The new Eurowings flights from Germany – Breakthrough for 'long haul low cost' or just old wine in new bottles?

Discussion Paper

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Abstract

During Berlin's ITB travel trade fair in March 2015, Lufthansa Group has named the first 'low cost long haul' destinations for revitalized Eurowings, which are going to be operated by SunExpress Germany. For the first time since the early 90's, LH Group is going to fly long haul out of Cologne/Bonn, one of Europe's pioneer low cost airports, whose management has consistently been predicting the inauguration of 'low cost long haul' flights. The objective of this paper is to have a critical look at this new product to assess to what extent it meets the fundamental low cost criteria and if it may be seen as breakthrough for the 'long haul low cost' business model in Germany.

First, we review the vast literature on low cost carriers to sum up the essential cost- and revenue related characteristics of their business model, and to discuss its transferability to long haul operations. Second, we have a closer look at the new 'low cost long haul' product as announced by Eurowings and then assess its compatibility with the low cost carrier (LCC) principles. We also discuss the general reasoning behind Lufthansa's move.

We find that major parts of the business model have more in common with traditional long haul leisure operations of holiday carriers such as airberlin and Condor than with the low cost philosophy of Ryanair and the likes. However, some LCC principles like 'no free catering' or 'baggage charges' apply for passengers travelling at the lowest fares. It is still too early to predict if the Eurowings product can be regarded as breakthrough for 'low cost long haul' flights. The actual choice of holiday destinations by Eurowings, though, indicates a quite conservative approach with only limited potential for supply-driven market stimulationon routes to Dubai and Bangkok. In any case, irrespectively of the question if the new product itself is 'low cost' or not, Lufthansa seems to have sound internal reasons for inaugurating the Eurowings long haul flights, as it could help significantly reducing staff costs also on longer distances.

Structure

1 Introduction

The low cost carrier (LCC) business model has revolutionized air transport first in the US and later in Europe and most other developed aviation markets in the world. Discount carriers[1] like Southwest, Jetblue, Ryanair and easyJet, but also the likes of Gol, Air Arabia or Air Asia are familiar to millions and carry growing numbers of passengers each year.

The LCC business model has so far been applied to short and medium haul operations almost exclusively, with transcontinental services in the U.S. or flights from Central Europe to the Canary Islands being among the longest segments offered. Reasons include higher shares of cost items that are quite independent from the actual business model on long haul sectors, like ATC charges or fuel costs. This makes it more difficult for LCC to gain a sufficient cost advantage over traditional airlines on long segments, and hence results in reduced scope for demand generation. Also, it is questionable how many travelers would prefer a (probably) nonstop low cost product over a discount-prized indirect routing offered by a traditional full service network carrier (FSNC).

Nevertheless, ‘low cost long haul’ (LCLH) flights have been a hot topic both in air transport research and for practitioners. The first attempt to fail was Laker’s Skytrain in the early 80’s. In Europe, at present, only Norwegian seems to successfully offer services labelled as “low cost long haul”, which go from Scandinavia and London Gatwick. In Asia, operators like AirAsiaX, Jetstar and Scoot operate widebody fleets with a total of almost 40 aircraft for long-haul low cost flights in the Asia/Pacific region with a growing extent.

With the launch of the Germanwings and Hapag Lloyd Express low cost operations in 2002, Cologne/Bonn airport has turned into one of continental Europe’s largest low cost airports. Since then, its management has repeatedly been predicting upcoming LHLC services. However, these would not materialize until autumn 2015 when Lufthansa’s revitalized subsidiary Eurowings is due to start services to a range of destinations in America and Asia, which are going to be operated by SunExpress Germany under an ACMI agreement. This development is part of Lufthansa’s recent strategy to focus itself on its Frankfurt and Munich hub operations while transfering all other German traffic to Germanwings and Eurowings.

But is Eurowing’s upcoming long haul product really low cost, as marketed by the carrier?[2] It is the objective of this paper to address this issue, and to discuss if this step really marks the breakthrough for LCLH air travel in Europe.

The paper’s structure is as follows: In chapter 2, we review the literature to compile the main characteristics of ‘ideal-typical’ low cost carriers, which are represented by the following four pillars: cost reduction, demand generation, ancillary revenues and dynamic pricing. We also refer to the literature to discuss the transferability of the low cost philosophy to long haul operations, and to have a look at earlier LCLH ventures. In chapter 3, we first provide some facts and figures on the new Eurowings long haul product and then assess the compatibility of this product with the LCC principles, as well as the additional assumptions regarding the general reasoning behind Lufthansa’s Eurowings move.

[1] Alternative terms are low fares, no frills, budget, and low cost carriers/airlines.

[2] In a 2015 press release, Lufthansa Group (2015) claims: “The new Eurowings is building on the successful Germanwings concept, which is positioned as an innovative quality low-cost airline and “low-cost” brand in Germany and Europe.”

2 The viability of “low cost long haul” operations

2.1 Fundamental characteristics of the low cost carrier business model and recent developments

Following the deregulation of the airline market in 1997, supply by low cost carriers has grown strongly in most of Europe, both in inducing new demand and at the expense of previous high-cost operations by legacy and regional carriers.

The fundamental business model applied by LCC has been reviewed in various articles and papers, both in the academic literature and in trade journals and industry studies (well-cited papers include Williams/Mason/Turner, 2003; Barrett, 2004; Franke, 2004; Gillen/Lall, 2004; and Pitfield, 2007). In brief, one can identify four main pillars of the LCC business model: cost reduction; demand generation; ancillary revenues; and dynamic pricing (see Table 1 for exemplary measures).

Table 1
Main pillars and associated measures of the LCC business model

<table>
<tr><th>Cost reduction</th><th>Demand generation</th></tr>
<tr><td rowspan="5">• High density seating and abandonment of free catering to reduce unit cost;
• Use of small and underutilized airports to a) increase daily flight hours and hence aircraft productivity, resulting in lower capital cost per aircraft mile, and b) benefit from reduced airport and handling charges and/or marketing funds;
• Free seating to make passenger boarding quicker, yielding in shorter turnarounds and higher aircraft utilization and hence in lower airport and aircraft cost;
• No free carriage of checked baggage;
• No frequent flyer programs, no interlining/alliances, no flight connections etc. to lower overhead, delay and complexity cost;
• Direct sales via website to reduce distribution and overhead cost;
• Outsourcing and ‘zero-based budgeting’ to reduce staff cost</td><td>• High discounts compared to legacy carrier fares result in additional demand (new passenger segments got established, like students, other VFR traffic and city breakers)</td></tr>
<tr><td>Ancillary revenues</td></tr>
<tr><td>• Sale of catering and additional services, as long as complexity is not increased;
• Direct online sale yields in high website traffic, which eventually results in profits from banner advertising space sold to third parties</td></tr>
<tr><td>Dynamic pricing</td></tr>
<tr><td>• Efficient but still effective pricing and revenue management;
• No complicated ticket rules;
• “Simple formula”: book early to benefit from cheap tickets, while late-bookers (often business travelers) have to pay much more</td></tr>
</table>

Source: Own compilation

In recent years, the business models of low cost and legacy carriers in Europe have been converging to some extent. While some legacy carriers, such as Iberia, KLM or SAS, have discontinued free catering and/or introduced baggage charges for discounted economy class ticketholders, some low cost carriers have introduced premium fare options, incl. bundles of additional amenities. Examples are germanwings’ smart and best fares (Germanwings, 2015), or Ryanair’s new “business plus” fare introduced in 2014 (The Telegraph, 2014). Also, Germanwings also offers connecting flights and interlines with other carriers.

2.2 The “low cost long haul” discussion

A successful transferability of the LCC business model to long haul operations is regarded as more difficult: One of the first papers to tackle this question was Francis et al. (2007) who show that, for various reasons, LCC principles like single class operations, high density seating, no frills, point to point operations, use of secondary airports and fast turnaround are more difficult to implement on long haul sectors than on short flights. As a consequence, in comparing potential LCLH operational cost with actual “legacy carrier” cost as reported by Virgin Atlantic, they estimate a relative cost advantage “a no-frills operation can achieve” of “perhaps 20”, compared to 50% or more on short hauls. A similar approach and results can be found in Morrell (2008).

However, such a low(er) relative cost advantage of potential LCLH airlines is seen as not sufficient as price-induced demand is more difficult to achieve on long hauls than on short hauls. And even if the same relative cost advantages were achieved, a massive generation of new demand would be highly unlikely, for two reasons:

(a) The absolute fare level on long hauls (and hence total holiday expenses) always remains much higher than on short hauls, and

(b) Long haul travel requires not only sufficient disposable income but also sufficient paid holidays.

In other words, a 70% reduction on a 100 GBP fare from London to Pisa or Venice is likely to induce more additional demand than the same relative reduction applied on a 1,000 GBP fare to Boston or Miami.

In addition, it is questionable to what extent travelers would prefer a (probably nonstop) low cost product over a discount priced connecting flight of a traditional network carrier. The latter have the ability to allocate targeted dumping fares exactly and exclusively on those O&Ds that would be contested by a new direct LCLH link, making it more difficult for the low cost carrier to break even. And the typical business traveller might not only expect a business class – which a LCLH operation could indeed offer – but also the possibility to collect status miles in his or her preferred frequent flyer program. This leaves almost no scope for LCLH airlines to undercut fares with a sustainable business model, even though costs might be lower.

Hence, most of the LCLH ventures so far failed: Laker’s Sky Train in the early 80’s (Flight Global, 1982), albeit in a, back then, vey regulated environment, and about 5-10 years ago airlines like ZOOM Airlines (Canada), Oasis (Hong Kong) and FlyGlobespan (UK) (see BBC, 2008; BBC, 2009; KPMG, 2008). Currently, only Norwegian seems to successfully offer services labelled as “low cost long haul” from Scandinavia and London Gatwick to – predominantly leisure destinations – in the U.S. and Thailand (See Annex 1). In Austral-Asia, the situation is not fully comparable, with Air Asia X, Jetstar and others operating a range of long haul services labelled as low cost.

A paper in which the future for LCLH operations is seen more positively is Wensveen/Leick (2009), who expect new long haul low cost carriers to “bridge the networks of short-haul, low-cost carriers, allowing low-cost carriers to compete with mega-alliances”, e.g. through cross-selling, integrate websites and other forms of cooperation. However, the authors do not really address the restricted ability of LCLH carrier to reduce cost. Also, Daft and Albers (2012) conclude that intercontinental low cost operations can be viable. In performing a case study profitability analysis, they look not only at the cost side but also consider revenue potentials. However, from their case study it remains unclear if sufficient point to point demand could be generated on a sufficiently large number of city pairs. A similar approach is undertaken by De Poret et al. (2015) who look at the economic viability of Boeing 787-8 LCLH operations, as currently offered by Norwegian. They show that these would heavily depend on fuel price levels and load factors.

3 Analysis of the new Eurowings “low cost long haul” business model

The purpose of this paper is (a) to assess whether the new Eurowings long haul product deserves being labelled as low cost, and (b) to assess if it may be seen as a step towards the breakthrough of a ‘long haul low cost’ business model. Before we tackle these questions, we briefly provide some facts and figures on the product, as communicated during the 2015 ITB travel trade fair, and some background information.

3.1 The “wings concept”

In recent years, Lufthansa has been under pressure from various sides: Rising low cost supply on intra-European routes; growing competition from Gulf, Chinese and Turkish carriers on routes to Asia; airberlin establishing hubs in Berlin and Dusseldorf in cooperation with Etihad Airways and oneworld; and increasing conflicts with the unions on crew salaries and employment conditions (CAPA Centre for Aviation, 2014).

Hence, to lower its cost structure on decentralized operations (i.e. on all routes not touching Frankfurt and Munich), Lufthansa initially decided in 2012 to switch these operations to germanwings. This transformation was completed in early 2015. Germanwings had originally been founded by Lufthansa in 2002 to get a foot in the low cost market. In summer 2014, then, Lufthansa announced to not only let Germanwings tackle the German non-hub markets but also operate pan-European wide and on long hauls (CAPA Centre for Aviation, 2014). For this, Gemanwings would be complemented by the revitalized Eurowings, a former regional carrier acquired by LH in the year 2000 which since then has been focusing as a regional operating platform, and a then still unnamed “longhaul wings”. In December 2014, this “wings concept” got green light by the Lufthansa board. The carrier revealed that all Germanwings and the upcoming Eurowings flights would be operating under the Eurowings holding company and that Cologne/Bonn would become the carrier’s first base for long haul operations. At the same time, it was announced that the actual operation of the upcoming long haul flights would be subcontracted to SunExpress Germany (Financial Times, 2014; Lufthansa Group, 2014).

3.2 The new Eurowings “low cost long haul” product - facts & figures

In March 2015, the following information on Eurowings’ forthcoming long haul product have been revealed (Lufthansa Group, 2015; airliners.de, 2015; Eurowings, 2015):

- Initial fleet: Two A 330-200 aircraft
- Operator: Sun Express Deutschland on behalf of Eurowings (ACMI agreement)
- Initial base: Cologne/Bonn (CGN)
- Start of operations: November (aircraft 1; westbound flights) and December 2015 (aircraft 2; eastbound flights) respectively
- 5 initial destinations and connections at CGN airport from and to selected germanwings destinations (for destinations, frequencies, base prices and transfer opportunities see Table 2)
- 3 different cabin classes (243 Standard, 46 More Comfort, 21 Premium seats) and three different fare types (Basic, Smart, Best) (see Table 3)

This initial information indicates that the new carrier would be rather leisure-oriented, given the choice of destinations and low weekly frequencies. An overview of the Eurowings schedules and an assumed fleet roster can be found in Annex 2.

Table 2
Initial Eurowings long haul destinations from Cologne/Bonn

Destination	IATA code	Weekly frequencies	Transfer opportunities from/to	Base price (Basic oneway)
Bangkok	DMK	2	Berlin, Hamburg, Dresden, Zurich, Vienna, Friedrichshafen, Milan, Venice, Budapest, London Heathrow, London Stansted	199.99 EUR
Dubai	DXB	2	Berlin, Hamburg, Dresden, Zurich, Vienna, Friedrichshafen, Leipzig, Rostock, Barcelona, Budapest, Bologna, Dublin, Prague, London Heathrow, London Stansted	99.99 EUR
Phuket	HKT	2	Berlin	199.99 EUR
Punta Cana	PUJ	2	Berlin, Hamburg, Bologna, Edinburgh, Klagenfurt, Lisbon, London Heathrow, Prague, Manchester, Salzburg, Stockholm, Zagreb	229.99 EUR
Varadero	VRA	2	Berlin, Hamburg, Dresden, Zurich, Vienna, Leipzig, Klagenfurt, London Heathrow, Milan, Manchester, Prague	229.99 EUR

Sources: Own compilation based on data taken from Sabre-ADI and germanwings.com; as of 10 March 2015

Table 3
Eurowings long haul product – Cabin and fare classes

Service class	Fare class	Seat pitch	IFE	Hot & cold meal, drinks	Luggage	Lounge	Seat reservation	Mileage accrual	Priority check-in, fast lane
Standard	Basic	30”	Yes	$	$	No	$	No	No
	Smart	30”	Yes	Yes**	23kg, 1pc	Yes****	Yes	Yes	No
More Comfort*	Basic	34”	Yes	$	$	No	Yes	No	No
	Smart	34”	Yes	Yes**	23kg, 1pc	Yes****	Yes	Yes	No
Premium	BEST	45”	Yes	Yes***	23kg, 2pcs	Yes	Yes	Yes	Yes

*) more comfort seats (+50 EUR in smart; +90 EUR in basic; provision of a blanket and a pillow)
**) 1 hot and 1 cold meal, free non-alcoholic drinks (soft drinks, tee, coffee)
***) à la carte choice from the menue
****) exclusively for Miles&More status members

Sources: Lufthansa Group (2015), airliners.de (2015), Eurowings (2015), as of 10 March 2015

At the author’s best knowledge, the agreement with SunExpress marks the first time that long haul services by Lufthansa Group are performed by a third party under an ACMI-agreement.

3.3 Compatibility with low cost principles

In this chapter, we assess to what extent the new Eurowings product is compatible with the LCC principles discussed in chapter 2. As the low cost sector has undergone a certain transformation process in recent years, with even Ryanair now offering a so called “business class” product and flights to larger airports, we compare the new Eurowings long haul product both with the traditional, pure low cost product, as previously offered by Ryanair, and with the current Ryanair product which can be regarded as the current LCC benchmark. In addition, we also consider the Germanwings short haul business model and the long haul products of airberlin and Condor, Germany’s two other airlines servicing long haul leisure destinations.

Table 4
Comparison of the Eurowings long haul product with other leisure and LCC carrier products

		Short haul			Long haul		
Area	Measure	Pure LCC (e.g. Ryanair 5 years ago)	Ryanair today	germanwings	Eurowings	airberlin	Condor
Pre-flight	online check-in only (counter = surcharge)	X	X	--	--	--	--
Pre-flight	no reserved seating	X	--	--	--	--	--
Pre-flight	no lounges access regardless of fare or passenger status	X	X	--	--	--	--
Inflight	high-density seating in standard economy class	X	X	X	X	X	X
Inflight	only one cabin class	X	X	--	--	(X/--)*	--
Inflight	no free catering in standard economy classes	X	X	X	X	--	--
Inflight	baggage charge in standard economy class	X	X	X	X	--	--
Inflight	No personal inflight eintertainment	X	X	X	--	--	--
Inflight	no seat recline, low cost interior full of advertising space	X	X	--	--	--	--
Flight ops	high fleet utilization (e.g. by short turnaround times or daily route variations)	X	X	X	X	X	X
Flight ops	Mix of business, city-break/ethnical, and holiday destinations	(X)	X	X	--	X	--
Flight ops	massive use of small airports	X	(X)	--	(--)	--	--
Flight ops	Homogenous fleet	X	X	--	X	X	X
Flight ops	no use of jetways	X	X	--	--	--	--
Flight ops	point to point flights only (no own connections, no interlining)	X	X	--	--	--	--
FFP	no mileage accrual or redemption	X	X	--	--	--	--
Revenue & Sale	low base fares for demand generation	X	X	X	X	(X)	(X)
Revenue & Sale	dynamic pricing instead of traditional rate fences	X	X	X	X	--	X
Revenue & Sale	online sales only, also to boost website and ancillary revenues	X	(X)	--	--	--	--
Revenue & Sale	only one fare with different price levels	X	--	--	--	--	--
Revenue & Sale	no direct contracts with tour operators	X	?	--	--	--	--
Personnel & overhead	Outsourcing	X	X	(?)	X	--	--
	Conformance with the Eurowings long haul product	**7/17**	**7-8/17**	**13/17**	**n/a**	**12/17**	**14/17**

Source: Own compilation based on information taken from the airlines’ websites

The comparison in Table 4 reveals that the new Eurowings long haul product is positioned somewhere in between the typical low cost product, as provided by Ryanair, and the long haul products offered by Condor or airberlin. We also see that the highest level of unweighted conformance seems to be with the European product of sister company germanwings and with Condor’s long haul product.

At pre-flight level, both the Eurowings, Condor and airberlin long haul and the Germanwings short haul products differ considerably from the pure LCC business model and Ryanair’s current product: Counter check-in is available to all passengers, while lounge access is complementary to premium class passengers and selected frequent fliers. With all carriers – including the new Ryanair product – seat reservation is also possible for all passengers, albeit at a charge for those who have booked the cheapest fare option(s).

The inflight product of Eurowings’ long haul flights is similar to Germanwings but clearly differs both from Ryanair and from airberlin and Condor: While high density seating in standard economy class is common for all business models, only Ryanair completely sticks to the ‘one cabin class policy’, one of the basic LCC characteristics. Similar to Germanwings, Eurowings offers a three-class cabin consisting of a premium (BEST) class with a higher seat pitch and width, a standard economy class and a number of rows with an increased seat pitch (labelled as More Comfort). Condor provides the most differentiated product on long hauls, with a standard economy class and both a comfort and a – full – business class. Airberlin offers a two-class (economy/business) product only on selected long haul flights, such as to North America and Abu Dhabi, while leisure destinations such as Punta Cana, Varadero or Cancun are usually served by a subfleet of all-economy A330 aircraft.

Catering- and baggage-wise, the new Eurowings and the Germanwings standard economy products seem to be fully compatible with the LCC philosophy: Neither free meals or drinks, nor complementary checked luggage are available for passengers who have selected the "basic fare". Condor and airberlin, in contrast, still offer free catering and a free checked baggage option to all passengers. Regarding the seat comfort and cabin interior, only Ryanair sticks to a pure LCC product with non-reclining seats and a very basic cabin interior packed with advertising space.

On the operational side, there is neither clear commonality with the LCC philosophy, nor with the fellow leisure long haul carriers: All carriers should try to maximize fleet productivity, i.e. block hours. On short hauls, traditionally, this goal has been tried to achieve by LCC in choosing smaller airports, allowing for quick turnarounds. This way, they have managed to increase aircraft utilization considerably above the levels of the network carriers. For long haul carriers, a higher than average fleet utilization is more difficult to achieve as segments are longer and, unlike on short hauls, it is not possible to add one or two more short flights each day.

In recent years, however, aircraft utilization of network and low cost carriers seems to converge, at least for the airline/aircraft type sample in Table 5. The data also indicate that utilization has decreased for the European carriers. Possible reasons include – for the low cost carriers – the increased use of larger airports, and Ryanair's strategy to reduce block hours and even to ground several aircraft in winter times, when revenues are low (Energylive News, 2013). A daily utilization of 14-15 hours for long haul aircraft, as currently achieved by Air Asia X and – in earlier years – by airberlin, Condor and Lufthansa, can be regarded as difficult to exceed.

Table 5
Aircraft utilization of European carriers and Air Asia X

		average daily flight hours		
Airline	**A/C Type**	**2014**	**2007**	**Change**
airberlin	A330-200	12.33	14.46	-15%
Condor	B767-300	13.62	14.97	-9%
germanwings	A319	8.05	9.22	-13%
Ryanair	B737-800	8.72	9.94	-12%
Lufthansa	A319	7.40	8.26	-10%
Lufthansa	A340-300	13.27	14.12	-6%
Lufthansa	A330-300	12.89	13.05	-1%
Air Asia X	A340-300	14.09	9.86	43%
Norwegian	B787-800	11.28	n/a	

Source: Ascend

The actual daily aircraft usage of the Eurowings long haul fleet cannot yet be estimated as the initial schedules (see Annex 2) still show some gaps which will likely be filled with additional flights. However, based on the roster plan in Annex 2, it seems that Eurowings is going to try to stick to usual ground times of 2-3 hours. This is less than e.g. Lufthansa's Dusseldorf-based Airbus 340 fleet operating to North America with daily ground times of about 6 hours (see Figure 1).

Figure 1
Roster of Lufthansa Airbus 340-300 D-AIGV operating on LH 408/409, 4-11 March, 2015 (Flightradar24.com screenshot)

Date	From	To	Flight	STD	ATD	STA	Status
2015-03-11	Dusseldorf (DUS)	New York (EWR)	LH408	11:05	11:37	20:00	Estimated 19:41
2015-03-10	New York (EWR)	Dusseldorf (DUS)	LH409	21:40	22:26	05:05	Landed 05:04
2015-03-10	Dusseldorf (DUS)	New York (EWR)	LH408	11:05	11:20	20:00	Landed 19:49
2015-03-09	New York (EWR)	Dusseldorf (DUS)	LH409	21:40	22:28	05:05	Landed 05:01
2015-03-09	Dusseldorf (DUS)	New York (EWR)	LH408	11:05	11:26	20:00	Landed 19:43
2015-03-08	New York (EWR)	Dusseldorf (DUS)	LH409	21:40	22:14	05:05	Landed 04:59
2015-03-08	New York (EWR)	-	LH408	20:09	-	-	Scheduled
2015-03-08	Dusseldorf (DUS)	New York (EWR)	LH408	11:05	11:14	20:00	Landed 19:48
2015-03-07	New York (EWR)	Dusseldorf (DUS)	LH409	21:40	22:30	05:05	Landed 05:03
2015-03-07	Dusseldorf (DUS)	New York (EWR)	LH408	11:05	11:17	20:00	Landed 19:50
2015-03-05	New York (EWR)	Dusseldorf (DUS)	LH409	21:40	22:59	05:05	Landed 05:10
2015-03-05	Dusseldorf (DUS)	New York (EWR)	LH408	11:05	11:16	20:00	Landed 20:00
2015-03-04	New York (EWR)	Dusseldorf (DUS)	LH409	21:59	22:24	04:25	Landed 05:00

Source: flightradar24.com (Screenshot from 11 March, 2015)

The initial choice of pure leisure long haul destinations to be served by Eurowings is less typical for a low cost carrier but reminds of the likes of the former LTU or of Condor and the British leisure airlines. Short haul low cost carriers, in contrast, now usually serve a mix of destinations relevant both to business, holiday and other private travelers, such as 'visiting friends and relatives' travelers and city-breakers.

In Europe, low cost carriers almost exclusively started on routes between small and secondary airports, e.g. to save on landing charges and to allow for quicker turnarounds. On long hauls, this principle is more difficult to implement since widebody aircraft require airport standards that cannot be fulfill by most small(er) airports, like ICAO code 4D or higher.[3] Hence, except for Bangkok (where it serves the "old" Don Muang airport) and for its base Cologne/Bonn (where passenger long haul flights have been scarce for years), Eurowings uses the 'main' airports of the regions it serves.

Operational-wise, the sale of connecting flights is another main field where Eurowings goes away from the fundamental LCC principles. However, this step seems to be logical as one of the major demand-side drawbacks of a pure LCLH concept is the supposed lack of sufficient O&D demand on most intercontinental segments. The existing Germanwings short haul network from and to Cologne/Bonn might help closing this (potential) gap.

[3] See the current ICAO Aerodrome standards, available online at: http://www.icao.int/safety/Implementation/Library/Manual%20Aerodrome%20Stds.pdf [retrieved 12 March, 2015].

Eurowings also breakes with the low cost philosophy in joining both the Germanwings and Lufthansa frequent flier programs, which is supposed to result in additional overhead costs.

Revenue-wise, Eurowings seems to have implemented the basic characteristics of LCC: Low base fares are promoted to generate demand, with a yield management based on dynamic oneway pricing instead on complicated fare rules and rate fences such as the Sunday rule known from legacy carriers (see e.g. Bischoff et al., 2011).

Sales-wise, the new Eurowings is supposed to cooperate intensely with tour operators, given the predominant choice of holiday destinations.[4] While these might be a guarantee for good load factors, this move could contradict the LCC philosophy of boosting website traffic and resulting ancillary revenues.

Finally, Lufthansa Group has decided to outsource the operational production of the Eurowings long haul services. Under an ACMI agreement, these will operated by SunExpress Germany, a German carrier that can operate independently of Lufthansa's agreements with the unions, and hence at much lower staff costs. In this respect, Eurowings goes a step further than e.g. Ryanair which has outsourced a percentage of its flight crews. According to SunExpress CEO Schwaiger, unit costs by SunExpress are about 30-40% lower than with traditional carriers if fuel is not counted (Aero.de, 2015).

3.4 Breakthrough for the 'low cost long haul' business model?

It is certainly still too early to predict if the Eurowings product can be regarded as breakthrough for 'low cost long haul' flights. The actual choice of holiday destinations by Eurowings, though, indicates a quite conservative approach with only limited potential for supply-driven market stimulation. Apparently, Eurowings tries to launch the product 'the soft way' in providing some more choice for travelers and tour operators on routes that should be 'no-brainers.

Table 6 shows the average annual supply in seats from Germany to the Eurowings destinations over the years 2000-2014, and the future absolute and relative contribution by Eurowings. For the destinations Bangkok and Dubai, this additional capacity turns out to be relatively small, e.g. compared to the relative rise in supply Ryanair had initially offered to "obscure" secondary airports. To Punta Cana and Varadero, Eurowings seems to considerably stimulate a market which has so far mainly been in the hand of the tour operators. The currently low fuel prices might have been an issue here. The new supply to Phuket is immense and seems to close the gap of the former LTU/airberlin services which are now being routed via Etihad's Abu Dhabi hub.

Table 6: Capacity impact of Eurowings

Destination	Year	avg annual capacity	future contribution by EW	EW impact
BKK/DMK	2000-2014	61,4974	32,240	5.2%
HKT	2000-2014	26,357	32,240	122.3%
DXB	2000-2014	904,954	32,240	3.6%
PUJ	2000-2014	158,827	32,240	20.3%
VRA	2000-2014	83,812	32,240	38.5%

[4] Punta Cana, Varadero and Phuket can be regarded as "pure" holiday destinations. Bangkok and Dubai might appeal more segments; However, the low 2/7 frequencies offered here are not optimal for business travelers.

Source: Sabre-ADI

Especially, it remains to be seen if dynamic pricing will be the right approach for these – mainly – leisure routes where demand is supposed to be quite homogenous in terms of price elasticity. In other words: Will there be enough passengers on routes like Cologne-Varadero paying high-end prices to successfully cross subsidize low base fares?

These objections might become even more relevant for the routes to Bangkok and Dubai with a high level of indirect competition from FSNC. To illustrate this issue, Table 7 shows some sample fares for flights from Cologne/Bonn to these destinations.

Table 7: Fare sample Cologne/Bonn-Dubai and -Bangkok, Dec 2015 and Jan 2016

From	To	Dates	Airline	Stops	Return Fare	free baggage	free catering
CGN	Dubai	2.1.16-6.1.16	Eurowings	0	380	no	no
CGN	Dubai	2.1.16-6.1.16	Eurowings	0	480	yes	yes
CGN	Dubai	2.1.16-6.1.16	Lufthansa/AUA	1	352	yes	yes
CGN	Dubai	22.-27.12.15	Eurowings	0	410	no	no
CGN	Dubai	22.-27.12.15	Eurowings	0	510	yes	yes
CGN	Dubai	22.-27.12.15	Lufthansa	1	481	yes	yes
CGN	Bangkok	20.-28.12.15	Eurowings	0	620	no	no
CGN	Bangkok	20.-28.12.15	Eurowings	0	720	yes	yes
CGN	Bangkok	20.-28.12.15	Air France	1	839	yes	yes
CGN	Bangkok	13.-21.1.16	Eurowings	0	400	no	no
CGN	Bangkok	13.-21.1.16	Eurowings	0	500	yes	yes
CGN	Bangkok	13.-21.1.16	Swiss/Lufthansa	1	494	yes	yes

Source: kayak.com (as of 13 March 2015). Fares in €.

The small sample hints that full-service legacy carriers – in some cases – can be in the position to offer even lower fares than the basic fare (i.e. without catering and baggage) charged by Eurowings. If this is the case, the only remaining advantage of the Eurowings product is the nonstop flight, while the legacy carriers can score with daily or more frequencies, mileage accrual and free baggage/catering. And if not only Cologne/Bonn, but also nearby Dusseldorf or Frankfurt airports are considered, the choice of available flights by legacy carriers becomes even larger, not least due to the immense capacities provided by the Gulf and Turkish airlines.

4 Summary and further remarks

After having reviewed the basic low cost carrier principles and the general discussion in the literature on the question to what extent LCC operations can be successfully applied to long haul sectors, we had a look at the new Eurowings long haul business model which is promoted as being a low cost long haul (LCLH) product. But is it really low cost? And can it be regarded as breakthrough for LCLH air travel from Germany?

To tackle these questions, we have first compared the characteristics of the Eurowings product with the typical LCC product, as applied by Ryanair, and with sister company germanwings' short haul and long haul leisure carriers airberlin's and Condor's products to assess this issue.

We find that major parts of the business model have more in common with the typical, traditional long haul leisure operations of holiday carriers such as airberlin, Condor and the likes than with the low cost philosophy we know from easyJet or Ryanair. However, some LCC principles like no free catering for passengers buying the lowest fares are applied, as well as baggage surcharges.

Irrespectively of the question if the new product is low cost or not, Lufthansa may have sound internal reasons for developing this segment, as it might be a way to find out in how far long haul services to destinations with low business demand can be viable if staff costs are significantly reduced.

As yet, it is certainly still too early to predict if the Eurowings product marks the breakthrough for ‘low cost long haul’ flights. The actual choice of holiday destinations by Eurowings indicates a quite conservative approach with only limited potential for supply-driven market stimulation. Apparently, Eurowings tries to launch the product the “soft way” in providing some more choice for travelers and tour operators on routes that should be “no-brainers”.

In the long run, it remains to be seen how Eurowings will be able to compete with full service legacy carriers that can be in the position to offer similar or even lower fares and daily frequencies on indirect routes.

5 Annex 1

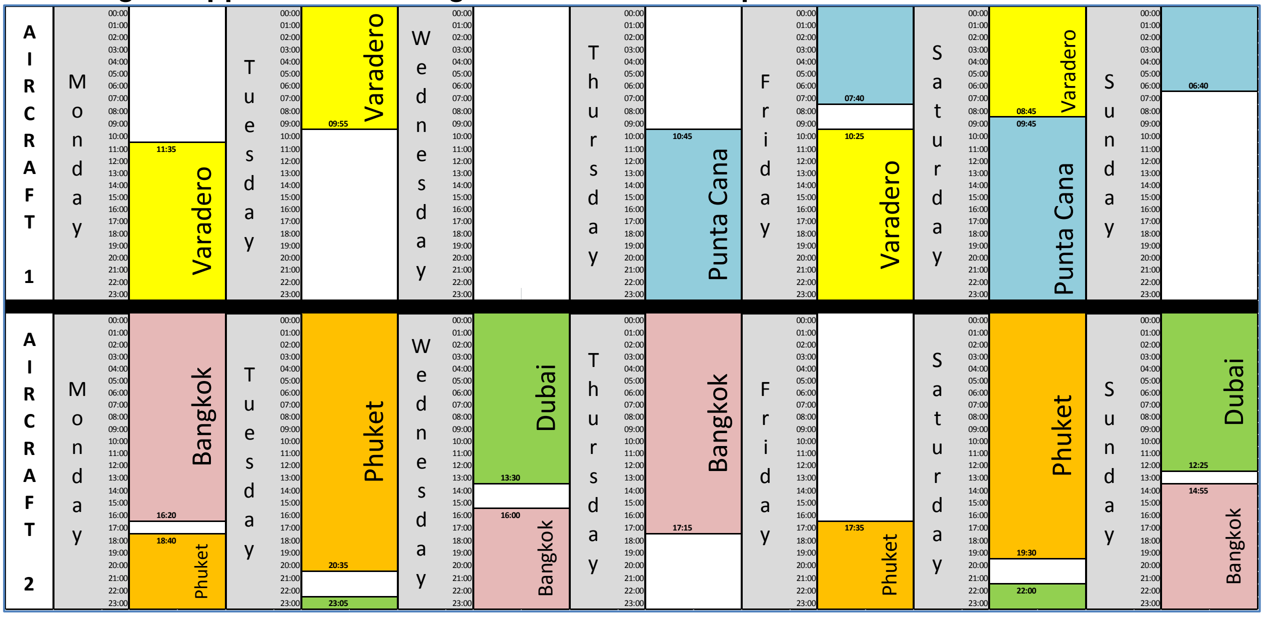
Norwegian Long haul Operations – May 2015

Origin	Destination	Equipment	Marketing Airline	Year	Month	Seats	Frequency	Seat per flight
ARN	BKK	B 787-8	Norwegian	2015	May	2619	9	291
ARN	FLL	B 787-8	Norwegian	2015	June	1455	5	291
ARN	JFK	B 787-8	Norwegian	2015	July	5238	18	291
ARN	LAX	B 787-8	Norwegian	2015	August	3783	13	291
ARN	OAK	B 787-8	Norwegian	2015	September	3783	13	291
BGO	JFK	B 787-8	Norwegian	2015	October	873	3	291
CPH	BKK	B 787-8	Norwegian	2015	November	1455	5	291
CPH	FLL	B 787-8	Norwegian	2015	December	2619	9	291
CPH	JFK	B 787-8	Norwegian	2015	January	5238	18	291
CPH	LAX	B 787-8	Norwegian	2015	February	3783	13	291
CPH	MCO	B 787-8	Norwegian	2015	March	1164	4	291
LGW	FLL	B 787-8	Norwegian	2015	April	1164	4	291
LGW	JFK	B 787-8	Norwegian	2015	May	7566	26	291
LGW	LAX	B 787-8	Norwegian	2015	June	4947	17	291
LGW	MCO	B 787-8	Norwegian	2015	July	1455	5	291
OSL	BKK	B 787-8	Norwegian	2015	August	1164	4	291
OSL	BKK	B 787-8	Norwegian	2015	September	582	2	291
OSL	FLL	B 787-8	Norwegian	2015	October	2619	9	291
OSL	JFK	B 787-8	Norwegian	2015	November	5238	18	291
OSL	LAX	B 787-8	Norwegian	2015	December	2619	9	291
OSL	MCO	B 787-8	Norwegian	2015	January	1164	4	291
OSL	OAK	B 787-8	Norwegian	2015	February	2619	9	291

Source: Sabre-ADI

6 Annex 2

Eurowings: Supposed initial long haul aircraft roster plan



Source: Own assumption based on available data. Additional charter flights to the Caribbean have been announced, but schedules have not yet been published at time of writing. We assume these to be operated by "aircraft 1" during the gaps visible in the roster plan.

Eurowings: Initial long haul schedules for winter 2015/2016 season

Origin	Destination	Operating Airline	Marketing Airline	Flight Nr.	Aircraft	Dep. Time	Arr. Time	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Cologne/Bonn	Bangkok (DMK)	SunExpress Germany	Eurowings	106	Airbus 330	1455	0750	-	-	-	-	-	-	S
Cologne/Bonn	Bangkok (DMK)	SunExpress Germany	Eurowings	106	Airbus 330	1600	0855	-	-	W	-	-	-	-
Cologne/Bonn	Dubai	SunExpress Germany	Eurowings	112	Airbus 330	2200	0700	-	-	-	-	-	S	-
Cologne/Bonn	Dubai	SunExpress Germany	Eurowings	112	Airbus 330	2305	0805	-	T	-	-	-	-	-
Cologne/Bonn	Phuket	SunExpress Germany	Eurowings	120	Airbus 330	1735	1100	-	-	-	-	F	-	-
Cologne/Bonn	Phuket	SunExpress Germany	Eurowings	120	Airbus 330	1840	1205	M	-	-	-	-	-	-
Cologne/Bonn	Punta Cana	SunExpress Germany	Eurowings	140	Airbus 330	0945	1510	-	-	-	-	-	S	-
Cologne/Bonn	Punta Cana	SunExpress Germany	Eurowings	140	Airbus 330	1045	1610	-	-	-	T	-	-	-
Cologne/Bonn	Varadero	SunExpress Germany	Eurowings	130	Airbus 330	1025	1550	-	-	-	-	F	-	-
Cologne/Bonn	Varadero	SunExpress Germany	Eurowings	130	Airbus 330	1135	1700	M	-	-	-	-	-	-
Origin	**Destination**	**Operating Airline**	**Marketing Airline**	**Flight Nr.**	**Aircraft**	**Dep. Time**	**Arr. Time**	**Mon**	**Tue**	**Wed**	**Thu**	**Fri**	**Sat**	**Sun**
Bangkok (DMK)	Cologne/Bonn	SunExpress Germany	Eurowings	107	Airbus 330	0920	1610	M	-	-	-	-	-	-
Bangkok (DMK)	Cologne/Bonn	SunExpress Germany	Eurowings	107	Airbus 330	1025	1715	-	-	-	T	-	-	-
Dubai	Cologne/Bonn	SunExpress Germany	Eurowings	113	Airbus 330	0830	1225	-	-	-	-	-	-	S
Dubai	Cologne/Bonn	SunExpress Germany	Eurowings	113	Airbus 330	0935	1330	-	-	W	-	-	-	-
Phuket	Cologne/Bonn	SunExpress Germany	Eurowings	121	Airbus 330	1230	1930	-	-	-	-	-	S	-
Phuket	Cologne/Bonn	SunExpress Germany	Eurowings	121	Airbus 330	1335	2035	-	T	-	-	-	-	-
Punta Cana	Cologne/Bonn	SunExpress Germany	Eurowings	141	Airbus 330	1640	0640	-	-	-	-	-	S	-
Punta Cana	Cologne/Bonn	SunExpress Germany	Eurowings	141	Airbus 330	1740	0740	-	-	-	T	-	-	-
Varadero	Cologne/Bonn	SunExpress Germany	Eurowings	131	Airbus 330	1720	0845	-	-	-	-	F	-	-
Varadero	Cologne/Bonn	SunExpress Germany	Eurowings	131	Airbus 330	1830	0955	M	-	-	-	-	-	-

Source: Sabre-ADI (as of 11 March, 2015)

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