological area of the port of Emperor Claudius.

- **Acoustic footprint reduction**: noise reduction in the urbanised areas of Fiumicino and Isola Sacra, by gradually limiting the use of runway 1 and displacing the South threshold.

- **“Under one roof” layout**, in continuity with current terminals: the project foresees the construction of terminals and piers in continuity with current terminals, featuring a harmonic architectural development, enabling **simpler transits** and making it possible to **achieve a modular design of the construction** (and to adjust annual investment accordingly) to better match traffic evolution.

- **Tariff sustainability to support the development of Fiumicino Hub**: although the investment in the terminal is comparable in terms of absolute money value to the previous plan (guaranteeing adequate service levels in line with current IATA standards), the modular design of the infrastructures and the operational efficiency achieved thanks to the “under-one-roof” approach make it possible to attain the competitive tariff level necessary for airport’s operations’ commercial sustainability.

- **Effective and sustainable accessibility through the following development drivers**:
  - Dynamic mobility modelling with macroscopic simulations for the vast area and detailed simulations for the airport grounds (microsimulations), calibrated with data from various systems.
  - Definition of alternative rail and road access routes from Rome and upgrading of current routes.
  - Railway maintenance and shared development approach with RFI (Rete Ferroviaria Italiana).
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Rome Fiumicino airport is surrounded by several residential areas.

- DEP 25 with wide bodies constrained by pine trees
- 16R (mainly wide bodies) affected by:
  - Noise impact on residential area in the West-side
  - Dependency with RWY 25 DEP

* Protected area: Riserva Naturale Statale del Litorale Romano
Airside operations

TRAFFIC 2019

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<td>43.5 MPPA</td>
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<td>MOVS</td>
<td>310k</td>
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<td>PAX/MOV</td>
<td>141</td>
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INFRASTRUCTURE

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<td>RWYs</td>
<td>3</td>
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<tr>
<td>TWY // RWY</td>
<td>5</td>
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<tr>
<td>Stands</td>
<td>127 / 135 (CARGO not-included +3/2)</td>
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<tr>
<td>Loading Bridge</td>
<td>35/36%</td>
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<tr>
<td>Declared Capacity Hub-in</td>
<td>90 movs/h = 54 arr + 36 dep</td>
</tr>
<tr>
<td>Declared Capacity Hub-out</td>
<td>90 movs/h = 36 arr + 54 dep</td>
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</tbody>
</table>
Terminal operations under Covid 19 traffic and restrictions

The pandemic has impacted terminal operations forcing AdR to:

- **rethink infrastructure capacity** in order to comply with **social distancing requirements** of 1 m between passengers by using
  - **static simulations** in boarding areas and at baggage reclaim belts;
  - **dynamic simulations** in the check-in hall.
- define a **variety of terminal configurations**, to be flexible according to traffic demand;
- **constantly monitor traffic volumes** and related capacity saturation since March 2020.

In the next months AdR will maintain a **flexible approach**, adjusting operative/capacity configurations in accordance with **Terminal 1 and 3 ongoing revamping projects**.
Fiumicino South: state of works
1st period 2012-2016: investments ~ €1,1 billion

FCO + CIA investments in 2012-16, cumulative value, € mln

- Actuals
- Fcst in 2012 ERA

2012-2016: +119 € mln
In 2017-21 additional investments worth approx. ~ €0,9 billion

FCO + CIA investments in 2017-21, cumulative value, € mln

Net of spending for the previously planned Northbound expansion, in the 2017-21 5-yr period ADR has accomplished capex worth approx. €0,9 billion, ie. € 142 mln lower than originally planned (mainly due to COVID emergency)
Since 2017, Fiumicino has been consistently confirmed as one of the **best and most award-winning airports in Europe**. Key to these goals was the **focus on customer experience** and positioning in the "Optimum" range of IATA levels of service for passenger terminal areas.

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**LOS A (>45 sqm/pax)**

**LOS B (35-45 sqm/pax)**

**LOS C (25-35 sqm/pax)**

**LOS D (<25 sqm/pax)**

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*A LoS calculated by comparing the gross sqm of operating levels with the TPHP 2012-2019. The LoS is higher than that adopted for the sizing of the infrastructures, since the system is not saturated*
Recognition of Customer Excellence

Fiumicino is the first airport gaining an accreditation for its leadership in sustainability by United Nations.

SUSTAINABILITY

BEST AIRPORT AWARD (AIRPORTS > 25 MIL. PAX / YEAR)

SKYTRAX – 5 STARS Covid 19, 4 stars world’s most improved airport

BEST AIRPORT IN EUROPE (AIRPORTS > 40 MIL- PAX / YEAR)

COVID-19 SAFETY CERTIFICATIONS

Fiumicino is the first airport gaining «5 stars» Skytrax rating.
Recognition of Customer Excellence

ACI World – "Airport Service Quality": European airports with > 40M passengers
"Overall Satisfaction" Index 2008-2020 FY
Scale: from 1 («Poor») to 5 («Excellent»).

In 2013, Fiumicino:
• 6°6 peers (>40mpax/y)
• 72°75 EU apts

In 2019, Fiumicino:
• 1°9 peers (>40mpax/y)
• 1°20 Apt >25mpax/y

The achieved improvements are attributable to an extensive action plan, which was launched 5 years ago, aiming to high levels of performance in the core processes.
Quality Plan for 2022-2026: main factors underlying ADR’s proposal

Level of excellence in operational performance and pax satisfaction

In the last five years, thanks to the Quality Plan and to all stakeholders (Enac, State Authorities, Carriers, Handlers, others), ADR has achieved excellent performance levels as highlighted by awards from the main institutions and rating companies in the industry.

As a result, the challenge for the next five years will be to maintain the achieved level of performance despite the growing complexities of managing traffic restart and the issues outlined below.

Infrastructure development works on Terminals and boarding areas

Over the next 5 years, an extensive renovation plan will be carried out in both terminal and boarding areas significantly affecting pax in terms of:
- unavailable circulation areas
- unavailability of airport resources (check-in desks, baggage reclaim belts...)
- constant changes in wayfinding information in order to adapt routes to the progress of construction work

In particular, construction works will involve:
- Restructuring and upgrading of Terminal 3: all levels (arrivals, departures and mezzanine)
- Front portion and extension of the Terminal «boarding hub D» (Departure/transit passport area)
- Restructuring and regulatory upgrading of piers «B» and «D» and of boarding area «C»; end of works at pier «A»
As of May 2022, the new Schengen border management system "Entry Exit System" (EES) will come into force. The European Commission's Smart Borders project aims at modernizing border management and increasing the security of the Schengen area. The EES is intended to electronically register the entry and exit of third-country nationals and automatically calculate the length of stay in the Schengen area. The system replaces current manual procedures (stamping of travel documents). It will make it easier to detect irregular migration (in particular the so-called overstayers) and to identify undocumented travellers more effectively during controls within the Schengen area, not least by means of biometric identifiers (facial image and four fingerprints).

The impact of the new procedure for third-country nationals entering the Schengen borders at the airport will be significant in terms of process time, dedicated areas, technological adaptations as well as customer experience.

In the course of 2023, the period of limitation of Ramp Handlers, which began on 18 May 2016, will expire at Fiumicino. This limitation has had significant benefits on the quality of services experienced both by passengers and airlines in terms of: Passenger disembarkation times; Turnaround; Punctuality of departing flights; Baggage reclaim; fleet maintenance and care.
ADR’s efforts for environmental protection: activities and key facts so far

- **Application of the new Concession Agreement**, including environmental objectives with bonus/malus mechanism
- **ADR adheres to LEED** (Leadership in Energy and Environmental Design) sustainability requirements for the development of new airport infrastructures
- **ADR has been among the first operators to embrace NetZero2050 resolution**
- **Award Sustainability in Jul-20**
- **Entry into Sep-20**

- **ISO 14001**
- **45001**
- **ISO 9001**
- **Quality Management System**

2000: FCO first airport with AMS
2007: ADR is the first Italian company to join EP100. In 2019 Fiumicino airport achieved the target of a 50% reduction compared with 2006, with the ambitious commitment to increasing its energy productivity by 150% by 2026
2010: ADR adheres to LEED (Leadership in Energy and Environmental Design) sustainability requirements for the development of new airport infrastructures
2012: Application of the new Concession Agreement, including environmental objectives with bonus/malus mechanism
2013: ADR has been among the first operators to embrace NetZero2050 resolution
2016: Award Sustainability in Jul-20
2019: Entry into Sep-20
2020-2021: Green Financing Framework and inaugural Green Bond issued in Dec-20

**Airport Carbon Accreditation Level 4+ recognition in Mar-21**
ADR’s commitment to sustainability 1/2

**RESPONSE TO THE COVID-19 PANDEMIC**

- ADR is keeping in place all internationally recognized containment measures, such as:
  - The reengineering of all airport processes to meet health safety requirements for passenger and workers
  - The creation of Italy’s largest vaccination centre (1,500 sqm) with a capacity of over 3,000 vaccines/day

**ZERO CO2**

- In 2020 ADR undertook a programme to reach zero CO2 emissions level by 2030 Rome airports are the first European airports to obtain ACA 4+ certification

- Ongoing main projects:
  - construction of two large multi-megawatt photovoltaic plants at the airport
  - the Smart Airport project aimed at making SAFs (Sustainable Aviation Fuels) available at the airports
  - development of a capillary network of recharging points for electric vehicles

**GREEN INFRASTRUCTURE**

- ADR plans, designs and builds infrastructures in compliance with international “sustainability” certification protocols (e.g. LEED protocol gold level for Ciampino General Aviation Terminal, Fiumicino Pier A and the Hubtown real estate project) in order to contain the environmental footprint

- By 2030 over 60% of Terminal infrastructures shall be built or renovated according to the highest international sustainability standards (LEED and BREEAM)
ADR’s commitment to sustainability 2/2

**CIRCULAR ECONOMY**

- ADR intends to become a **zero-waste airport** and to reduce the amount of waste produced by each passenger by 10% of the 2019 value by 2030
- Organic waste is treated in a **composting plant** within the airport and workwear is created using the plastic from the bottles
- Circularity includes **sustainable management** of water resources, building materials and land reuse

**COUNTRY’S DEVELOPMENT ENGINE**

- The Rome airport system is an **engine for the development of the country** and the territory surrounding the airports from an economic, environmental and social point of view
- In 2020 ADR successfully issued its first “green bond” worth €300 million
- In 2020 ADR undertook the reclamation of a severely-degraded area with a high value-to-nature
- **Issuance of ADR Sustainability Linked Bond worth €500 million**

**PEOPLE**

- **People** are at the centre of ADR’s development strategy
- ADR’s policy of continuous improvement of service quality is constantly updated considering the changes in operations imposed by Covid-19, to guarantee health protection for passengers and staff
- Several initiatives to support, engage and listen to employees in order to consolidate an even greater proximity to its people
Renovation projects will be carried out to improve the building shell and facilities in order to attain LEED / BREEAM standards incl. on the existing boarding gates A1-10, A31-A51 and office towers 1, 2.

<table>
<thead>
<tr>
<th>A</th>
<th>New infrastructures with a defined and clear-cut boundary</th>
<th>New construction</th>
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<tbody>
<tr>
<td>B</td>
<td>Renovation of space managed by third parties (VIP areas, retail, F&amp;B)</td>
<td>Commercial interiors</td>
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<tr>
<td>C</td>
<td>Infrastructures (hall check-in, bag delivery, etc)</td>
<td>BREEAM in Use</td>
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<tr>
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<td>Other infrastructures without a defined and clear-cut boundary</td>
<td>BREEAM in Use</td>
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</table>
|   | Other areas | Pre-assessment (based on project and legal)  
Energy certification provided by a third party |
AdR the first and to date the only airport in Europe to achieve ACA 4+

AIRPORTS CARBON ACCREDITATION MAP

As at the end of 2020, around 340 airports in the world were certified by the ACA (out of about 18k globally), 167 of which are based in Europe, including all the largest airports.

# of European Airports in the Level\(^{(1)}\)

<table>
<thead>
<tr>
<th>Level</th>
<th>Accredited Airports in Europe</th>
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<tbody>
<tr>
<td>Level 4+ Transition</td>
<td>ADR di Roma</td>
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<tr>
<td>Level 4 Transformation</td>
<td>Gatwick, London City, Copenhagen, Schiphol, Milan</td>
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<tr>
<td>Level 3+ Neutrality</td>
<td>Heathrow, Paris-ADP, Vienna, Zurich</td>
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<td>Level 3 Optimisation</td>
<td>Edinburg, Malta, Lisbon, Aberdeen, Bologna, Torino</td>
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<tr>
<td>Level 2 Reduction</td>
<td>Stockholm, Istanbul, Luton</td>
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<td>Level 1 Mapping</td>
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In March 2021, Rome airports became the first in Europe to achieve ACA Level 4+ “Transition” (only 3 cities globally)

In 2020, Level 4 and 4+ have been added to the ACA to align it with the objectives of the Paris Agreement

Source: [https://www.airportcarbonaccredited.org/participants](https://www.airportcarbonaccredited.org/participants) (1) As of 17th April 2020
FCO South Completion Plan: terminal capacity up to 2030

<table>
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<tr>
<th>Year</th>
<th>Total Capacity</th>
<th>Traffic Forecast</th>
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<tr>
<td>2020</td>
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<td>64.0</td>
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Note: Traffic Forecast Chart shows a steady increase in forecasted traffic, with a projected capacity of 64.0 Mppa for the year 2030.
FCO South Completion Program: terminal capacity up to 2030

- **T3:**
  - 4 belts
  - 3.2 mppa

- **+Pier A:**
  +6.6 mppa

- **-Pier B**
  -6.5 mppa

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*Capacity Saturation of originating and embarking DS e NS*
FCO South Completion Program: terminal capacity up to 2030

- T3: +2 belts +2.1 mppa
- T1: +3 belts +4.3 mppa
- Pier B +6.5 mppa
- Pier D -4.2 mppa
- AIC -2.2 mppa

**Capacity saturation of originating and embarking DS e NS**

- Total capacity
- Traffic Forecast

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<tr>
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</table>
FCO South Completion Program: terminal capacity up to 2030

- Current operations & FCO South Completion Plan

Capacity Saturation of originating and embarking DS e NS

+ Pier D
  +4.2 mppa

+ AIC
  +2.2 mppa

T3:
  +2 belts
  +4.4 mppa

Total capacity

Traffic Forecast

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<tr>
<td>2030</td>
<td>64.0</td>
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T1 | East Terminal System

DESCRIPTION OF WORKS:
The development of the East Terminal System includes:

- construction of new Pier A, with 23 gates of which 13 with PLB;
- North extension of Terminal 1, to create a new departure lounge;
- West extension of Terminal 1, with Security check point area, 3 additional baggage reclaim belts;
- Boarding area C renovation, with 7 bus gates.

EXPECTED BENEFITS

- Greater capacity of the Domestic-Schengen departures system
- Greater capacity of the terminal’s departure (check-in hall, security, immigration transits) and arrival subsystems (baggage claim room)
- Better passenger services and perceived quality

STATUS and AMOUNTS

In progress

<table>
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<tr>
<th>2020 actual</th>
<th>2021 forecast</th>
<th>2022-2026 estimate</th>
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<tbody>
<tr>
<td>48.5 M€</td>
<td>66.9 M€</td>
<td>90.2 M€</td>
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</tbody>
</table>
T1 | East Terminal System | New airside plaza
T1 | East Terminal System | New airside plaza and mezzanine food court
T1 | East Terminal System | View from food court over the airside plaza
T1 | East Terminal System | View from food court over the airside plaza
T1 | East Terminal System | New pier A
**T3 | Departures and arrivals refurbishment**

**DESCRIPTION OF WORKS:**

Terminal 3 is going to be completely renovated at all operative levels.

**Main objective:** upgrade of concrete **structures** according to new seismic rules, upgrade of the **fire prevention** system

**Capacity:** refurbishment and upgrade of **baggage claim belts, check-in desk and hall; security lane upgrade for USA flights.**

Works will be organized in **two different phases, according to traffic forecast and capacity**

**EXPECTED BENEFITS**

- Capacity enhancement: baggage reclaim, security and check-in
- Environmental quality and architecture enhancement
- Compliance to Italian regulations

**STATUS and AMOUNTS**

Design in progress

<table>
<thead>
<tr>
<th></th>
<th>2020 actual</th>
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<tbody>
<tr>
<td></td>
<td>7.4 M€</td>
<td>9.4 M€</td>
<td>141.7 M€</td>
</tr>
</tbody>
</table>
T3 | Departures refurbishment

**today**

**tomorrow**
T3 | Arrivals refurbishment

**today**

**tomorrow**
Doubling of taxiway Bravo | East area

DESCRIPTION OF WORKS:

• Demolition of the existing Bravo taxiway, in the section between TWY BA and TWY BF
• Construction of two new taxiways parallel to runway 07/25, called Bravo and Charlie, in place of the current Bravo taxiway
• Taxiway visual aids systems and extension of rainwater drainage network

EXPECTED BENEFITS

• Performance improvement of the infrastructure in terms of flexibility, punctuality and reliability
• Improvement of aircraft ground circulation, reducing waiting times and consequently fuel consumption and pollution due to aircraft

STATUS and AMOUNTS

Design in progress

<table>
<thead>
<tr>
<th></th>
<th>2020 actual</th>
<th>2021 forecast</th>
<th>2022-2026 estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- M€</td>
<td>- M€</td>
<td>50.4 M€</td>
</tr>
</tbody>
</table>
Agenda

1. Introduction
2. Current operations & FCO South Completion Plan
3. Traffic Forecast
4. Medium and long term capacity expansion
5. Ciampino Airport
6. Next steps
Forecasting approach

1. Short Medium Term (1-5 years)
   - In the short-term, the offer of carriers is the main driver for traffic development alongside the strategy/positioning of the airlines
   - In the medium-term, forecasts are adjusted to reflect the evolution of the competitive scenario
   - The methodology considers also the changes in the market, for instance high speed train competition or higher penetration of LCCs across Italy/Europe

2. Long Term (>5 years)
   - The long-term forecast approach is based on the ICAO methodology (Manual of Air Traffic Forecasting) considering the main techniques:
     - *Time-series analysis*: methods are largely based on the assumption that historical patterns will continue and determine the trend in traffic development. In the context of medium-term or long-term forecasting, a traffic trend represents the development in traffic over many years, isolating short-term fluctuations
     - *Econometric analysis*: multiple regression analysis to project of air travel demand based on relevant variables: GDP per region, demography, touristic flows and macro-economic variables
     - *Industry forecast*: utilization of ACI, IATA, Airbus and Boeing outlook
### Short-term forecast: international industry consensus

#### Comparison of traffic forecast (% of recovery of 2019 volumes)

<table>
<thead>
<tr>
<th></th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEST</td>
<td>44%</td>
<td>77%</td>
<td>91%</td>
<td>101%</td>
<td>105%</td>
</tr>
<tr>
<td>BASE</td>
<td>36%</td>
<td>64%</td>
<td>85%</td>
<td>95%</td>
<td>100%</td>
</tr>
<tr>
<td>WORST</td>
<td>28%</td>
<td>48%</td>
<td>70%</td>
<td>79%</td>
<td>90%</td>
</tr>
</tbody>
</table>

- Significant uncertainty still surrounds the recovery of the aviation industry
- Three scenarios are used to look at the potential recovery trajectory using the following assumptions:
  - +/- effectiveness of vaccine against new virus variants
  - +/- speed of deployment of vaccine amongst population, reaching herd immunity (70%)
  - +/- coordinated European approach facilitating a safe free movement inside EU (Digital green certificate)
  - +/- reduction in demand to fly for business travellers

#### Traffic forecast

<table>
<thead>
<tr>
<th></th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEST</td>
<td>52%</td>
<td>85%</td>
<td>99%</td>
<td>108%</td>
<td></td>
</tr>
<tr>
<td>BASE</td>
<td>44%</td>
<td>71%</td>
<td>83%</td>
<td>95%</td>
<td></td>
</tr>
<tr>
<td>WORST</td>
<td>36%</td>
<td>54%</td>
<td>62%</td>
<td>70%</td>
<td></td>
</tr>
</tbody>
</table>

#### 2019 volumes recovery

- AT3 (Apr21 | Pax)
- EU (Mag21 | Mov)
- IATA (Mag21 | Pax)
Short-term forecast: bottom-up approach for FCO

Traffic type

<table>
<thead>
<tr>
<th>Traffic type</th>
<th>Local</th>
<th>Connecting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic</td>
<td>(76%)</td>
<td>(24%)</td>
</tr>
<tr>
<td>International</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercontinental</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Route networks

<table>
<thead>
<tr>
<th>Route networks</th>
<th>Trunk</th>
<th>Thin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic</td>
<td>(69%)</td>
<td>(31%)</td>
</tr>
<tr>
<td>International</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercontinental</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Purposes of travel

<table>
<thead>
<tr>
<th>Purposes of travel</th>
<th>Business</th>
<th>Leisure</th>
<th>VFR/Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic</td>
<td>(20%)</td>
<td>(66%)</td>
<td>(14%)</td>
</tr>
<tr>
<td>International</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercontinental</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Quick recovery on routes with higher volumes of Local traffic
- Less on traffic to Northern Italy due to high speed rail competition
- Local European traffic will have an accelerated recovery compared to short/medium haul of Extra-European volumes

- Historic routes with high traffic volumes will see a quick recovery compared to routes with low volumes and high connecting traffic
- Higher recovery to main European hubs leveraging the beyond traffic to long haul destinations
- Routes with high volumes of Local traffic will resume earlier than routes with low volumes and with strong connecting traffic
- Intercontinental Leisure markets with higher Local volumes will guide the gradual recovery, not all the Long Haul Business traffic will recover in the short-medium term the volume pre-Covid period

- Leisure and VFR are the clusters where is expected a quick recovery of traffic vs. Business, where video conference mode will continue to limit the frequency of travel
- European Leisure traffic to/from the main European destinations will continue to represent the main driver traffic recovery, with lower volumes vs. pre-Covid period

- Long Haul market strongly impacted by Covid in the short term also on Local flows
Short-term forecast: passengers in 2021-2026

Passenger Forecast FCO (mpax)

% Recovery on 2019
- 2019: 23%
- 2020: 25%
- 2021: 57%
- 2022: 76%
- 2023: 91%
- 2024: 100%
- 2025: 106%
- 2026: 106%
• Analysis of the historical data for the 2000-2019 period

• Identified the linear function that best models the data

• The robustness of the outcome has been verified through calculating the R² coefficient (which expresses a good representativeness of the data when its value nears 1)

• Selected variables which have proved significant for the robustness of the econometric model

• Traffic flows between regions correlated with GDP

• Also considered expected evolution of touristic flows to/from Italy

• Applied growth rates in forecasts on the air transport market carried out by the main international organizations and associations (IATA, BOEING, AIRBUS, ACI Europe)
Long-term forecast: FCO passengers (1/2)

FCO Passenger Forecast (mpax)

2019-2046 CAGR:+2.7%
• **Decrease in domestic market share** on total volumes, in particular where there is competition of High Speed Rail

The trend in the DOM sector shows negative growth at an average annual rate of -1,0% (CAGR 2006-2019)

• **Sustained growth of the international sector**

In 2019 74,5% of international destinations. Since 2006 the INT sector has recorded significant growth at +4,8% average annual

• **Important growth of the EXTRA EU segment and in particular of the long-range Extra Schengen**

The growth of non-EU traffic was significant with an average annual growth rate of +5,7% from 2006 to 2019. In the three-year period 2016-2019 CAGR was significantly higher at 8,4%
1. Historical data analysis (period 2000-2019): annual traffic volume and busy day
2. When determining the correlation between the two variables “busy day” and “annual traffic volumes”, time has not been taken into account as a factor affecting the shape of the curve
3. The displayed logarithmic curve is used to define the busy day based on the annual traffic forecast.

### TPHM

1. Historical data analysis (period 2000-2019): busy day and TPHM
2. The correlation ratio between busy day and TPHM is equal to 7-8%
3. The average percentage is applied to the busy day forecast in order to determine the TPHM forecast.

<table>
<thead>
<tr>
<th>Year</th>
<th>Busy day</th>
<th>TPHM</th>
<th>TPHM / Busy day</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>843</td>
<td>71</td>
<td>8,42%</td>
</tr>
<tr>
<td>2001</td>
<td>860</td>
<td>65</td>
<td>7,56%</td>
</tr>
<tr>
<td>2002</td>
<td>862</td>
<td>71</td>
<td>8,24%</td>
</tr>
<tr>
<td>2003</td>
<td>935</td>
<td>80</td>
<td>8,56%</td>
</tr>
<tr>
<td>2004</td>
<td>959</td>
<td>74</td>
<td>7,72%</td>
</tr>
<tr>
<td>2005</td>
<td>937</td>
<td>74</td>
<td>7,90%</td>
</tr>
<tr>
<td>2006</td>
<td>968</td>
<td>73</td>
<td>7,54%</td>
</tr>
<tr>
<td>2007</td>
<td>1.037</td>
<td>81</td>
<td>7,81%</td>
</tr>
<tr>
<td>2008</td>
<td>1.111</td>
<td>83</td>
<td>7,47%</td>
</tr>
<tr>
<td>2009</td>
<td>1.019</td>
<td>79</td>
<td>7,75%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Busy day</th>
<th>TPHM</th>
<th>TPHM / Busy day</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>1.049</td>
<td>78</td>
<td>7,44%</td>
</tr>
<tr>
<td>2011</td>
<td>1.035</td>
<td>80</td>
<td>7,73%</td>
</tr>
<tr>
<td>2012</td>
<td>1.005</td>
<td>81</td>
<td>8,06%</td>
</tr>
<tr>
<td>2013</td>
<td>981</td>
<td>75</td>
<td>7,65%</td>
</tr>
<tr>
<td>2014</td>
<td>1.030</td>
<td>74</td>
<td>7,18%</td>
</tr>
<tr>
<td>2015</td>
<td>1.046</td>
<td>75</td>
<td>7,17%</td>
</tr>
<tr>
<td>2016</td>
<td>1.013</td>
<td>75</td>
<td>7,40%</td>
</tr>
<tr>
<td>2017</td>
<td>967</td>
<td>74</td>
<td>7,65%</td>
</tr>
<tr>
<td>2018</td>
<td>992</td>
<td>78</td>
<td>7,86%</td>
</tr>
<tr>
<td>2019</td>
<td>988</td>
<td>72</td>
<td>7,29%</td>
</tr>
</tbody>
</table>
According to traffic forecast, the TPHM will reach the airside's current declared capacity by 2032
Agenda

1. Introduction
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FCO North Development Plan, unapproved by the Ministry for the Environment

External development areas

Masterplan 2030

North development area outside the current airport boundary

ca. 540 hectares overall, of which ca. 400 hectares in Natural Reserve areas
FCO North Development Plan | General framework

Medium and long term capacity expansion

- RWY 4
- Processor & Piers
- North Apron
- People Mover
- East Apron
- Utilities
- Contact stands
- Accessibility
- Real Estate
- Multistorey car parks

FCO North Development Plan | General framework
a. Reduction of land use consumption and environmental sustainability

b. Reducing noise footprint

c. «Under-one-roof» Terminal development

d. Rate-related sustainability, so as to boost the FCO Hub development and the connectivity of both Rome and Italy

e. Efficient and sustainable accessibility
To ensure properly planned additional capacity at Fiumicino, AdR has identified the following main triggers:

<table>
<thead>
<tr>
<th></th>
<th>FCO SOUTH CAPACITY AT COMPLETION</th>
<th>REQUIREMENT AT MEDIUM/LONG TERM</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATM/H</td>
<td>90</td>
<td>119</td>
</tr>
<tr>
<td>MPPA</td>
<td>64</td>
<td>88</td>
</tr>
</tbody>
</table>

AdR’s target is to identify a development layout allowing each system capacity to meet demand until the end of concession (up to 120 atm/h and up to 88MPPA), with a special focus on each critical subsystem threshold (check-in, boarding areas, baggage reclaim belts, etc.)

Therefore, AdR has analysed several alternatives based on the following milestones:

1. Land use
2. Modular Building
3. Operations and MCT
4. Current infrastructures’ efficiency enhancement
Airside capacity development | Main drivers for runway location

a. Traffic characteristics of FCO: Hub-in and Hub-out peak hour time

b. Infrastructures capacity to manage traffic demand

c. Land use

d. Environmental constraints

e. Interferences with other infrastructures

f. Airside ground movements management
• As various analysed alternatives indicate, the location of new RWY is confirmed parallel to RWY 16L/34R

1 760m West RWY 16L/34R
2 820m West RWY 16L/34R
3 1.035m West RWY 16L/34R
4 1.500m West RWY 16L/34R
5 520m East RWY 16L/34R

820m

For the new RWY location Alternative 2 is preferred: compliant with segregate and simultaneous usage of existing Rwy 16L/34R and independent ops from 07/25
Airside development | Runway 4 timeline and demand trigger

**RWY 4 timeline**

- A. Masterplanning and Environmental approval
- B. Survey and mechanical test
- C. Final Design
- D. Land acquisition
- E. Works

**Demand trigger – IATA Best Practice**

\[
	ext{Trigger} = \frac{\text{Design Capacity}}{(1 + \text{CAGR})^{\text{Lead Time}}}
\]

- **Design capacity**: current declared airside capacity = 90 mov/h
- **CAGR**: Comp. Annual Growth Rate referred to traffic movement forecast = 1.8%
- **Lead Time**: number of years from the time when the trigger is reached and when new infrastructures enter into operation = 10 years

**RWY 4 demand trigger**

- **Historical TPHM**
  - 2019: 72 mov/h
  - 2018: 78 mov/h
  - 2017: 74 mov/h
  - 2016: 75 mov/h
  - 2015: 75 mov/h

- AdR constantly monitors the airside demand trigger and fine-tunes the ongoing planning exercise in order to have new runway available when traffic demand approaches existing max capacity.
- Runway 4 has been postponed according to traffic demand considering the necessary time until the new infrastructure could enter into operation.
The new RWY4 would make it possible to use **RWY1**, limited to arrival peak slot, only for aircraft landing and to use **RWY 2** (removal of obstacles in the «Coccia di Morto» area) and **RWY 4** for take off.
Runways’ use rules | Departures and arrivals peak

**Departure peak**
- RWY 2 and RWY 4 for take off
- RWY 3 for landing

**Arrival peak**
- RWY 1 and RWY 3 for landing
- RWY for take off
RWY 4 is fundamental to shift noise contour far from residential areas

Simulation of noise contour with 1,500 flights per day with and without the new runway 4

Comparing the two scenarios, without the new runway 4, +12,548 people will be exposed to the aeronautical noise:
- 8,844 people in Zone A (LVA 60-65 dB)
- 3,704 people in Zone B (LVA 65-70 dB)

(census round 2011)
Airside capacity dynamic simulation with Simmod

Maximum capacity of the airside system is defined by the logarithmic curve shown in the graph where a maximum delay threshold of 15 minutes is assumed.

Maximum capacity of the airside system has been determined by means of an exponential estimation setting a maximum delay threshold of 15 minutes.

The identified capacity should not be understood as a value expressing a limit of the system, but as an indicator of an optimal level of service.

The previously defined capacity estimate was further verified by increasing the traffic sample in the peak departure and arrival times until the arrival/departure pair was defined within the maximum average delay threshold of 15 minutes.

The development layout (RWY 4 and aircraft stand system on the East side) allows a percentage increase in capacity of approx. 50% in the two time peaks.

<table>
<thead>
<tr>
<th></th>
<th>Arrival [mov/h]</th>
<th>Departure [mov/h]</th>
<th>Total Mov. [mov/h]</th>
<th>% increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Departure Peak</td>
<td>35</td>
<td>79</td>
<td>114</td>
<td>+46% depart.</td>
</tr>
<tr>
<td>Arrival Peak</td>
<td>78</td>
<td>36</td>
<td>114</td>
<td>+44% arr.</td>
</tr>
</tbody>
</table>

The simulation does not consider the potential optimization of flight procedures such as: HIRO, reduction of minimum separation, RECAT EU, TBS

ADR is working with Enav to verify future airside capacity. Starting from current traffic, forecast traffic and allocation rules, considering airspace and flights procedures, the assessment will define the maximum throughput of the airside system.
## Industry reference and international best practices

<table>
<thead>
<tr>
<th>BEST PRACTICE / HIGHLIGHTS</th>
<th>IMPLICATIONS FOR THE NEW MASTERPLAN PROPOSAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General planning strategy</strong></td>
<td>Airlines and ground handlers are increasingly looking for self-service options to drive capacity and efficiency</td>
</tr>
<tr>
<td>• More balance in effectiveness and efficiency</td>
<td></td>
</tr>
<tr>
<td>• More flexibly phased expansion based on triggers and lower environmental impact</td>
<td></td>
</tr>
<tr>
<td>• Under-one-roof terminal concept</td>
<td></td>
</tr>
<tr>
<td>• Airline allocation must be performed after consultation with operators</td>
<td></td>
</tr>
<tr>
<td><strong>Ground access and car park assessment</strong></td>
<td>Fewer, larger, more integrated terminals are more efficient (economies of scale), and single under-one-roof terminal concept is considered positive thanks to operational synergies with the existing terminals.</td>
</tr>
<tr>
<td>• Shift of the centre of gravity away from railway station</td>
<td></td>
</tr>
<tr>
<td>• Road access is adequate and balanced</td>
<td></td>
</tr>
<tr>
<td>• Railway proposals are adequate and balanced</td>
<td></td>
</tr>
<tr>
<td><strong>Passenger terminal</strong></td>
<td>FCO has a high potential in terms of catchment area, which could be acquired</td>
</tr>
<tr>
<td>• Better airside-terminal integration</td>
<td></td>
</tr>
<tr>
<td>• Optimized functional segmentation</td>
<td></td>
</tr>
<tr>
<td>• Design based on «Optimum» Level of Service (LoS)</td>
<td></td>
</tr>
<tr>
<td>• Spaces are appropriately sized</td>
<td></td>
</tr>
<tr>
<td>• Possible additional capacity at the end of planning horizon</td>
<td></td>
</tr>
<tr>
<td>• Location of emigration allows optimization of commercial opportunities</td>
<td></td>
</tr>
<tr>
<td><strong>Cargo strategy</strong></td>
<td>Cargo facilities and operation are balanced</td>
</tr>
<tr>
<td>• Cargo location is appropriate and allows enough capacity for current needs and growth.</td>
<td></td>
</tr>
</tbody>
</table>
Terminal capacity evolution

- **In 2030** Fiumicino South terminal system will reach a total passenger capacity of 64 million passengers per year, with check-in and boarding subsystems reaching saturation according to current traffic forecasts.
- **In 2031** the first phase of development will enter into operation (first module of East Terminal, Pier K, boarding area D switch to NS), reaching a total system capacity of 81 M passengers.
- By **2035** check-in and extra Schengen subsystems will reach saturation, according to current traffic forecasts.
- By **2036** the second part of the terminal and pier L will be completed. The global capacity of Fiumicino will thus reach a capacity of almost 97M passengers.
- Finally, a **third phase** of development is planned which, with the construction of the third pier M, will make it possible to exceed the capacity of 100 M total passengers.

The system will thus respond to the evolution of traffic demand reaching the year 2046 with a capacity of 97 M passengers, for a total expected number of passengers equal to 88 M.

The main triggers are explained below:

- **2031**: traditional check-in and Non Schengen boarding capacity reach saturation → 1st phase
- **2036**: Non Schengen boardings and traditional check-in capacity reach saturation → 2nd phase
ADR are monitoring airside trigger and updating the investment plan to open new processor and new pier when traffic demand meets maximum capacity.

Processor and Pier K had been postponed according to traffic demand.

It is important to develop the airport masterplan to obtain environmental approval in time to build the new infrastructure.
4 | Medium and long term capacity expansion

Terminal capacity evolution | Total Capacity 2020-2046

FCO SUD

- T Est: +5 belts +8.6 mppa
- +Pier K +9.7 mppa
- +AID DS to NS -1 mppa

FCO EST

- T Est: +5 belts +7.7 mppa
- +Pier L +8.0 mppa
- + Pier M: +4.2 mppa
- + Pier H renovation +4.5 mppa

Saturation of check-in and boarding subsystems

End of concession

Terminal capacity evolution | Total Capacity 2020-2046
Terminal expansion | FCO North unapproved Development Plan

GREEN FIELD NORTH TERMINAL

- Green field outside the current airport boundary (North)
- Ideal in case of strong alliance shifting
- Terminal very close to runway: minimize taxitime
- Long distance from current Terminal area
- Duplication of systems and functions
Terminal expansion | Analysis of alternatives outside airport boundary

**GREEN FIELD NORTH TERMINAL**

- Grey field outside the current airport boundary (East)
- Ideal in case of strong alliance shifting
- Terminal very close to runway: minimize taxitime
- Far distance from current Terminal area
- Duplication of systems and functions
- CAPEX intensive also for relocation of existing buildings
Terminal expansion | Analysis of alternatives within airport boundary: cargo area

- **Brown field solution**
- **Needs to recover Cargo City system** between South and East terminal subsystems (approx. 25 hectares)
- **Interference** with runway system
- **Terminal far** from current area
- **Duplication of systems** and functions
Medium and long term capacity expansion

Terminal expansion | Analysis of alternatives within airport boundary: technical area

- **Brown field**, building on the current airport boundary
- **Recovery of MRO** at «Pianabella»
- **Close to current Terminal area**
- **Possible synergy** with systems and functions
Terminal expansion | Analysis of alternatives regarding Pianabella area

- Recovery of MRO in West area
- Terminal far from the current area, needs a tunnel with an automated people mover at the airside and a landside people mover
- Interference with take off & approach procedures
- Duplication of systems and functions
Alternative #1

Single Hub configuration allows an under-one-roof experience, ensures through proper carriers’ allocation (mainly point-to-point flights to the east) operations flexibility and shorter connection times.

Minimal configuration*

159 stands: 90LB + 69REM

Of which EAST area TOT. 22WB + 18NB
- Pier K: 6 WB + 10 NB
- Pier L: 11 WB
- Pier M: 5 WB
- Remote: 8NB

* Not incl. further possible developments at Pier H

Maximum configuration *

191 stands: 115LB + 76REM

Of which EAST area TOT. 61 NB
- Pier K: 21 NB
- Pier L: 22 NB
- Pier M: 5 NB
- Remote: 8 NB

* Not included further possible developments at Pier H
Alternative #2

Mineral configuration*

161 stands: 97LB + 64REM

- Of which EAST area TOT. 26WB + 28NB
  - Pier K: 7 WB + 9 NB
  - Pier L: 12 WB + 1 NB
  - T. East: 10 NB
  - Remote: 7 WB + 8 NB

* Not included further possible developments on Pier H

Maximum configuration *

198 stands: 120LB + 78REM

- Of which EAST area TOT. 80 NB
  - Pier K: 23 NB
  - Pier L: 25 NB
  - T. East: 10 NB
  - Remote: 22 NB

* Further possible developments on Pier H not included

Single Hub configuration through an underground airside people mover, which reduces flexibility and modularity: all people mover path should be built at “time 0” to allow connection between East and South, with considerable investments and management costs. People mover makes flow and connecting times higher than Alternative 1.
Completion Plan approved by ENAC included Terminal 4, as an additional processor to achieve 64Mpax/a.

We believe that T4 underestimates some threats:
- **airside** operations complexity;
- **terminal** operation inefficiency;
- Curbside congestion due to limited exit road dimension

To achieve the same capacity targets, ADR proposes:
- **Extension of T3** to the West over the Protocol Terminal;
- **Renovation of all T3 subsystems**, at dep and arr level
- **Upgrading of check-in desk at T1**

Medium and long term capacity targets will be pursued and achieved via a modular-approach in the new East expansion area.
Level of service and passenger experience to the end of the concession

Terminal subsystems were sized according to the expected traffic and considering the LEVEL OF SERVICE "Optimum"

Evolution of the terminal surfaces (entire airport) and expected traffic: currently FCO provides for a comfort level of 31 sqm/pax, falling within the "Optimum" range, and will reach a level of 33 sqm / pax at the end of the concession.

Sqm/pax hour of FCO at East completion

"Optimum" level of service until the end of the Concession

This approach was used when dimensioning the single subsystems

* South + East FCO curve: gross operating area, compared to TPHP 2019 evolution according to the forecast trend of the Masterplan
## Comparative analysis of alternatives #1 and #2

<table>
<thead>
<tr>
<th>MAIN DRIVERS</th>
<th>SCORES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Alternative1</td>
</tr>
<tr>
<td><strong>Capacity improvement</strong></td>
<td></td>
</tr>
<tr>
<td>• MPax/year</td>
<td>+39,0</td>
</tr>
<tr>
<td><strong>Feasibility/modularity (terminal)</strong></td>
<td></td>
</tr>
<tr>
<td>• Alt.#2 needs from 1st Phase higher CAPEX due to people mover (airside by tunnel)</td>
<td></td>
</tr>
<tr>
<td><strong>Minimum Connecting Time (terminal)</strong></td>
<td></td>
</tr>
<tr>
<td>• Alt.#1 Pier short distance from processor, “under one roof”</td>
<td></td>
</tr>
<tr>
<td>• Alt.#2 Long path, people mover, low flexibility use</td>
<td></td>
</tr>
<tr>
<td><strong>Sustainability</strong></td>
<td></td>
</tr>
<tr>
<td>• Geotechnical soil features and amount of excavated soil due to the tunnel with automated people mover</td>
<td></td>
</tr>
</tbody>
</table>
## Comparative analysis of alternatives #1 and #2

<table>
<thead>
<tr>
<th>MAIN DRIVERS</th>
<th>SCORES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Alternative 1</strong></td>
<td><strong>Alternative 2</strong></td>
</tr>
<tr>
<td><strong>Ground transportation and accessibility</strong></td>
<td></td>
</tr>
<tr>
<td>• Alt.#1: One trail station, shorter distance between Terminals, more flexibility in case of disruption</td>
<td>![Score 1]</td>
</tr>
<tr>
<td>• Alt.#2: Longer distance between Terminals, higher CAPEX</td>
<td></td>
</tr>
<tr>
<td><strong>Business Continuity</strong></td>
<td></td>
</tr>
<tr>
<td>• Breakdown of people mover connection system, higher impact with the operations</td>
<td>![Score 1]</td>
</tr>
<tr>
<td><strong>Airside performance</strong></td>
<td></td>
</tr>
<tr>
<td>• Similar achievable maximum capacity: +119 ATM/h</td>
<td>![Score 1]</td>
</tr>
<tr>
<td><strong>Capex impact</strong></td>
<td></td>
</tr>
<tr>
<td>• Alt.#2: Higher cost for connection by tunnel, replacement and relocation of car parks and technical area (west+east), landside people mover</td>
<td>![Score 1]</td>
</tr>
</tbody>
</table>

#### Maps
- **Alternative 1**
- **Alternative 2**
Focus on ground transportation: alternative analysis

<table>
<thead>
<tr>
<th>Alternative 1</th>
<th>Features</th>
</tr>
</thead>
</table>
| Accessibility by road | • Separate access for current system and new East Area  
• Redundancy of the access system, and sufficient buffer in case of disruption on the curbside or along the A91 motorway  
• Shorter distance between terminals |
| Accessibility by rail | • Just one train station for all services (regional, express and high speed)  
• Max flexibility  
• Redundancy of routes and services |

<table>
<thead>
<tr>
<th>Alternative 2</th>
<th>Features</th>
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</table>
| Accessibility by road | • Separate access for current system and new East Area  
• Common access to the new terminal and Cargo city  
• Last mile of the A91 with fewer flows than alternative 1  
• Less buffer in case of disruption on the curbside or along the A91 motorway than Alt.#1  
• Longer distance between terminals |
| Accessibility by rail | • Redundancy of routes and services  
• Two stations with different services  
• Higher capex for airside people mover and for roads (more viaducts on poor soil)  
• Higher capex for Railway stations than Alt.#1 |
New sustainable accessibility through the enhancement and diversification of the itineraries

**TARGET**
- Increase the demand for rail transport to the airport
- Support the growth of airport demand
- Ensure access by rail to the new Terminal
- Ensure accessibility to the airport also in case of disruption

**SOLUTIONS**
- Extend the catchment area
- Strengthen the railway service
- Implement rapid and efficient internal mobility systems
- Create alternative itineraries

**WORKS**
- Connections between the Tyrrhenian line and the FL5 regional line
- Doubling of the FL1 regional line between Ponte Galeria and FCO
- Construction of a People Mover between the current railway station and the future East Terminal
- Creation of two additional railway tracks in the railway station

1. Connections between the Tyrrhenian line and the FL5 regional line
2. Doubling of the FL1 regional line
3. Creation of two additional railway tracks in the railway station
Road accessibility development

Guarantee good levels of service by creating dedicated accesses to airport infrastructures, separating flows and creating alternative routes.

**TARGET**
- Support the growth of airport demand
- Ensure road access to the new Terminal
- Ensure accessibility to the airport without compromising the mobility of the Roman coast

**SOLUTIONS**
- Dedicating the A91 for the exclusive use of airport traffic and improve access from the south
- Diversity access to distribute flows
- Viability of connection A12-Area Est
- Create alternative itineraries
- Infrastructure provided for access to the East Terminal

**WORKS**
- Completion of complanari roads up to the town of Fiumicino
- Transformation of via della Scafa into a high speed road
- Viability of connection A12-Area Est
- Infrastructure provided for access to the East Terminal
- Expansion of the departures viaduct in front of the current terminals

1. Completion of complanari roads up to the town of Fiumicino
2. Transformation of via della Scafa into a high speed road
3. Viability of connection A12-Area Est
4. Infrastructure provided for access to the East Terminal
5. Expansion of the departures viaduct in front of the current terminals
Railway accessibility development

Long term benefits

<table>
<thead>
<tr>
<th>Current Infrastructure Network</th>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Railway accessibility development</td>
<td>Increase in railway demand</td>
</tr>
<tr>
<td></td>
<td>Decrease in road congestion</td>
</tr>
<tr>
<td></td>
<td>Increase on high speed connections</td>
</tr>
<tr>
<td></td>
<td>Service improvement</td>
</tr>
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</table>

Change in modal split

<table>
<thead>
<tr>
<th></th>
<th>Private</th>
<th>Public</th>
</tr>
</thead>
<tbody>
<tr>
<td>CURRENT</td>
<td>74%</td>
<td>26%</td>
</tr>
<tr>
<td>LONG TERM</td>
<td>49%</td>
<td>51%</td>
</tr>
</tbody>
</table>
Agenda

1. Introduction
2. Current operations & FCO South Completion Plan
3. Traffic Forecast
4. Medium and long term capacity expansion
5. Ciampino Airport
6. Next steps
Current status and operations

- 60% traffic level less than 2019, due to pandemic
- Environmental constraints ongoing: noise Commission and Court Claim
- Traffic forecast for next years: Commercial Aviation reduction from 100 to 65 A/C mov per day, General Aviation constantly level (Max 60 A/C mov per day)
Main investments completed and planned

**TERMINAL & AIRSIDE**

- Terminal refurbishment
- Apron refurbishment: Commercial Aviation, 100 & 200 areas
- General Aviation 300 and Golf Areas
- Apron Hooks for Golf and 400 areas

**TERMINAL & AIRSIDE**

- Design in progress -> seismic and fire prevention works
- Maintenance and compliance works -> new approach lighting system for RWY 33 (SALS), no entry and stop bar on taxiway links to runway.
Agenda

1. Introduction
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6. Next steps
Average regulated charges down since 2016 while covering airport’s costs on further € 1 bln investments

- ADR’s regulatory settlement allows for cost recovery on actual (NOT planned) capex spending, with yearly adjustments to re-align fcst/actuals upon ENAC’s scrutiny
- Avg. charges for regulated services always lower than ERA forecasts (Economic Regulation Agreement) and constantly reducing between 2016 and 2021
FCO: average charges, forecast evolution

Forecast evolution(s) of avg. regulated charges [FCO, € / paying pax]*

ADR aims to ensure FCO's pricing sustainability through a flexible tariff evolution leveraging off operations’ efficiency, expected rise in traffic volumes and over time a re-distribution of part of the allowable costs within the framework of the existing sector regulations

* Avg. charges net of regulated real estate
Regulated charges for 2022-26, next steps

- Consultation with users on AdR’s assessment of capacity expansion
- AdR files request to start consultation on updates of regulated charges (2022-26)
- AdR opens consultation on updates of regulated charges
- AdR posts its final proposal on regulated charges update
- Final determination approved and made public

June-July | End-July | August | End-Nov. | End-Dec.

90 dd or more

- Limited time window to perform all duties for updating regulated charges to represent an updated cost correlation
- However, AdR remains committed to doing so and does not consider other options (ie. «freeze» of current regulated charges) with a view that a new, clear settlement of the «regulation agreement» represents significant value for all airport’s stakeholders on enhanced transparency/predictability
Soon back for more …