Covid-Tested Flights: The Way Forward

Aeroporti di Roma’s Case

ACI EUROPE Webinar

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Air travel, per se, is safe

- No evidence of outbreaks occurred due to procedural gaps, nor due to the failure to comply with the rules.

- Risk of onboard infection minimal (IATA reports 1 case out of 27 mln pax).

- Prevention measures adopted by the air transport industry (airports, airlines) are effective and rigorously implemented.

- Very high degree of control and traceability, as opposed to other transport modes and public services.

Current focus of prevention measures on avoiding import / export of infection across regions.
Prevention policy responses in EU so far do not appear effective

The current set of risk mitigation measures put in place throughout Europe appears subject to improvement.

- Since early stages, based on the application of self-quarantine (if not border closure)
  - not 100% safe measure: based on individuals’ responsibility, not easy to enforce and control (e.g., recent cases of new strains imported from high risk Countries).
  - disproportionate measure: hitting all passengers, including uninfected persons, the vast majority.

- Measures only recently mostly switching to pre-departure testing in many EU Member States and US, but in a very uncoordinated and confusing manner (some States request PCR OR antigenic, some only PCR, some PCR AND antigenic (!), some quarantine OR test).

- Testing protocols in Europe are not yet homogeneous, nor systematic. EU Council agreed on Jan 21 on further restrictions (e.g. dark red zones) that will involve quarantines and limitations to non essential travel within the EU. 
  
  *ADR proposal*

- **ALL passengers originating from critical areas** (based on predetermined criteria and/or on contingent situation – e.g. spread of variants) subject to certified pre-flight rapid testing → maximum (100%) and documented control, safety perception on-board

- **NO restrictions on arrival, which thus appear useless** → sustainable mobility, healthy people can travel
Facing the new normal: pre-departure testing likely to stay for long

- Vaccine campaigns commenced and slowly - but consistently –being rolled-out. Italy vaccination campaign is now targeting Q4 2021 as the earliest target for herd immunity.

- However, herd immunity not likely to rapidly allow for a complete eradication of infection, which is of the essence to allow a substantial normalization of aviation processes.

- Hence, travel protocols allowing to pre-identify and control infected passengers appear:
  - not only vital during the most critical phases of the pandemic
  - but also necessary to assist (for a currently indefinite term), in safety and without restrictions, the recovery of traffic demand expected after the stabilization of the health situation.
As one of the largest hubs in Europe, ADR has been at the forefront of prevention measures, being committed to:

- Implement and communicate a solid “safe airport proposition” to:
  - ensure max safety and health protection for passengers and airport staff;
  - enhance passengers’ confidence and gain key stakeholders’ trust;
- Obtain recognitions (eg. ACI EU Best Apt, Skytrax 5*) and 3rd party certifications (eg. RINA Biosafety, ACI Health Safety Audit)

Testing facility within the Terminal area, fully operational since Aug. 16, 2020, in full partnership with Regione Lazio, the Italian Ministry of Health and Ist. Spallanzani, the reference institution for immunology). Rapid antigen detection tests (RADT) utilized extensively (now 3 areas in the terminal, 5400 capacity up to test/day, about 41,000 passengers tested)

- Largest drive-through testing centre of Regione Lazio, located inside Fiumicino airport’s long-stay car park (ca 15,000 mq, operating 7/24, daily capacity ~4,000 tests, rapid and molecular) – operational since Sept. 1, 2020, 93,000 tests performed).
ADR Case: Prototyping and launching the Proposed Protocol

First prototype Covid-tested flight
Rome – Milan route

- Sept. 16, 2020 ➔ ADR started a pilot project with Alitalia, offering the first Covid-tested flights (2 DF) on the domestic route Rome FCO-Milan LIN, aiming at demonstrating operational viability and overall effectiveness of the proposed protocol, supported by and in cooperation with Regione Lazio (Order No. Z00058)

- On this pilot, passengers must either have performed the rapid antigen test at the airport or presented a medical certificate with a negative molecular (RT PCR) or antigenic test result carried out in the 72 hours before boarding.

- Nov. 23, 2020 ➔ The Italian Government (joint Order by 3 Ministries) allowed – on an experimental basis – the first transoceanic Covid-tested corridor to be operated in Rome Fiumicino, trading trust-based quarantine on arrival for a pre-departure negativity control on 100% of passengers.
  ➔ passengers on Covid-tested flights from US not be subject to quarantine obligations, having performed a molecular/antigenic test within 48h before boarding and repeating a rapid antigenic test upon arrival at Fiumicino.
  - Dec. 8, 2020 ➔ first Covid-tested flight from New York JFK to Rome FCO, operated by Alitalia;

- The Order also allows for a ITA-GER Covid-tested corridor (Frankfurt-Rome, Munich-Rome) – not yet active, due to the currently very tight travel restrictions in place in Germany.
The Covid-tested flights’ trial launched by Aeroporti di Roma at Fiumicino airport has produced excellent results in terms of:

- **risk minimization** (percentage of CONFIRMED positive cases: only 0.13 %, false positives at arrival antigen at 0.31%). Notwithstanding the fact that the USA has had in the period 3 times as many new daily cases as Italy*, a very low percentage of positive cases was reported.

- **operational effectiveness** (with all checks being carried out in less than 2 hours, no impact on OTP)

- **passengers’ satisfaction** (over 90% of passengers would advice to travel on Covid-tested flights)

*As of Jan 27, New York state reports 66 new daily cases per 100K, while Italy has 20.

The above results establish:

- the **health effectiveness** of the protocol, which allows for a radical reduction in the risk of importing the infection through a preventive control on 100% of passengers (particularly noticeable if compared to the alternative measure of the fiduciary isolation)

- the full suitability to support the desired phase of progressive recovery of air traffic and the Country's international connectivity, with maximum safety as required.

The **UNWTO** has endorsed ADR’s pilot project, regarding it as the most viable strategy to restart tourism and therefore choosing it as the reference benchmark worldwide to overcome the crisis of the aviation sector.
## Facts & Figures

### No. of passengers / flight on Covid-tested routes

<table>
<thead>
<tr>
<th>Route</th>
<th>No. of Passengers</th>
<th>Variation %</th>
</tr>
</thead>
<tbody>
<tr>
<td>JFK - FCO</td>
<td>137</td>
<td>+142%</td>
</tr>
<tr>
<td>FCO - JFK</td>
<td>129</td>
<td>+73%</td>
</tr>
<tr>
<td>ATL - FCO</td>
<td>69</td>
<td>+28%</td>
</tr>
<tr>
<td>FCO - ATL</td>
<td>79</td>
<td>+16%</td>
</tr>
</tbody>
</table>

### Rate of positive cases on Covid-tested routes (as of Jan 28, 2020)

<table>
<thead>
<tr>
<th>N. of arriving passengers tested</th>
<th>Not confirmed by the molecular</th>
<th>Confirmed by the molecular</th>
<th>Confirmed as COI &gt;10</th>
<th>Negative on arrival</th>
<th>Negative</th>
</tr>
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<tbody>
<tr>
<td>3.824</td>
<td>3.807</td>
<td>3.819</td>
<td>3.819 (99,55%)</td>
<td>3.819 (99,87%)</td>
<td></td>
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17 passengers positive to antigene test (0,45% of total)

### Strong increase of number of passenger / flight after the introduction of Covid tested flights

Variation % compared to the previous 60 days

### Virus-prevalence close to zero

(only 5 positivity cases on board in 38 flights)

(1) Total pax above 6 yrs of age Alitalia JFK-FCO and Delta ATL-FCO
For the 5 confirmed positive cases, as requested by USMAF (Italian Ministry of Health) and in cooperation with the airlines, a **backward search** on the test presented in the USA upon boarding has been carried out: out of the 5 cases found, 2 had produced a negative result to the molecular test and 3 a result of negativity to the antigen test.

In order to obtain further information on the presence of any “false negative” on board of COVID-Tested flights, Regione Lazio, the Ministry of Health and the Spallanzani Institute cross-referenced data from the regional database of positive cases with those contained in the COVID-Tested flights’ arrivals database: as at mid January, this analysis has identified only 2 occurrences (equal to **0.7 per thousand** of the total), on which further assessments should be carried out to determine if the cases were to be related to a post arrival infection.

The rate of "**positive to the antigen test at Fiumicino/total tested passengers**" for COVID Tested flights (**0.45%**) is significantly lower than the same rate found in the testing activity at the airport (with identical testing protocol) conducted between August and December 2020 on passengers arriving from EU countries considered at risk (**0.8%**). In the evaluation of these rates it shall be considered that in 4 of the last 5 months the new daily cases reported in the USA have been at least **twice as many** as those reported in the EU.

The above confirms that the air mobility reactivated thanks to the control scheme provided by the Ordinance 11/23/2020 appears to consist of **virus-prevalence flows close to zero**. To date, the rate for confirmed cases on these flows is significantly lower than both the ratio between new daily cases and total swabs carried out in the Lazio region (approx. 5%), and the one relative to the arriving passengers flows that were checked at Fiumicino previously.

**The protocol perfectly matched the new US CDC Order requesting since Jan, 26 to test passengers bound to the USA before departure. In Rome such testing has been ongoing since the start of Covid Tested flights. No changes were necessary.**
1. **Extension of the trial** after 15 February 2021, the prescribed deadline established by the Order, until September 2021, as well as the **adoption of the protocol for all Italian airports in view of a general national policy**

2. An **enlargement of the trial's perimeter**, also depending on a risk assessment of new variants emerging in high risk Countries, with particular reference to:

   - **additional intercontinental routes** to be activated as "COVID-Tested" flights with double control of passengers before departure and after arrival. For the strategic nature of Italy’s air connections it is considered appropriate to activate connections in the USA also from Los Angeles, Washington DC, Boston, Miami and Dallas; outside of the US, from Japan (Tokyo), Brazil (Sao Paulo), Argentina (Buenos Aires), UAE, Canada, China, South Korea, Hong Kong and Taiwan.

   - **extension of the reasons allowing to enter in Italy with COVID-Tested flights** (also including, as soon as possible, "non-essential" private reasons)

The above would allow a further step to SAFELY reactivate a partial intercontinental air connectivity.
In view of potential rising volumes, ADR will directly manage a new testing point at the airport, at competitive prices, conveniently located in the terminal facilities.

- Expected to be managed mostly on a reservation basis, encouraging off-airport testing before dep. (48/72h)
- Material scalability potential (max testing capacity in the terminal up to ca. 15,000 tests/day).

Full integration of pre-boarding testing in the airport services

- Operations already in place
  - 3 areas
  - 5,400 test/day
  - min 3x scalability
Together with major airlines, ADR is evaluating the data integration of passengers’ tests results into a "Travel Health Portal" that can store in a protected way the records entered by passengers ("Health Declarations") and make available to Authorities the self-certification models required by the legislation and the relevant health certificates for evaluation/validation of health officers.

Such a tool will be essential in the stages of the progressive reduction of cases and containment of the pandemic, when air flows will return to increase.

A "Travel Health Portal", such as the one already being studied by ADR, presents numerous and significant benefits, including:

- **effective and safe management of certificates of negativity before departure;**
- possibility for airlines to make boarding conditional to the presentation of the relevant health certificates;
- **strong support for contact-tracing** by looking for the self-certifications produced by passengers directly in a single computer database;
- Digitization, through a QR-code, of the information that passengers must provide at the airport (ease of reading and standardization).

In support of the above, it is foreseeable that passengers’ possession of a suitable vaccination record may at some point represent a significant factor for allowing transit at the airport and boarding an aircraft. Also from this point of view, the availability and implementation on an experimental basis of a "travel health portal" could be advantageous for the authorities and for the safety of air travel.
Starting on January 5, ADR has already begun to experiment with good results the implementation of “AOK Pass”, in partnership with Alitalia and in cooperation with USMAF (Italian Ministry of Health): the new pilot allows passengers bound for New York on Alitalia Covid-Tested flights to present, upon boarding, a digital negativity certificate from a Covid-19 rapid antigen test, carried out at the airport, via the AOKpass app – developed in partnership with the ICC - International Chamber of Commerce.

The procedure is simple: once passengers have taken a test at Fiumicino airport’s facilities, they can download the AOKpass app onto their mobile device and will receive the result via a QR code that authenticates and securely stores the negative result on their smartphone. Upon boarding the flight to New York, passengers will then be able to use their digital health credentials by having the boarding attendant scan the QR code directly.

Further development may include vaccination certificates (in case of medical evidence that disease transmission is blocked by vaccines), as well as other digital solutions as they may become available / required.
Aeroporti di Roma’s Next Steps (4/4)

- A structure of approximately 1,500 sqm have been installed in the airport area with the support of Aeroporti di Roma. From February 15, 2021, part of the area dedicated to Covid-19 drive-through testing facilities located at Fiumicino's long-stay car park will be transformed into a vaccination centre, developed in partnership with Regione Lazio, Istituto Spallanzani and the Italian Red Cross.

- The structure will be managed by the Health Authorities of Regione Lazio and manned by the medical and paramedical staff of the Italian Red Cross.

- The centre will be the first large national vaccinations’ centre in an airport with 25 health checkpoint dedicated to the inoculation of the vaccine, 20 boxes dedicated to registration operations, 10 medical check-up boxes, a post-vaccination waiting area with 240 seats and about 600 dedicated parking spaces. Attached emergency room available.

- Emergency ultra-low temperature storage capacity also made available by ADR.
A call for change, in the name of safety and mobility

- AdR believes that the Covid-tested flights Protocol:
  - is an obvious solution combining enhanced safety (100% controlled passengers) with effective ability to travel, and
  - is to be widely adopted during the phase of coexistence with the coronavirus, whose duration is not expected to be short nor certain,

so as to ensure maximum safety and maximum speed of economic recovery, as traffic flows will progressively resume.

- Hence, based on emerging operational and medical evidence, AdR advocates:
  - for a structural application of the Covid-tested flights Protocol to extra-EU routes to remove/reconsider quarantine obligations
  - for an ad-hoc adoption of the Covid-tested flights Protocol also at the EU level, focusing on the intra-EU routes mostly impacted by the pandemic, based on objective and predetermined criteria, so as to avoid restrictions such as isolation and quarantine, complexities and risks on arrival