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## Low-cost, long-haul –

# Flight of fancy or business of the future?

An analysis of the prospects for European carriers

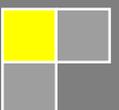
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## **Low-cost, long-haul – Flight of fancy or business of the future?**

Flying long-haul at low cost with Lufthansa by the end of 2015? On the face of it, this recent strategic announcement by Europe's market leader seems a bold move. After all, the track record of low-cost, long-haul start-up business in Europe has, so far, been fairly dismal. Norwegian Air Shuttle is currently the only European budget carrier that offers such flights. Yet the concept of low-cost, long-haul flights seems full of promise and therefore tempting even for legacy carriers such as Lufthansa: AirAsia X, Cebu Pacific, Scoot and Jetstar Airways are all solid examples of carriers who successfully serve price-sensitive customers on long-haul routes. However, these carriers all operate out of the Asia Pacific region. PROLOGIS has undertaken an analysis of the prospects for low-cost, long-haul operations in Europe. With this study, we hope to provide you with a better insight into the risk/opportunity profile of this business concept for European carriers – one that will make you understand better why Lufthansa's plans are becoming a distinct possibility.

### **What is happening in Europe?**

It was only at the beginning of this month that Lufthansa publicly confirmed the launch of their low-cost, long-haul services. Branded as Eurowings, Europe's largest airline group is planning to begin intercontinental operations in late 2015. Initially, the airline will operate three A330-200 aircraft, each with a capacity of 310 seats, out of Cologne-Bonn airport to destinations in Florida, the Caribbean and the Indian Ocean.<sup>1</sup> SunExpress, the joint venture airline of Lufthansa and Turkish Airlines, will service the new routes. This could be a way of increasing the competitiveness of the Lufthansa Group in leisure markets, and thereby gaining market share in the business segment of carriers such as Condor and Thomsonfly. This approach also allows Lufthansa to explore the possibility of low-cost, long-haul operations and gain first-hand experience of driving this business model, without running the risk of jeopardizing the Lufthansa brand. In addition, the Eurowings concept could be a way of countering the strong competition that the European legacy carriers are facing from European low-cost carriers (LCCs).

This specific approach came as a surprise to many. According to Ryanair's management, in order to make economic sense, a start-up low-cost, long-haul approach requires a minimum of 40 to 50 aircraft. Hence, the lack of availability over the next few years of suitable, fuel-efficient jets, such as Boeing's B787 Dreamliner and Airbus' A350, has led Ryanair to postpone the launch of a long-haul budget carrier for the foreseeable future.<sup>2</sup> Nevertheless, Lufthansa envisages starting the service with A330s, possibly replacing these by new generation wide-bodies, if the concept turns out to be viable.<sup>3</sup>

Norwegian Air Shuttle, which has been operating low-cost, long-haul services for more than a year, was able to develop its service due to the early acquisition of Dreamliners. With a fleet of seven B787-8s, the Scandinavian hybrid carrier is the only European airline that currently offers low-cost intercontinental flights. Another B787-8 will join its fleet in 2015, with a further nine B787-9s on order.<sup>4</sup> The expansion of the fleet is in line with the airline's plans to increase services on successful existing routes next spring.<sup>5</sup> Norwegian currently offers 17 routes between Europe and the US, as well as to Asia. Intercontinental flights are offered from London, Copenhagen, Oslo and Stockholm. There is,

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<sup>1</sup> Lufthansa (2014)

<sup>2</sup> FVW (2014)

<sup>3</sup> CAPA (2014a)

<sup>4</sup> ch-aviation.com (2014)

<sup>5</sup> Norwegian.com (2014)

however, no reliable indication of the profitability of these services as yet. Norwegian employs Thai crew members.<sup>6</sup> This allows them to retain airfares at customer-friendly levels and provides additional downward pressure on all airfares. Not surprisingly, Norwegian comes under fire from European and US legacy carriers as a result. It remains to be seen whether the current competitive advantage that Norwegian appears to have as a result of the use of its fuel-efficient aircraft and its low labor cost will be translated into medium- and long-term returns.

### Analysis of Potential Cost Advantages

PROLOGIS has investigated the potential cost advantages of European low-cost carriers venturing into long-haul services. More precisely, the transferability of LCCs' short-haul success factors (see table 1) into low-cost, long-haul prospects was examined. The nine success factors under consideration included

- |  |   |
|--|---|
| (1) the point-to-point network concept | (5) high fleet utilization and fast turnarounds |
| (2) single class segmentation          | (6) low labor cost                              |
| (3) operating with a homogeneous fleet | (7) low overhead costs                          |
| (4) the no-frills concept              | (8) low distribution costs and                  |
|  | (9) serving secondary airports.                 |

LCC business model elements	Cost advantage	Main determinants	
Point-to-point (PTP) network	Low	- Unsuitable: need for feed & connectivity - Few (highly competitive) markets retain PTP-flights	Empirical analysis (interviews)
Single class segmentation	Low	- Unsuitable: need for multi-class segmentation - Cross-subsidization & seasonal demand require business class	
Homogenous fleet	Substantial	- Unified fleet allows for cost advantages - Ensure good fit selected aircraft with greater variety markets, ranges and capacity	
No-frills	None	- Retained cost advantage insignificant, partly due to cost breakdown long-haul flight operations - Less opportunities to gain ancillary revenues due to less flights per day	
High fleet utilization & fast turnaround	None	- Inability to exceed average block hours of competition - Increased stage length reduces ground time, i.e. fast turnaround increasingly less relevant	Theoretical analysis
Low labor cost	Moderate	- Young organizations, no previous concluded labor agreements - Lower crew productivity long-haul services (i.e. overseas accommodations)	
Low overhead cost	Moderate	- Simplicity operations largely maintained - No overhead 'burden'	
Low distribution cost	Low	- Serving long-haul markets require LCCs to depend on GDS and travel agents - Increased costs due to promotion efforts in long-haul markets	
Secondary airports	None	- Unsuitable: Too remote from demand, need for connecting opportunities	

**Table 1.** Applicability of cost advantages to long-haul flight operations (source: PROLOGIS)

<sup>6</sup> ALPA (2013)

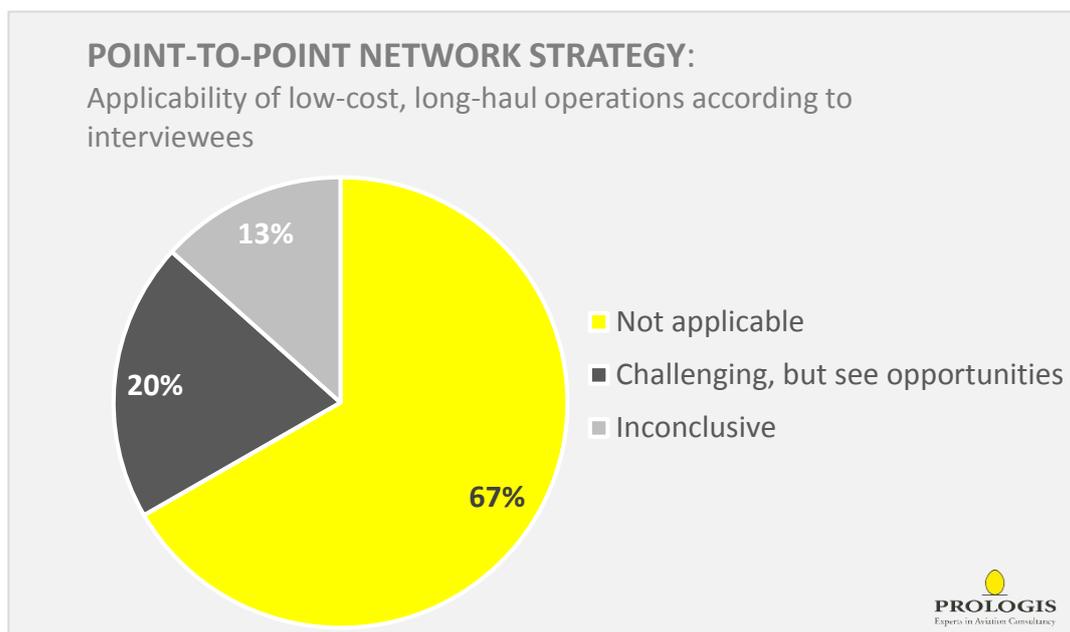
In order to gain a closer and deeper understanding of factors (1) to (4), explorative research was conducted by means of comprehensive interviews with both board members and senior managers of airlines as well as with aviation consultancies across Europe. Factors (5) to (9) were analyzed through a literature review, as sufficient information was available. Special focus was placed on the network structure (1) as well as the cabin class concept (2), as these were deemed to be the critical factors by the market experts, and which therefore merited further investigation.

**The Point-to-Point network concept: Is it applicable?**

When LCCs consider entering the market for long-haul flights, the question of network design becomes a crucial factor. The point-to-point (PTP) concept has proven to be successful for low-cost operations within short- and medium-haul markets over the past decade. It was established by LCCs to reduce complexity and achieve substantial cost savings. When it comes to long-haul traffic, however, the hub-and-spoke model appears to remain the network concept most likely to generate profits.

Statements regarding the PTP network ranged from “*very difficult and challenging*” to “*will not work*”.

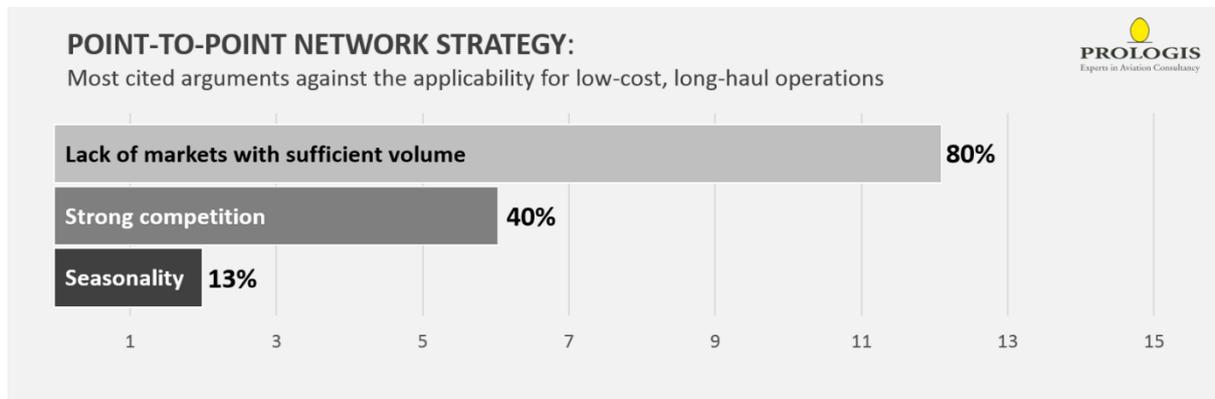
The study results confirm the suitability of the hub structure for low-cost, long-haul operations: 67% of those interviewed were of the opinion that a point-to-point network structure would be less appropriate in a long-haul operating environment (see table 2). Statements ranged from “*very difficult and challenging*” to “*will not work*”.



**Table 2.** *Applicability of the Point-to-Point network strategy to long-haul flight operations (source: PROLOGIS)*

A significant majority of the interviews (80%) cited the lack of markets with sufficient volume as a decisive argument against the applicability of point-to-point operations (see table 3). The relatively few markets which are considered to benefit from sufficient local demand to enable point-to-point flights include New York, London and Amsterdam. As pointed out by 40% of the interviewees, competition against legacy carriers with well established networks on high volume routes is strong. Intense competition results in low yields and reinforces the argument against a point-to-point network.

Moreover, 13% of the market experts interviewed also saw seasonality as a challenging factor and doubt whether there would be sufficient year-round feed, especially during the European wintertime.



**Table 3.** *Most cited arguments against Point-to-Point for low-cost, long-haul operations (source: PROLOGIS)*

Several interviewees suggested that reduced flight frequency could help the airlines solve the lack of point-to-point demand on some routes. Norwegian employs just such a low-frequency schedule during certain periods of the year, serving some US destinations only twice a week (LGW-LAX/FLL). But lower frequencies have also disadvantages. Firstly, it becomes harder to exploit the utilization of aircraft to their full potential and hence efficiency. Secondly, such routes become less attractive for passengers in transit, who make up the largest tranche of passengers on long-haul flights: Lower frequency of flights makes transit more difficult and affects the quality of an airline's schedule from a passenger perspective.<sup>7</sup>

The advantage of a hub-based network over a point-to-point network for long-haul operations is clearly to be able to generate sufficient demand. This is by means of connectivity and feed traffic, which network carriers seek to increase with the use of interline and codeshare agreements. Such airline partnerships are, however, a good example of strategic business components which were originally abandoned by LCCs in order to simplify operations. The issue remains as to whether low-cost, long-haul airlines can establish profitable networks without entering into bilateral and multilateral agreements. This becomes an even more legitimate question when the fact that European LCCs have increasingly moved towards interline and codeshare activities for short- and medium-haul traffic is taken into account.\* Oasis Hong Kong, for instance, did not embrace interline agreements and therefore lacked connecting flight opportunities. The carrier, which ceased operations in 2008 after only 18 months, was said to have significantly underestimated the high percentage of transit passengers.<sup>8</sup>

AirAsia X successfully feeds its long-haul flights through the short-haul network of its parent corporation, AirAsia. Using this as an example, it seems that developing low-cost, long-haul services in conjunction with an own solid short-haul network or an already successfully operating network carrier

\* European LCC and hybrid codeshare partnerships have increased by 17% between 2008 and 2013. (PROLOGIS, 2013)

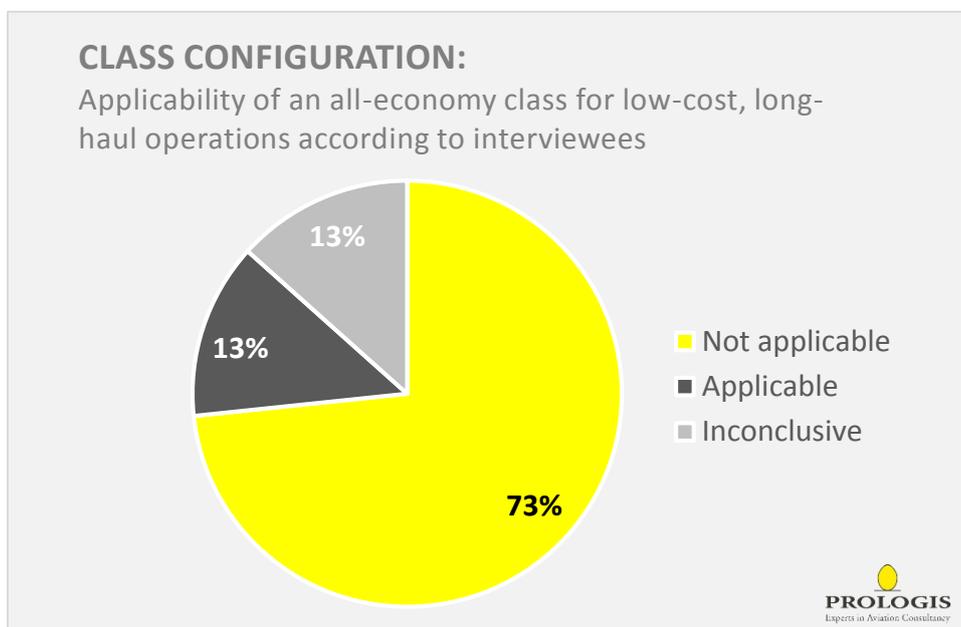
<sup>7</sup> Gatwick Airport (2014)

<sup>8</sup> Morrell (2008)

may have higher chances of success: this was also proposed by several of the interviewees. Nevertheless, such approaches can be challenging. Both short-haul network passengers and passengers of legacy carriers are not necessarily the type of clients who aspire to use low-cost, long-haul travel.

**All-economy configuration: Does the concept need to be adapted?**

PROLOGIS’ analysis also demonstrates that an all-economy class configuration for low-cost, long-haul operations is less appropriate. The majority of interviewees (73%) were not enthusiastic about this approach within Europe (see table 4). In some areas of the Asia Pacific region, however, premium demand is limited. This drives carrier Cebu Pacific, for instance, to operate with an all-economy configuration. The optimal use of high-density seating with 436 seats in their A330-300s (as compared with 231 seats total capacity in the same aircraft with Etihad), allows the Philippine airline to achieve very low unit costs.<sup>9</sup>



**Table 4.** *Applicability of an all-economy class concept (source: PROLOGIS)*

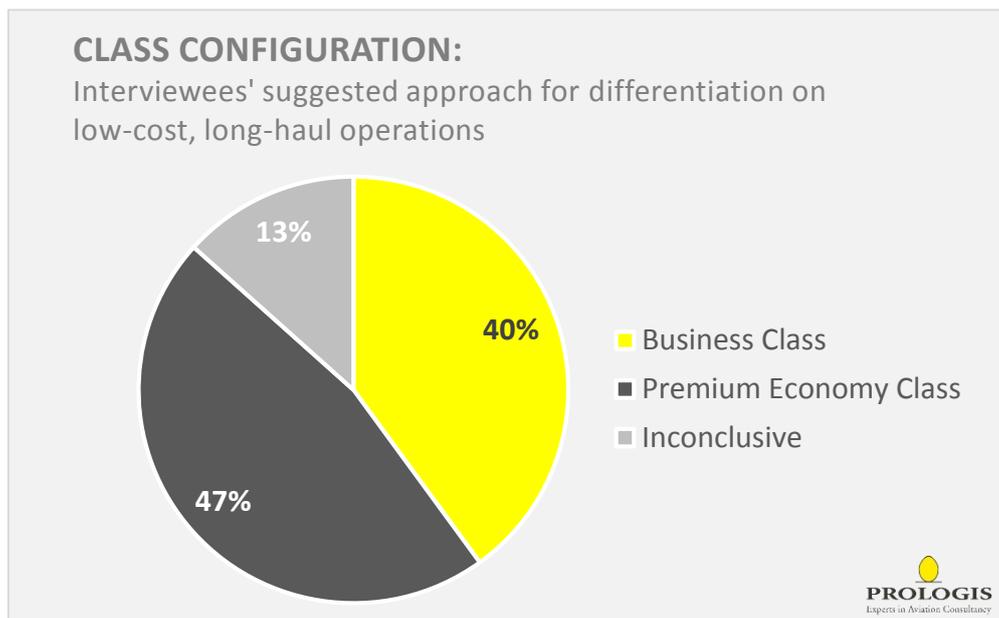
For low-cost, long-haul operations out of Europe, those interviewed spoke in favor of a differentiated cabin class concept: *“In simple terms, to make long-haul viable, you need business, economy and cargo.”* Another interviewee argued: *“I think that it will be extremely difficult to have a profitable operation catering for only economic or budget-focused passengers.”* The alternative of having premium class to business class was also mentioned (see table 5): *“[Offer] premium economy, so something in between, which is affordable for many people who have higher expectations with regards to service.”* Practical examples given included Norwegian long-haul and charter carriers, who operate a premium class as

*“[Offer] premium economy, so something in between, which is affordable for many people who have higher expectations with regards to service.”*

<sup>9</sup> CAPA (2014b)

opposed to a business class. However, it is questionable whether a premium class, yielding less revenue compared to business class, allows for cross-subsidization.

If a business class is adopted, cross-subsidization can be achieved, which helps realize LCC-typical cheap economy airfares. 40% of the interviewees supported this idea. *“AirAsia X has introduced flat beds. They offer only a minimal number. But if they want to be competitive and effectively lower the prices for the cheap end of the market, the only way to do that is cross-subsidization in the same way as the others do it.”* Furthermore, two interviewees mentioned seasonality as a driver for adding a business class, as this helps to generate adequate revenue during periods of lower demand.



**Table 5.** Preferred class configuration approach for low-cost, long-haul operations (source: PROLOGIS)

Yet by offering business class seats LCCs would go head-to-head with legacy carriers on their most lucrative product. According to several of the interviewees, a fierce response from competitors must be expected: *“The traditional carriers may be able to turn a blind eye or not worry about a few economy seats sold on a low-cost carrier. But if those start taking the real bread and butter of these airlines, which is their business and first class passengers, they will all fight back very, very hard.”* Other issues raised concerned the increased organizational complexity associated with a multi-class concept, the lack of interest by business travelers, and distrust in the quality of a low-cost carrier’s business class product.

#### **Further success factors: Can they save costs?**

##### *Homogenous fleet: Achieving efficiencies*

Operating a single aircraft type results in lower maintenance and training costs and was thus initiated by low-cost carriers for the short- and medium-haul market. Applying a homogenous fleet for long-haul operations also seems to produce substantial cost efficiencies: all interviewees advocated a single type fleet. Nevertheless, it was also emphasized that the variation in markets, range and capacity should be carefully dealt with. Demands on an aircraft can be very different during a 6-to-8-hour flight,

compared with, for instance, an 8-to-12-hour route. *“But then again, you need to find those routes which are the perfect fit for the aircraft, or for which the aircraft is the perfect fit”,* said one senior consultant.

#### *No-frills concept: Generating ancillary revenues*

Traditionally, low-cost airlines operate according to the maxim ‘if you want something extra, you have to pay for it’. Budget airlines have therefore developed a model of generating ancillary revenues. Yet in long-haul markets, experts are skeptical as to whether the no-frills concept will really yield significant cost advantages over legacy carriers. As one interviewee pointed out: *“It is largely irrelevant in the overall cost picture. It only amounts to a couple of percentage points.”* There is also less chance of pushing ancillary revenues hard as a revenue stream in the long-haul sector. One interviewee explained: *“Many of those charges are a per flight charge: even if it is a longer flight, it is still just a per flight charge. I don’t know how much more they’re going to get.”*

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#### *High fleet utilization & fast turnarounds: No competitive advantages*

By minimising the time spent on turnarounds, LCCs were able to maximize the time spent in the air, thereby leaving traditional carriers trailing far behind with regard to efficiency. However, these competitive advantages are not believed to be transferable to the long-haul routes. The increased stage lengths and consequent decrease in rotations mean that these benefits are reduced.<sup>10</sup> Furthermore, secondary airports lack sufficient feeder traffic to facilitate long-haul operations and connectivity opportunities, as well as the appropriate amenities. This aside, the fact that there are fewer turnarounds means that the relatively lower charges of secondary airports have less of an impact on total operating costs.

#### *Labor and overhead costs advantages*

The LCC-typical mindset of efficiency and simplicity is perhaps most visible in their approach to staff management and organizational structure which results in major cost efficiencies. This presumably also holds true for European LCCs that are seeking to operate long-haul routes. LCCs have other significant advantages over legacy carriers, such as the relative youth of their organizations. For one, this means that they are not constrained by legacy labor agreements, which allows them to keep labor costs low. Secondly, they are not likely to have inherited rigid and complex organizational structures.<sup>11</sup> However, on long-haul routes, there is less scope to achieve higher crew productivity, as staff cannot return to their home base after each trip.<sup>12</sup>

#### *Distribution efforts and challenges*

In line with their simplification strategy, LCCs originally focused on direct sales via their websites and via call centers. However, in an attempt to attract more business travelers, they have increasingly steered their distribution strategies towards more indirect channels. With respect to the long-haul markets, LCCs

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<sup>10</sup> Moreira et al. (2011)

<sup>11</sup> Francis et al. (2007)

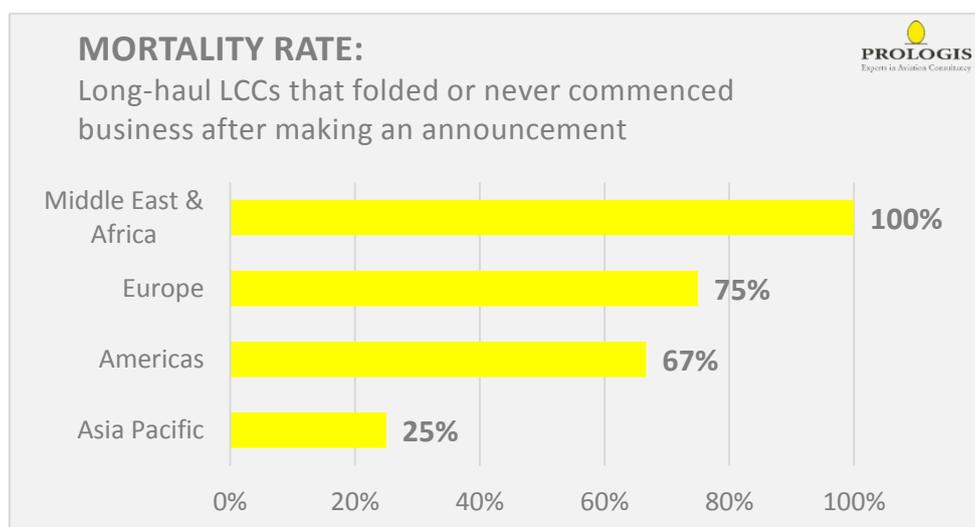
<sup>12</sup> Dennis (2007)

will most likely depend on Global Distribution Systems (GDS) and travel agents for selling their capacity. Particularly in new and unfamiliar long-haul markets, the distribution cost differential compared to that of legacy carriers can be assumed to be minimal.<sup>13</sup> In this context, it should be noted that entering a new market is always accompanied by promotional efforts. Whereas airlines may benefit from sufficient brand awareness in their home markets, entering long-haul markets requires them to put significantly more effort into establishing a brand presence. To increase passenger uptake, PR campaigns have to be delivered<sup>14</sup>, which usually come at a high cost. Norwegian realized this necessity when they launched long-haul flights from the UK in the summer of 2014, and selected a global advertising agency to raise brand awareness. The campaign was rolled out not only in the UK, but also in Scandinavia, North America and Germany.<sup>15</sup>

In summary, it would appear that the factors which have contributed to the success of European LCCs on the short-haul routes are only marginally transferrable to long-haul markets. As this analysis is solely focused on the cost perspective, however, conclusions about the general viability of low-cost, long-haul operations are hard to draw at this point in time. Further examination of the changing breakdown of operating costs on long-haul routes will need to be made. As stage lengths increase, fuel costs rise proportionally, making it even more difficult for LCCs to achieve operating cost advantages over legacy carriers. To this end, some argue that LCCs should only pursue sectors up to a maximum flight time of 7 or 8 hours.

### Regional differences: Better prospects in Asia

Whereas the business case of low-cost, long-haul flight operations is being questioned in Europe and the Americas, the concept already thrives in Asia Pacific. According to PROLOGIS' market research, the success rate of long-haul LCCs in this part of the world is significantly higher than in other regions.



**Table 6.** Mortality rate of low-cost, long-haul operational attempts by region (source: PROLOGIS)

<sup>13</sup> Holloway (2008)

<sup>14</sup> GHC (2014)

In the Americas and Europe, the mortality rate of low-cost, long-haul carriers is at 67% and 75%, respectively. This includes all LCCs who have at some time announced or started long-haul operations, but subsequently went out of business. In Asia, this rate is merely 25% (see table 6).

A recently published travel report by OAG Aviation Worldwide mentions the “rapid market growth with massive potential demand” as well as the significantly large population as positive characteristics of the Asian market. The report emphasises how the LCCs operating there have a profound understanding that the hub concept and feeder traffic are essential prerequisites for the low-cost, long-haul business to succeed.

### **Conclusion and outlook**

In contrast to Asia, Europe has not witnessed many low-cost, long-haul start-up attempts – and the ones that did try failed to a very large extent. This speaks volumes for the many risks and challenges of this business idea. Nevertheless, hybrid carrier Norwegian seems to have found a way to make it work – at least for now. It remains to be seen if the airline’s financial success will be strong enough to let it exploit its high fleet investments.

PROLOGIS’ analysis indicates that European budget carriers operating long-haul may find it difficult, but not impossible to achieve cost advantages over legacy carriers. Two of the most important conclusions of this analysis are: The majority of market experts believe that neither a single class segmentation nor a point-to-point network can be applied on long-haul operations. Nevertheless, concrete recommendations with regard to a long-haul low-cost concept for European carriers cannot be derived directly from the results of the analysis. It would seem that best-practice for a low-cost, long-haul business model has not yet been found.

Kicking off in the long-haul LCC business with a subsidiary, Lufthansa is applying an approach which differs greatly from Norwegian. It will be interesting to see if the new Eurowings brand will manage to attract enough passengers; and whether it will profit substantially from factors such as the group’s large network, airline partnerships, brand awareness and financial backbone. Perhaps this launch will be the cornerstone of a new and successful low-cost, long-haul business model for European carriers.

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