



TRT TRASPORTI E TERRITORIO SRL

Complimentary study on the traffic hypotheses of Nantes-Atlantique airport

Study for the Commission Nationale du Débat Publique

Angelo Martino and Marco Brambilla, TRT

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**Only for Milano
headquarters*



Outline of the presentation

- Objectives and methodology
- Summary of Nantes-Atlantique air traffic data and forecasts
- DGAC forecast studies
- Conclusions
 - factors influencing air traffic growth
 - our view on 2019 DGAC air traffic forecast

Objectives and methodology

Objective

- Assess the DGAC air traffic forecasts considering the opposite views of those claiming that the figures are:
 - *underestimated* and that the airport will be soon congested
 - *overestimated* due to taxation, stabilisation of growth, different travellers' attitude and climate change regulations

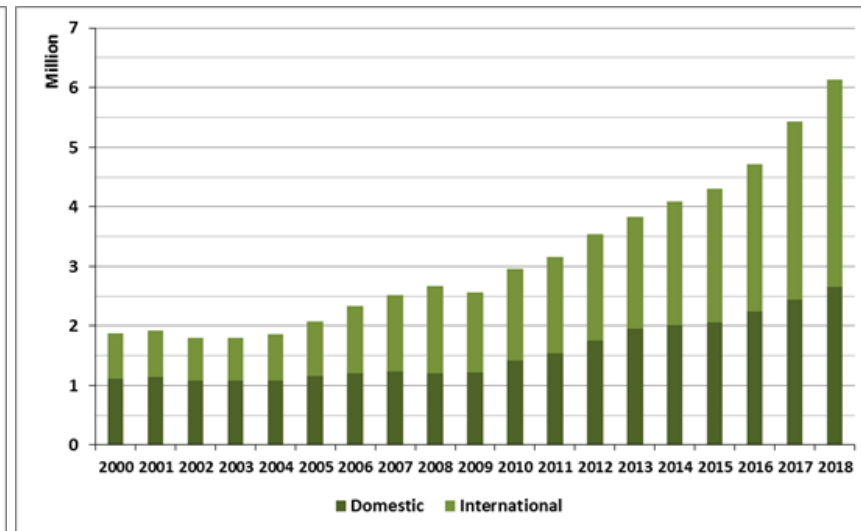
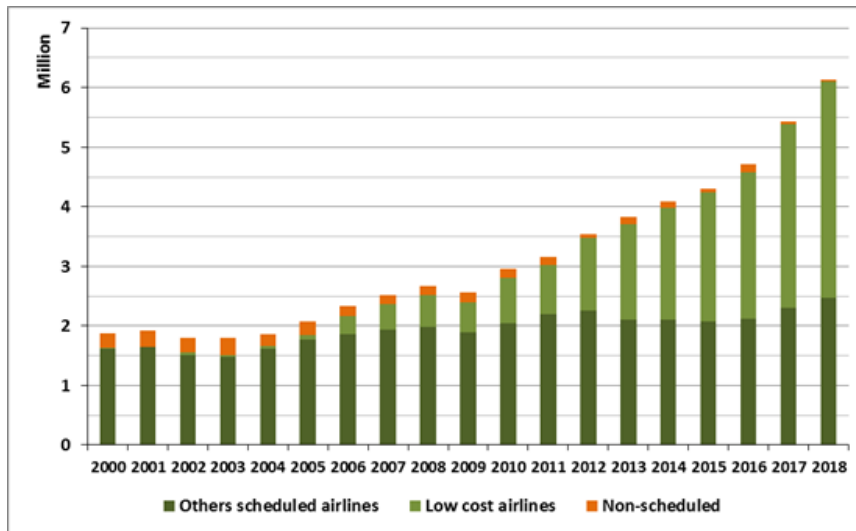
Methodology

- Analysis based on the official documents and studies provided by the CNDP and integrated by additional reports and interviews

Summary of traffic data and forecasts

Observed traffic by passengers segment (2000-2018)

- 6.1 million passengers in 2018
- low cost dominant: 3.6 million passengers in 2018
- international surpassed domestic in 2007, driven by low cost airlines

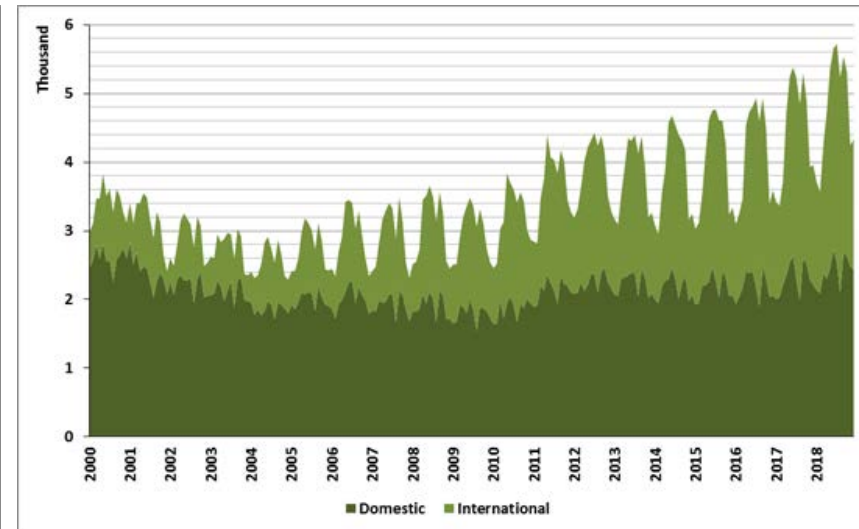
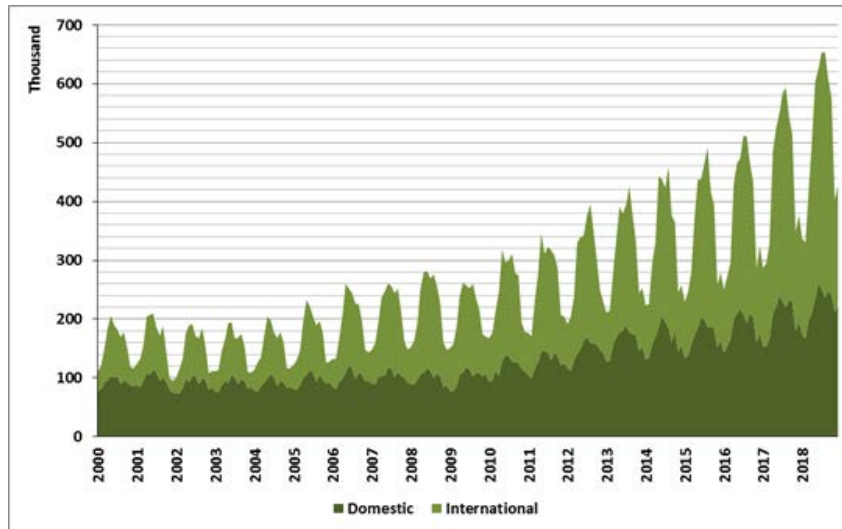


Summary of traffic data and forecasts

Annual summer peaks identify periods where demand concentrates

Intensity of summer peaks increased through time

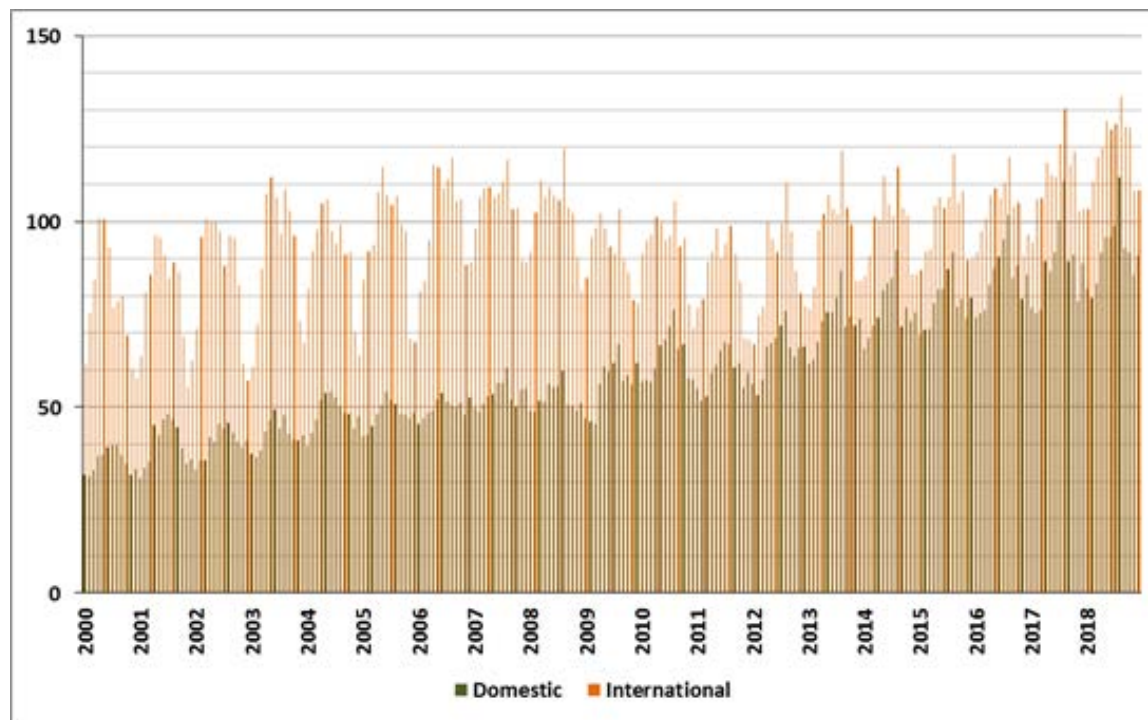
Different paces for passengers (left) and movements (right)



Summary of traffic data and forecasts

Average load factor (passengers per movement) increasing through time

Different paces for domestic (stable increase) and international (influenced by economic crisis)



Summary of traffic data and forecasts

Passenger characteristics (2017 survey)

- Nationality: 84% from France
- Residence: 34.3% from Nantes' and 34.2% from neighbouring departments
- Travel purpose: holiday or leisure 52%
- Trip duration: relatively long (4-15 days)

- Nantes origins more outbound than inbound journeys
- Preferred ticket: non-refundable, no change allowed and purchased at own expenses
- Only 1 or no flights over the last 12 months before the survey
- Destinations more likely in Europe

2019 DGAC forecast model

1. Calculation of the variation of fuel cost over the 1990-2017 period (oil price variations are fully transferred to ticket price).
2. Estimation of the travel demand (passenger-km) lost because of the variation of the fuel costs only.
3. Estimation of the travel demand in step 2 is subtracted to the observed demand to estimate the trend net of fuel price effect.
4. The model explains domestic and international travel demand separately net of the fuel cost effect as a function of (i) GDP and (ii) number of aircraft movements at the airport.
5. Elasticity with respect to the GDP is assumed decreasing over time in order to take into account the increasing maturity of the market.

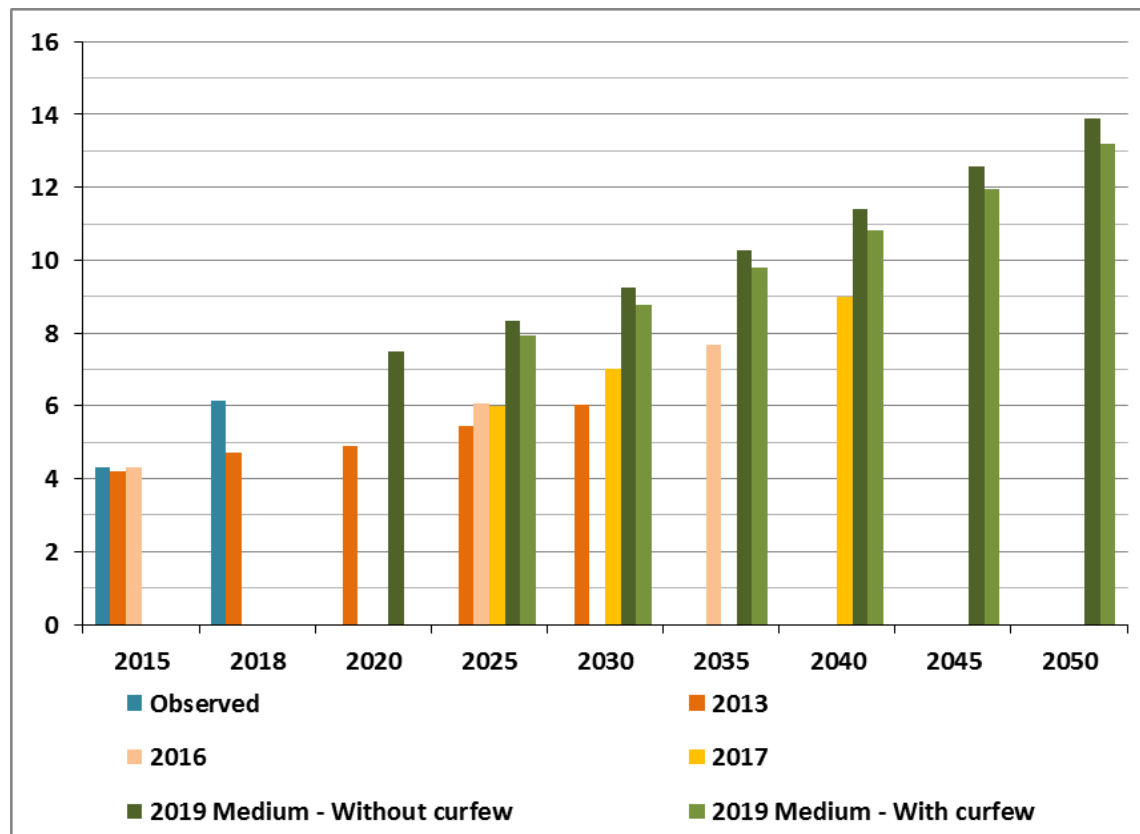
No competition with other airports

No distinction between scheduled and low cost airlines

DGAC forecast studies

Comparison air traffic forecasts in 2013, 2016, 2017 and 2019

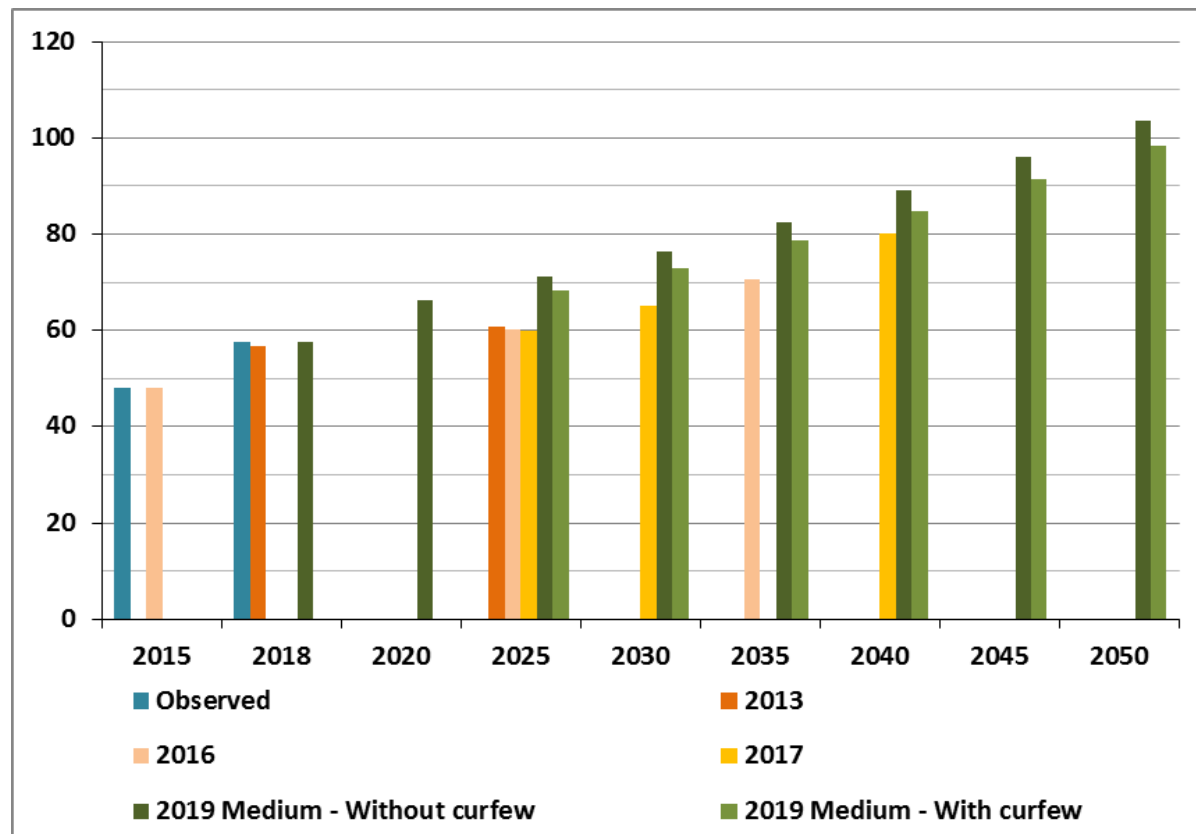
Passengers volume(*)



(*) curfew consists of prohibiting flights between 00:00 and 06:00 am

DGAC forecast studies

Comparison air traffic forecasts in 2013, 2016, 2017 and 2019
Flights movements(*)

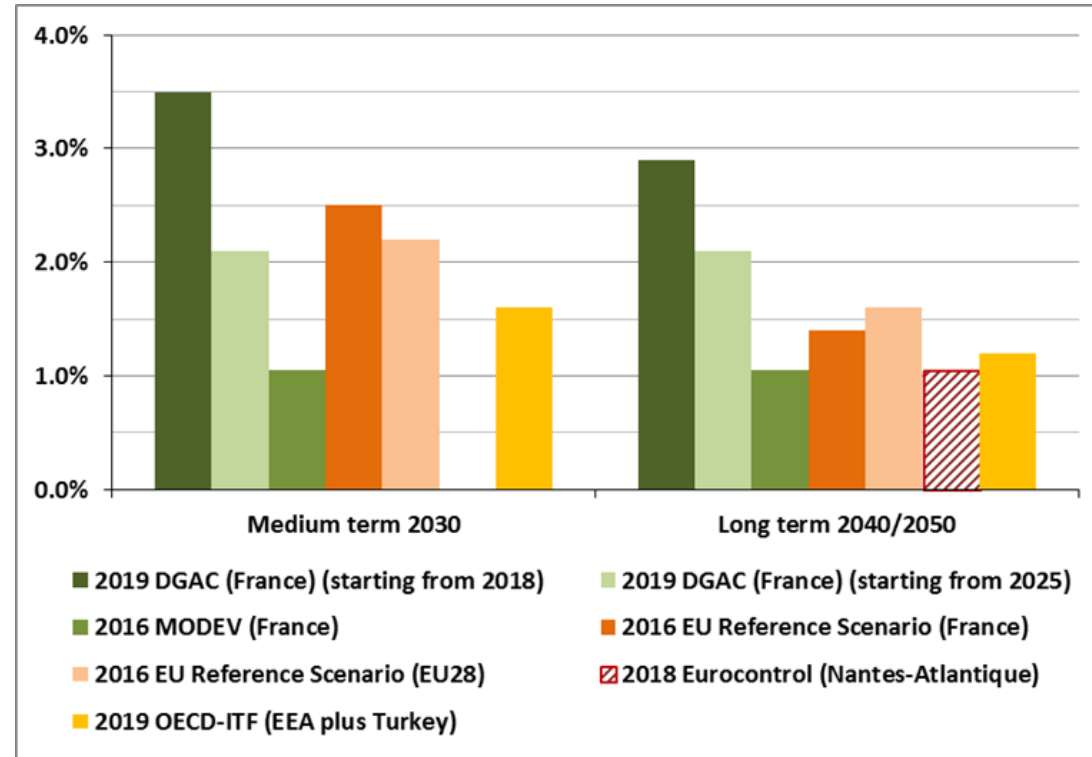


(*) curfew consists of prohibiting flights between 00:00 and 06:00 am

DGAC forecast studies

Annual growth rates of 2019 air traffic forecast compared with other medium and long term projections:

- 2016 France national transport model
- 2016 EU Reference scenario (EU28 and France)
- 2018 EUROCONTROL at 2040 (Nantes-Atlantique, average of 4 scenarios)
- 2019 OECD-ITF (EEA plus Turkey)



Conclusions on factors influencing air traffic growth

Operating airlines and networks

- High penetration of low cost airlines, 59% of passengers in 2018
- Driven by low cost airlines, international segment increasing at higher pace compared to domestic,
- Low cost airlines highly flexible in planning and managing the network of connections
- Six competing low cost airlines established at the airport

Conclusions on factors influencing air traffic growth

Relationship between airlines network, travellers profile and regional socio-economic context

- Many leisure destinations, especially for international trips
- Business, accounting for 1/4 of trips, likely to travel with low cost airlines
- Traffic developments correlated to the economic development of the region
- On top of economic developments, additional traffic could be linked to land use developments

Projections of demography, population aging migration flows should also be considered. They could either positively, or negatively, change users preferences towards the attitude to travel in the future

Conclusions on factors influencing air traffic growth

Competition with other French airports

- Relatively small size of the closest airport (Rennes)
- Minor overlap with comparable French regional airports

Competition with high speed rail and long distance bus services

- Low or negligible, also due to different destinations operated
- TGV generally preferred for direct travel to Paris
- Air transport preferred for connecting flights in Paris

Conclusions on factors influencing air traffic growth

Policies for internalisation of external costs

- (see recently announced French environmental tax)
- It's a factor negatively influencing future developments, especially for airports whose passengers are more sensible to variations of price
- Future improvements of engines efficiency might partially compensate increases in fuel taxation

Political scenario and macro-economic contexts

- Could negatively affect future developments (Brexit, political tension in the area of Persian Gulf, increase of oil price)

Conclusions on air traffic forecasts

Short/medium term (2030)

- 2019 DGAC update seems not overestimating future development
- The ramp-up period followed by linear growth seems realistic
 - 159 new connections for 2018-2020, of which 148 low cost airlines, majority to southern Europe
 - Nantes-Atlantique base of major low cost airlines in 2019, 25 new connections being opened
- Average annual growth rate of 2019 DGAC found slightly higher than the other projections
- Expansion of the network of connections designed mainly toward holiday and leisure destinations

Conclusions on air traffic forecasts

Long term (2030-2050)

- Envisaged growth seems less likely to happen
- We would rather expect a lower asymptotic equilibrium due to market saturation
- Average annual growth rate of 2019 DGAC found higher with respect to other projections
- Technological progress may be a factor influencing future developments, optimisation of internal space and seats capacity

Thank you for your attention

martino@trt.it

brambilla@trt.it



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