

# CRA Competition Memo



## Ryanair/Aer Lingus: Flight Cancelled

The European Commission's decision to prohibit Ryanair's proposed takeover of Aer Lingus (M.4439) has been vocally criticised by Ryanair as "politically motivated" and inconsistent with past practice (e.g. *Air France/KLM* and *Lufthansa/Swiss*, approved in Phase I with slot remedies). However the assessment that the merger would have been anti-competitive flowed directly from economic analysis.

The theory of harm was straightforward: given the significant horizontal overlap between the two carriers, the elimination of competition resulting from the transaction would likely lead to higher fares. The case thus turned on empirical evidence about the competitive interaction between the parties, on the prospects for credible new entry, and on the potential for the efficiencies claimed by Ryanair to offset the competitive harm. This case differed from earlier airline mergers and led to competition concerns which could not ultimately be remedied. It is also notable for the significant part played by empirical analyses submitted by both parties, and validated by the Commission and its experts through a formal "dataroom" exercise.<sup>1</sup>

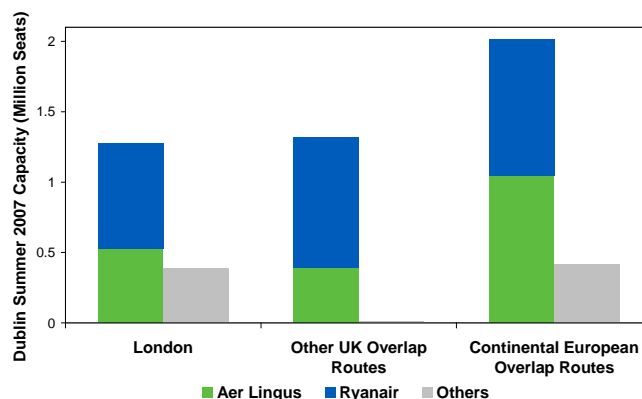
### Background

The proposed merger would have brought together the two leading Irish airlines, Ryanair and Aer Lingus. Ryanair has its second largest European base in Dublin. Having introduced the low-cost, low-fare model in Europe in 1991, it has grown rapidly to 19 bases across Europe and carried 42.5 million passengers in 2006 on more than 400 routes. Aer Lingus is the Irish flag carrier, operating more than 70 short-haul European routes out of Ireland (as well as long-haul flights primarily to the US). Since 2001 Aer Lingus has repositioned itself on the low-cost, low-fare model for its European routes, eliminating business class and offering one-way non-refundable fares. Unlike previous airline mergers, this case concerned two primarily no-frills airlines whose main European focus was on point-to-point operations and leisure passengers, and which, moreover, shared a major base at Dublin Airport.

### Unilateral effects in short-haul flights out of Ireland

The proposed merger implied a high level of overlap between Aer Lingus' short-haul European operations and Ryanair's operations out of Ireland. The focus of both carriers on point-to-point leisure passengers broadens the markets in which the two airlines compete, as these passengers are more likely to consider different airports serving the same city as viable alternatives (even when travel times to the final destinations differ), and do not need to fly to a primary airport hub in order to connect with another flight. With Aer Lingus currently accounting for about 34% of total short-haul capacity at Dublin, and Ryanair for about 46%,<sup>2</sup> the merger would have resulted in a very significant increment for short-haul traffic out of Ireland, in contrast to previous consolidations (e.g. in *Air France/KLM* the incremental effects at the main affected airports – CDG and Amsterdam – and the number of overlap routes were both much smaller).

The Commission's investigation found that the two carriers competed directly on 35 Irish routes (32 out of Dublin), including all of the major city destinations from Dublin. These routes jointly accounted for close to 70% of short-haul capacity at Dublin. The merged entity would have had a monopoly position on 22 of the overlap routes, and an average share in excess of 85% on the 35 overlap routes.



Since restructuring in 2001, Aer Lingus more than doubled its short-haul destinations. Ryanair also greatly expanded its network out of Dublin, with a more than 4-fold increase since 2002. Growth by both airlines has significantly broadened the overlap between them (from 8 routes in 2001 to the current 35). The fact that most of Ryanair's expansion is relatively recent also implies that Ryanair has typically entered routes where Aer Lingus was already present – providing an ideal "natural experiment" to test for the intensity of the competitive interaction between the two.

In spite of the scale of the competitive overlap, Ryanair maintained that the merger would not have anti-competitive effects because the two airlines did not compete to any significant extent. It argued that its low-cost approach, flying to secondary airports rather than to the primary airports served by Aer Lingus, meant that the two carriers served different pools of potential passengers. Ryanair also claimed that the two airlines would continue to compete after the merger, and that it would lower Aer Lingus' fares by applying its low-cost model.

These claims are not supportable. Even if the services offered by Aer Lingus and Ryanair are differentiated in terms of quality, price and destinations (primary vs secondary airports), it does not follow that the two carriers do not impose a competitive constraint on each other. Rather, the question is the significance of such a constraint. The notion of Ryanair as a sort of "benign monopolist" once the most significant alternative to itself had been removed is also hard to reconcile with simple economic incentives. Empirical evidence clearly showed that the two carriers are each other's closest rivals, and given the strength of their competitive interaction, the merger would have created incentives to increase fares.

### Airport to Airport or City to City?

For 20 of the 35 overlap routes, Ryanair and Aer Lingus served different destination airports from Ireland, and therefore overlapped only on a city-pair basis and not on an airport-pair

<sup>1</sup> Aer Lingus was advised by a team of Charles River Associates economists including Cristina Caffarra, Giulio Federico, Hugh Wills and Daniel Donath.

<sup>2</sup> Based on capacity data for Summer 2007 from the Dublin Airport Authority.

basis. Important quantitative evidence that the carriers' customers viewed these primary and secondary airports as direct substitutes was generated by the passenger survey carried out by the Commission at Dublin Airport.<sup>3</sup> This indicated that on most routes surveyed, a substantial proportion of passengers had considered services into other airports serving the same city when choosing their flight. The survey results showed that point-to-point leisure passengers view secondary airports (typically further away from the city centre) as acceptable substitutes, if fares are sufficiently lower.

This evidence was consistent with the apparent rivalry between Aer Lingus and Ryanair in the market place. Ryanair routinely advertises its destination airports by reference to the city which they serve, and compares its fares to Aer Lingus' on the basis of city-pair overlaps. Both airlines monitor each others' prices, and both use yield management software that adapt fares to variations in demand caused by changes in competing airlines' capacity and pricing. Ryanair also reacts directly to Aer Lingus' promotions.

### Econometric analysis of unilateral effects

The second major piece of empirical evidence suggesting that the merger would have resulted in significant unilateral effects was an econometric analysis of the competitive interaction between the parties.

Aer Lingus submitted a regression analysis of its monthly fares, passengers and capacity data for the period 2002 through 2006. The purpose of this analysis was to investigate the impact of the competitive environment (number of rivals on a given route, their share of capacity, and presence of Ryanair) on the fares Aer Lingus was able to charge, as well as its load factor (the proportion of seats occupied). Robust econometric evidence emerged from this data based on a panel data technique, which exploited variation in competitive conditions on each specific route over time. The recent history of Ryanair's entry on several routes where Aer Lingus was already operating allowed for a natural application of panel data techniques to the estimation of competitive effects.

The analysis considered specifically Aer Lingus routes where Ryanair entered since 2002, and compared the level of Aer Lingus' fares *after* Ryanair entered with the level *before*. We found a robust and significant effect: where Ryanair had entered a route flown by Aer Lingus, Aer Lingus' fares were reduced and load factor declined. Ryanair's presence at the same destination airport and at a different destination airport (for the same city) had similar (negative) effects on Aer Lingus fares. We also found that the impact of Ryanair's presence on fares for Aer Lingus' passengers originating in Dublin was even larger.

A similar approach was adopted by the Commission, with data from both parties. The Commission's regression analysis formed part of the evidence used to demonstrate the existence of significant competitive constraints between Ryanair and Aer Lingus.

Because Aer Lingus had been on the whole the first-mover on overlap routes out of Ireland (it had not entered or exited city-pair routes where Ryanair was already present), the "before and after" econometric analysis was necessarily less informative about the impact of Aer Lingus on Ryanair. But the identification of a clear competitive constraint from Ryanair to Aer Lingus unambiguously shows that there is a group of passengers who view the airlines as close substitutes, and are prepared to switch between them in response to price changes. The existence of these "marginal" customers, and

the relatively symmetric positions of the two carriers in the Irish market<sup>4</sup>, imply that competition currently restrains the fares of both airlines. This constraint would be lost as a result of the merger, leading to adverse unilateral effects and higher fares for *both* carriers.

The Commission provided the parties' economists with confidential access to all key submissions and datasets received, to allow for extensive checking and comments on the various analyses. While dataroom exercises have been conducted in the past, the exercise for this case was more exhaustive and rigorous, and a welcome development.

### An irremediable deal?

The Commission's standard approach to competition problems in earlier airline mergers had been to adopt slot remedies in order to facilitate new entry. In this case however the slot remedies offered by Ryanair were deemed insufficient to promote such entry and thus offset the anti-competitive effects of the transaction.

As the overlap between the parties' operations at Dublin Airport was so extensive, new entry on a large scale would have been required to replace the competition that was being removed. Such entry would have required access to significant peak slots (which in principle Ryanair could have made available); but it also risked generating unsustainable over-capacity in Dublin. This prospect alone was likely to deter a would-be entrant from taking on the merged entity on its home turf. Introducing further conditions to encourage entry (e.g. a commitment by the merged entity to reduce frequencies to accommodate a new airline based at Dublin) would have created serious risks of rigging competition at Dublin, and facilitating de-facto collusion. Such an outcome would have been inferior to the current healthy rivalry between Aer Lingus and Ryanair, again with a detrimental impact on consumers.

Ryanair's further offer of behavioural commitments (e.g. a one-year reduction in Aer Lingus' fares) was also deemed insufficient to address the structural reduction in competition, also because it notably excluded any commitment on Ryanair's own fares.

Finally, Ryanair's efficiency claims were largely based on plans to reduce Aer Lingus' costs below current levels, rather than optimising the operations of the two carriers, and improving the combined operations of the merged entity. The Commission therefore agreed that Ryanair's claimed efficiencies were mostly not merger specific, and anyway unlikely to offset the post-merger incentive to increase fares. The Commission also rejected Ryanair's claims that the greater buyer power the combined entity would be able to wield would necessarily benefit consumers.

### Conclusion

*Ryanair/Aer Lingus* is the first airline merger blocked by the European Commission. The unique facts of this case called for such an outcome. Significantly, the econometric analysis of the competitive interaction between the two airlines provided clear evidence that the merger would have created sizeable unilateral effects. It also directly contradicted Ryanair's claim that it only competed with Aer Lingus on limited airport-pair overlaps, and demonstrated instead that the competitive overlap affected the vast majority of all Irish air-travel. Given the scale and nature of the overlap, slot remedies were simply not sufficient to prevent a lessening of competition.

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<sup>3</sup> The Commission also relied on other qualitative evidence obtained during its investigation to establish that most of the potential overlap routes could be defined on a city-pair basis.

<sup>4</sup> The results of the customer survey also indicated that in general a substantial proportion of Ryanair customers viewed Aer Lingus as an alternative in the same way that Aer Lingus passengers viewed Ryanair as an alternative.