

# **Berlin Airports**

# BERLIN SHOULD RETHINK ITS SINGLE AIRPORT STRATEGY



Berlin's attempts to build a new airport have been a national embarrassment. The project is already ten years behind schedule. What's more, the new Brandenburg Airport already looks too small to meet current, let alone future demand for air travel. The capacity crunch will come if the authorities go ahead with existing plans to close Tegel once Brandenburg is finally ready. If Tegel were to be allowed to remain open this crunch could be avoided, which would boost to economic growth and could provide more variety of airline services and more choice for passengers.

### Berlin and the 'single airport concept'

Berlin's unique history has helped shape the evolution of its airports over the years. As a consequence of its occupation by the four Allied powers after World War Two, it was once served by five different airports, primarily for military purposes. At the start of this century, three of them were still operating: Tempelhof (THF), Tegel (TXL) and Schönefeld (SXF).<sup>1</sup>

Following German reunification in 1990 there was an understandable desire for Berlin and Brandenburg, the federal state that encircles the city, to have a major airport which could meet rising demand for air travel. In 1996 a 'single airport concept' was struck upon. An expanded Schönefeld site was chosen to handle all Berlin's commercial aviation, and it was decided that the city's other airports would all close.

Construction at Schönefeld began in 2006, and Tempelhof eventually closed in 2008. The new airport, Berlin Brandenburg International (Brandenburg Airport, BER), was originally scheduled to open in 2010, with Tegel required by an apparently legally-binding decision to close shortly thereafter. However, following a series of delays Brandenburg Airport is still not ready, and it is unclear whether the revised opening date in autumn 2020 will be met. As a result Tegel remains open for the time being, but the plan is still to close it.

## If Brandenburg Airport were open today it would already be full!

The demand for air travel tends to show a fairly stable relationship to overall economic growth over the medium term. But that does not always make forecasting air travel demand straightforward. In the case of Berlin, other factors complicate matters. First, Berlin is only gradually growing into its recently reacquired role as Germany's capital city. Second, low-cost air travel was slower to take off in Germany than in other markets, such as the UK.

When planning approval was granted for BER in 2004, it was anticipated that around 23 million passengers would use the airport in 2015, rising to around 30 million in 2023. Built to satisfy this forecast level of demand, Brandenburg Airport currently has capacity for 27-28 million passengers per annum (mppa) at most; further planned expansions would increase capacity to 45 mppa. By way of comparison, total passenger traffic at Tegel and Schönefeld had already reached 33 mppa by 2016, having grown by 11 per cent a year since 2011.

These were located in the American, French and Soviet sectors respectively. Johannisthal Air Field was also located in the Soviet sector, but closed in 1952. The smaller Gatow airport was located in the British sector and was closed in 1995.

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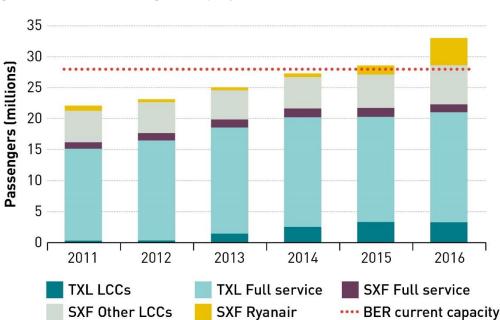


Figure 1 Demand has grown rapidly

Source: Frontier analysis based on OAG data. LCC = Low cost carrier

A large part of the growth of air traffic in Berlin has been driven by low-cost carriers. However, under the current legal requirement, the opening of Brandenburg Airport will still trigger the closure of Tegel within six months, raising a number of critical questions. In particular:

- Will Brandenburg Airport alone have sufficient capacity to meet potential growth?
- Does a one-size-fits-all approach to airport provision in Berlin best serve the interests of passengers and maximise growth potential?
- Could having only one airport restrict airline operating models, reducing competition and hence the number of passengers carried?

#### Berlin has significant further growth potential

The figures above indicate that enforcing the decision to close Tegel could create an immediate airport capacity crunch in Berlin. But Frontier's analysis suggests that there is even more growth potential to come. After all, Berlin is the capital of Europe's largest economy, the largest city in Germany and the fourth-largest in Europe.

Compared to the 20 most populous cities in Europe, Berlin's total demand for air travel is materially below what might be expected. There were around 9.4 passenger journeys p.a. per head of population in Berlin, compared to the average of around 11.5. Just moving up to this average would take Berlin to around 40 mppa. This is not just way in excess of Brandenburg Airport's current capacity, but starts to challenge even the upper limits of its expected expansion range. With this in mind, sticking to the decision to close Tegel would seem to condemn Berlin to airport capacity constraints that other major cities (London in particular) are striving to address.

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Berlin is the 4th largest city in Europe But demand is below the line in terms of pax per population Passengers per population 25 12 Population (millions) 10 20 8 15 6 10 4 5 2 0 0 Milan Hamburg Madrid Lisbon Berlin lamburg Athens Warsaw Stockholm Barcelona Manchester Budapest Manchester stanbul

Figure 2 Passenger traffic through Berlin is low for the size and importance of the city

Source: Frontier analysis based on data from Eurostat Regional Yearbook 2015 and various sources including ACI for passenger volumes

To consider the impact of future capacity constraints, Frontier carried out congestion modelling based on two demand scenarios:

- The minimum case scenario this is a conservative forecast with demand projected from current passenger volumes based on average expected income-based organic growth; and
- A likely scenario here we add 'demand catch-up' to income-based organic growth.

Our projections are illustrated below, with overall demand converging on the higher trend line (consistent with Berlin's size and wealth) over a number of years. Interestingly, the maximum planned capacity for Brandenburg Airport is likely to be reached in the late 2020s, so under the proposed new arrangements Berlin will be hitting full capacity at about the same time that London Heathrow will be hoping to alleviate its capacity constraints with a new runway. The issues London has had in agreeing new airport capacity further suggest that a city should think twice about removing capacity it already has, if it is then likely to have to find new capacity again in the foreseeable future.

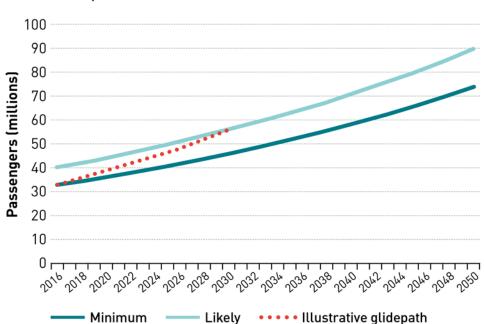


Figure 3 Growth potential for Berlin traffic

Source: Frontier analysis

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The recent collapse of Air Berlin does not affect these prospects. The economic factors driving underlying demand for air travel are far more important than the fortunes of individual carriers. This was conclusively demonstrated in Budapest after the collapse of the Hungarian national airline, Malév, in 2012. Despite the sudden loss of a carrier offering more than 40 per cent of all seats at Budapest, within two years total traffic had recovered. It has since grown by about 60 per cent thanks to the expansion of a variety of carriers including Ryanair and Wizzair.

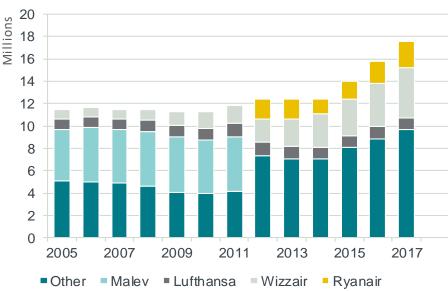


Figure 4 Seats flown, Budapest Airport

Source: Frontier analysis, OAG data

#### Enhanced airport competition could help accelerate growth

In Frontier's view, the higher traffic scenario for Berlin is extremely credible because low-cost carriers still have significant scope to expand. True, sufficient overall capacity will be needed to meet this latent demand, but airport choice and competition may also have a role to play.

There is supporting evidence of this view from the UK. In 2009, a market investigation by what was then the UK Competition Commission (CC) found there was 'no competition' between the seven UK airports owned by BAA. One of the CC's remedies was to oblige BAA to sell three of its airports. By 2014, BAA had in fact sold six of them, including Gatwick and Stansted. A 2016 review by the CC's successor, the Competition and Mergers Authority (CMA), reported that there had been considerable benefits as a result.

#### Benefits from airport competition in London

- Passenger growth: Since 2009 passenger numbers at the divested airports have grown about 10 per cent faster than at comparable UK airports, even controlling for airport-specific factors;
- Service: Service quality at Gatwick has improved significantly and reached an all-time high at Heathrow;
- Route choice: Airports have increased efforts to attract additional airlines, routes and flight frequencies;
- Airport charges: Gatwick and Stansted have struck long-term competitive deals for airport charges with their major customers. They have also agreed new charging structures, including seasonal discounts. These incentives have increased passenger volumes;
- Community and stakeholder engagement: Airports have developed stronger relationships with local communities.

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Keeping Tegel open would not only secure the airport capacity needed to meet prospective demand growth for many years, but it also increases the prospect that Berlin could benefit from stronger competition. However, this might depend on how Tegel and Brandenburg Airport are managed. London has benefited not from having multiple airports per se, but rather because they are in competition with each other. If Berlin's policy were to change and Tegel were to remain open, it would be a positive development to put the two airports under separate, independent management.

While we cannot know for sure how an independently managed Tegel would turn out, a more dynamic competitive environment would potentially promote a wider range of business models. For instance, there could be scope for a low-cost connecting "hub" at Tegel. This could in turn induce Lufthansa (or other carriers) to think seriously about establishing Berlin as a full-service hub, in addition to Frankfurt and Munich. Keeping Tegel open and under different management than Brandenburg could therefore both secure the capacity needed to meet future demand in Berlin, and increase the chances of improving the city's current poor connectivity.

There are, of course, counter-arguments. Keeping Tegel open is itself not a costless option. Further investment would be needed to improve its infrastructure and to meet tougher environmental

Some also argue that it is more efficient to provide capacity through one airport rather than two. This argument is not convincing. Evidence from airports around the world suggests that, although there are some associated fixed costs, economies of scale tend to be exhausted by the time capacity exceeds 5 mppa. This is well below the size of either Tegel or Brandenburg. Furthermore, while the network effects of hub operations may justify consolidation in some cases, neither Berlin airport is - or is likely to become - a fully-fledged hub like Heathrow or Frankfurt.

#### Conclusion

The decision to close Tegel and concentrate all Berlin's air traffic at the new Brandenburg Airport may have seemed sensible at the time it was originally made. But surging demand for air travel to and from Berlin now casts serious doubt on the decision. There is no reason to think this growth is a blip or will prove fleeting.

Serious consideration should be given to keeping Tegel open. If it closes, the capital of Europe's largest economy will be writing off viable and valuable airport capacity at the very time that rival cities across the continent are struggling to keep pace with the growth in demand.

That the new airport continues to suffer significant delays is an embarrassment for the local government and for Germany as a whole. But it also provides an opportunity for a rethink that could significantly benefit Berlin's economy. There is still time for a thorough re-assessment of the singleairport strategy and the option of keeping Tegel open.



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