



White Paper

The Delta–Virgin JV: What the Numbers Show

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Executive Summary

Earlier this year Air France–KLM acquired a 31% stake in Virgin Atlantic from the Virgin Group whose share in the airline shrunk to 20% after this transaction. This move was part of a long stream of strategic moves through which Delta and Air France–KLM built out strong positions on the lucrative London Heathrow–U.S. market.

The events triggering this deal go back almost a decade to 2008 when the EU–US Open Skies Agreement went into effect, and a series of compelling circumstances led to Delta and Virgin Atlantic launching their transatlantic joint venture (JV) on 1 January 2014. In retrospect this JV proved to be a huge success for both parties.

ICF was a key advisor to Virgin in network planning and scheduling matters before and during negotiation of the JV. We have simulated Virgin's network with and without the JV under different scenarios with our proprietary traffic flow simulation tool. This ex-ante modelling gave Virgin an independent view of their plans. Testing different concepts through scenarios helped refine the strategy and the details of the JV.

Now, several years later, we evaluate the impact and results of this JV.

ICF NetWorks Software: ICF relies on its state-of-the-art proprietary QSI tool to simulate airline partnerships and their financial impacts. Once calibrated, the software can simulate a partnership scenario in less than two hours. This way, during a typical alliance project, ICF evaluates several dozens of partnership scenarios.





ICF is a trusted advisor on airline JV matters. Our team members have participated in the negotiation of 15 different airline JVs.

A Sequence of Compelling Circumstances

From the beginning, the underlying logic for both Delta and Virgin was access to the lucrative London Heathrow-U.S. market—access that Virgin long enjoyed and Delta coveted.

2008: The EU-US Open Skies Agreement went into effect on 30 March 2008. Before this date, the UK-US bilateral allowed four designated carriers to operate between the U.S. and Heathrow: American Airlines, British Airways, United and Virgin Atlantic. With the EU-US Open Skies Agreement, Continental, Delta, Northwest and US Airways all launched services to Heathrow, eventually switching over all the services previously operated from London Gatwick.

Towards the end of 2008, Virgin Atlantic faced weakening demand and decreasing yields on its key routes in the London Heathrow-U.S. market due to an influx of competitors and the unfolding global financial crisis. On the other side of the Atlantic, Delta was also suffering from the effects of the financial crisis. Although it merged with Northwest in 2008, this did not materially change Delta's position as just one among the many serving Heathrow and having a small share of capacity on this market.

2009-2010: After a predictably disastrous 2009, the situation stabilised somewhat in 2010. However, that year, the U.S. Department of Transportation granted antitrust immunity to British Airways, Iberia and American Airlines, and United and Continental merged. At this point, Delta and Virgin Atlantic found themselves to be the marginalised players on the London Heathrow-U.S. market.

2012: The situation for Virgin and Delta turned even worse in 2012 when IAG acquired bmi and its large portfolio of Heathrow slots. British Airways' hold on the slot-constrained Heathrow capacity was further strengthened, while Virgin's prospects of organic growth or building a feeder network at Heathrow evaporated. In this situation, the logical conclusion for Virgin and Delta was to start cooperating.

2013-2014: The first major step in the Delta-Virgin Atlantic partnership occurred in 2013 when Delta purchased 49% of Virgin Atlantic. As soon as regulatory approvals of the purchase were in place, the two airlines started code-sharing in July 2013. Subsequently, after receiving antitrust immunity as well, they launched their transatlantic JV on 1 January 2014.

The Results

To evaluate the results of the JV, ICF compared situations before and after the JV by first analysing IATA PaxIS data for 2007-2015. All charts that follow reflect traffic and revenues between Heathrow, U.S., Canada and Mexico and thus exclude the effects of operations to Gatwick—most of which were eventually switched over to Heathrow after 2012.

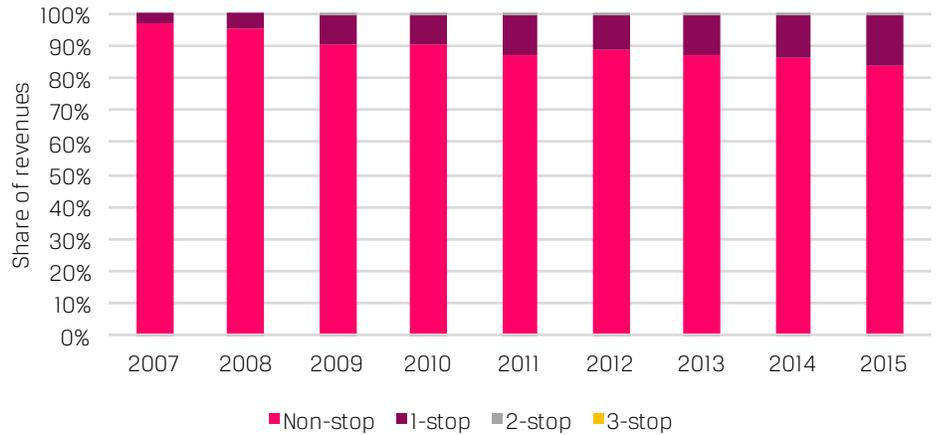
At the total revenue level, the JV was able to increase the combined revenues of the two carriers between Heathrow and the U.S., Canada and Mexico (the scope of the JV) by about 10% if we compare 2012—the last year before cooperation—to 2015 when the JV can be considered fully established. Most of this growth resulted from market conditions and the cooperation itself. Only a fraction is attributable to new activity such as Virgin's direct flights to Atlanta, launched in 2013, and Delta's new Philadelphia route, launched in 2015. The chart below demonstrates the combined revenues of the two airlines on the subject markets.

REVENUE BY OPERATOR



Between 2012 and 2015, yields on the routes within the scope improved by 18% for Delta and 11% for Virgin. Since the JV is of an incremental profit-sharing type, the airlines together enjoyed a combined 13% improvement in yields. This was achieved despite a constant increase of connecting traffic within the overall revenue mix—up from 12% in 2012 to 16% of revenue in 2015. Before 2011, Delta had a small presence at Heathrow. Therefore, traffic connecting in the U.S. was necessarily smaller. The chart on the next page demonstrates how connecting revenue gained share over the years.

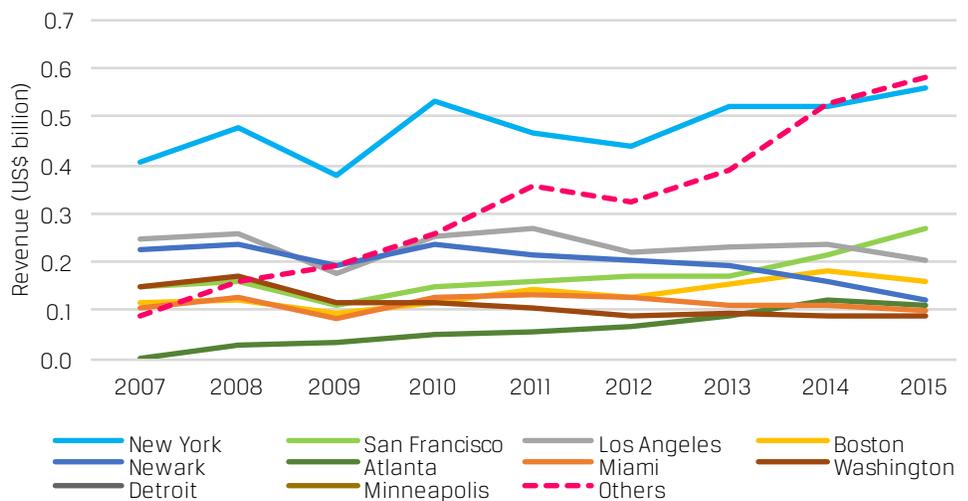
REVENUE SHARES BY ROUTING



Despite the scope of the JV including Canada and Mexico as well, the combined share of the revenues from these markets never reached 2%. The two airlines remained focused on the London Heathrow-U.S. market, and in fact, the revenue shares of the Mexican and Canadian markets decreased to below 1%.

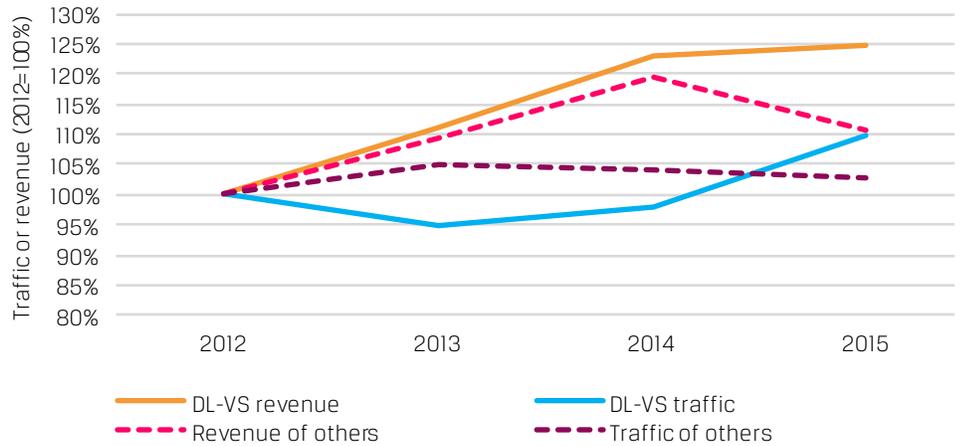
As shown on the chart below, within the U.S. some routes benefited from substantial revenue growth. New York JFK was—and remained—the most important route, generating around 25% of revenues. San Francisco, Atlanta and Boston saw substantial revenue growth, while Newark saw a decline as the JV reduced its presence there. More significantly, the remaining routes to secondary cities grew quickly as the JV introduced new routes to Seattle and Philadelphia, added capacity to Delta's powerful U.S. hubs and took full advantage of the connecting opportunities of Delta's extensive network.

REVENUE BY ROUTE



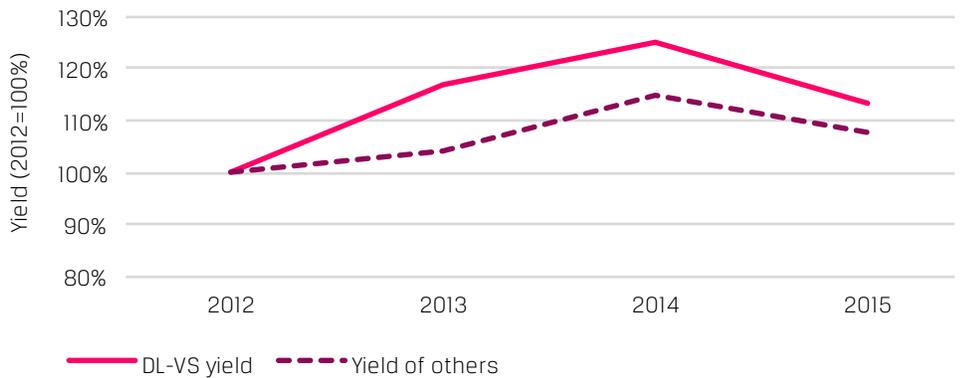
Despite all the above, the real test of the JV was how it performed in comparison to the market. The JV gained market share in both revenue and traffic, as detailed in the chart below. Between 2012 and 2015, the revenues of the JV grew approximately 25% while its traffic grew just 10%. During this same period, revenues of all the other airlines grew only 10% while traffic grew 3%.

CHANGE IN TRAFFIC AND REVENUE



More importantly, this change represented a 13% improvement in the JV's yields which, again, were significantly better than the 8% improvement that all the other carriers reported.

CHANGE IN YIELDS



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Summary

The Delta-Virgin JV proved successful and made a substantial contribution to Virgin Atlantic's overall financial recovery. The combination of the JV and Delta's shareholding in Virgin Atlantic essentially turned Virgin Atlantic into a semi-independent affiliate of Delta, and focused Virgin's plans back onto the North Atlantic opportunities it was set up to exploit rather than on seeking greater network presence and feed at Heathrow.

Delta paid US\$360 million for the 49% stake in Virgin Atlantic. For this amount, it gained significant influence over the other airline, including Virgin's valuable portfolio of Heathrow slots. Delta was also able to forge the hugely successful JV, and to channel substantial transatlantic traffic via its own hubs. Together with Delta's parallel JV with Air France-KLM, the Virgin venture cemented Delta's position as the number one airline in New York with a strong presence in key international as well as domestic routes, and especially New York's largest business class market: Heathrow. Air France-KLM's acquisition of the Virgin Atlantic shares this year was the conclusive step for the SkyTeam carriers to cement their position on the transatlantic markets.

About the Authors



Edmond Rose is a subject matter expert in airline commercial matters, including partnerships and alliances, as well as network planning and pricing and revenue management. He was Commercial Director of Virgin Atlantic where he negotiated and implemented the JV with Delta and directed Virgin's airline partnerships as well as its fleet and network planning and RM. Prior, Edmond worked as a consultant and for British Airways as Head of Regulatory and Political Affairs. Edmond brings 20 years of industry experience to our team and an exceptionally deep knowledge of the European airline market.



Andras Bognar is an aviation economist in ICF's London office. Over the last 15 years, he has worked extensively in the aviation industry, specialising in airlines and airports. Andras is an expert in airline alliance matters, and as an economist, Andras' technical skills include forecasting, financial modelling, business process re-engineering, organisation design and related analyses. He has performed these tasks for airlines, airports, maintenance organisations, ground handlers, training providers and other companies in aviation.

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