

# Airlines in Poland

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**Abstract** In this article is described the concept of the airline. This article describes the different types of airline concepts which can occur in the airline market. The main topic of this research is description of all Polish airlines in detail. You can find in this topic description of each Polish airline also with a fleet and departures what were main attributes for this research and for determining of airline model of each Polish company

**Keywords** airlines, aviation in Poland, LOT, types of airlines, EuroLOT, Enter Air, Travel service Poland, Exin, SprintAir

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## 1. Introduction

The airline - an airline providing scheduled or non-scheduled air transport services, including the carriage of passengers or cargo and has the appropriate civil aviation authority certificate issued by the State in which it was founded. In Poland, there are two types of airlines providing passenger services and cargo. [1]

### 1.1. Charter carriers

Tourist charter market was for many years dominated by airlines from countries bordering the Mediterranean. Until 2005, the largest Polish player in this market was a LOT, and later a subsidiary Centralwings. In addition, from time to time they appeared and gone small airlines that operate on medium and long-haul routes. Polish airlines LOT, Enter Air, SprintAir, SkyTaxi, Travel Service.

### 1.2. Transportation of cargo

Transported by air freight consignments are two types: normal and requiring handling services. Supported special require, inter alia: hazardous materials, live animals, perishable goods, as well as shipping heavy and / or undersized, diplomatic and valuable. In 2010 on board Polish aircraft carried a total of 45,1th. tons of cargo, the biggest share fell Airlines Cargo. Polish airlines LOT Cargo, Exin, Sky Taxi, Sprintair.[2]

Polish airlines offer both cruise calls, as well as charter flights and cheap domestic flights. The leading representative and symbol of Polish civil aviation are Polish Airlines LOT. These lines are one of the oldest airlines in the global

aviation market - established in 1929, and today offer flights to over 100 destinations worldwide..

## 2. Polish AIRLINES

It's an air transport undertaking resulting from 1 January 1929 by the merger of all operating airlines in the country, the Polish company, owned by the treasury; LOT Charters owner of the company. It belongs to the Star Alliance. [3]

### 2.1. Fleet

**Boeing 787 Dreamliner** supports connections long distance Airlines. The Boeing 787 is a twin-engined, wide-jet. It is the latest model aircraft manufactured by the US Company of The Boeing Company. LOT was the first carrier in Europe, which started operating these aircraft to operate scheduled air services. The Boeing 787 Dreamliner is made of composite material, which has significantly lowered aircraft weight and consequently reduce fuel consumption by ten percent. The modern Rolls-Royce engines emit 60% less noise. The distinctive design of wings held high ends dramatically reduces the air resistance.

The aircraft version of the LOT terminal takes on board a total of 252 passengers in three classes of travel:

- LOT Business Class
- LOT Premium Economy
- Airlines Economy Class

Features and timetables sites are shown in the figure 1. [4]

Lenght	57 m
Height	17,0 m
Range	60,0 m
Diameter of fuselage	5,74 m
Max take-off weight	215 910 kg
Number of seats	250-290
Engine	General Electric GEnx lub Rollys Royce Trent 1000
Cruising speed	0,85 Mach
Reach	15 700 km
Max fuel	124 700 litrów
Operating ceiling	13 100 m
Number of pieces	6

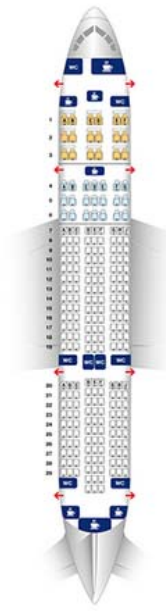


Figure 1. Features and position of sites of Boeing 787.

**Embraer 195-** The largest family of aircraft. It is the work of the Brazilian company Embraer - Empresa Brasileira de Aeronáutica. In our fleet to domestic and middle-distance. Characteristically floating end of the wing, called winglet, reduce air resistance. This allows for faster overcoming distances and lower fuel consumption. Performance and efficiency of engines Embraer 195 cause that it meets the rigorous standards of the noise-generating. Jet takes on board up to 112 passengers.

At your disposal spacious cabin, large lockers for luggage, and this will significantly improve comfort on flights to London.

The main advantages of the aircraft:

- Comfort seats with adjustable headrests
- Configuration of 2 + 2, no middle seats

Features and timetables sites are shown in the figure 2. [5]

**The Boeing 737-400** is a twin-engine jet aircraft produced by the US company of The Boeing Company. It is produced in various versions since 1967. Boeing 737-400 in different versions, is the most popular jet airliner of all time.

In our fleet to domestic and middle-distance. Configured especially for us narrow hull, twin-engine model 400 takes on board from 148 to 162 passengers.

Embraer 175 is a slightly extended version of narrow hull jet Embraer 170. In our fleet it supports domestic connections, and middle distance. Thanks to the efficient and

Lenght	38,65m
Height	10,28 m
Range	28,72 m
Diameter of fuselage	3,01 m
Max take-off weight	52 290 kg
Number of seats	112
Engine	2× GE CF34-10E turbofans
Cruising speed	0,82 Mach (890 km/h)
Reach	3 960 km
Max fuel	12 971 litrów
Operating ceiling	12 500 m
Number of pieces	6

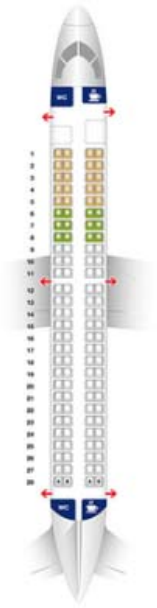


Figure 2. Features and position of sites of Embraer 195.

effective aircraft engines meet the stringent standards noises and floating completion wings - winglets, reduce air resistance, which reduces fuel consumption. On board can travel up to 82 passengers. In 2010, two Embraers 175 of our fleet are chartered with crew to operate the flights most important people in country. Despite regional character, at your disposal spacious cabin, large lockers for luggage, and this will significantly improve travel comfort.[6]

Embraer 170 is a twin-engine jet aircraft narrow hull produced by the Brazilian company Embraer - Empresa Brasileira de Aeronáutica. Wings aircraft are equipped with a characteristically floating end of the wings called wingletami. They reduce air resistance and thus reduces fuel consumption. High performance and efficient engines comply with stringent standards while the noise-and thus the plane can fly to major airports in Europe and World. On board can travel up to 70 passengers.[7]

2.2. Departures



Figure 3. Planned and current merger [8].

### 2.3. Eurolot

Operator providing transport services between major Polish airports, and connecting these ports to various foreign cities. The majority shareholder is the State Treasury (62% shares).

Eurolot has its own fleet of turboprop aircraft short-range ATR 72-200, as well as major medium-haul aircraft type Q400 NextGen Bombardier and Embraer 175.

Until recently, this line served as a feeder for domestic flights LOT Polish Airlines. However, in August 2012 the Board of LOT decided that domestic flights will operate a fleet which prevent the sale of part of the fleet. Therefore, the board decided to Eurolot expansions on European routes. Today, however, this line functions as feeder routes for foreign LOT.

Currently the CEO is Andrew Juszczyński, and his deputy - Bartłomiej Matusiewicz.

Additional business of the company is Pilot Training Centre, in which courses are also offered to acquire licenses for the position of the Air dispatcher. The resort was established in 2003 and deals with training for individuals, as well as train crew Eurolot and LOT Polish Airlines and other entities in the world.

Carrier Eurolot SA whose majority shareholder is the State Treasury from 2012 struggling with major financial problems, according to data from the Ministry of Treasury. At the beginning of 2014, the situation of airlines was so bad that she had to sell two aircraft to repay their debt to the state entities. There is also plan for an orderly winding up or restructuring of the carrier. The main reason for poor financial performance was the start of commercial operations at its own risk, as well as misguided collaboration with 4You Airlines, and the company's development strategy diverges from market realities.

The last flight was made on the route Zurich - Krakow March 31, 2015 year.

Since April 1, the planes were included in the LOT fleet, which take over the commitment Eurolot in the form of operating lease. Airlines have already used the bombardiers leased with its crew of Eurolot in the formula ACMI. The transaction is in line with the restructuring plan LOT, which ends in October - it involves the use of regional aircraft. [9]

### 2.4. Enter Air

Polish charter airline. It has four permanent operational bases Chopin airport in Warsaw, Pyrzowice Airport, the airport in Poznan and Wroclaw airport. Enter Air aircraft also support other Polish cities such as Cracow, Gdansk, Rzeszow, Bydgoszcz and Lodz.

Enter Air was founded in November 2009, and its first season began in April 2010. Creation of a new airline conducive to good against Europe, the condition of the Polish economy and especially the condition of Polish charter market, which despite the crisis in the world grew by over

5% year on year. In the first period line benefited from two B737-400 type aircraft. The inaugural cruise was held on 25 April 2010 from Ataturk Airport. Warsaw's Frederic Chopin airport at the new Enfidha between Sousse and Tunis in Tunisia. The route from Warsaw to Tunisia and back made aircraft Enter Air with registration marks SP-ENB.

In the winter of 2011/2012, Enter Air launched its first scheduled flights to Sri Lanka and Bangkok. Cruises operate Boeing 737-800 aircraft. [10]

### 2.5. Fleet

At present fleet consists of 15 Boeing 737-400 and

- SP-ENA (B737 - 400)
- SP-ENB (B737 - 400)
- SP-ENC (B737 - 400)
- SP-ENE (B737 - 400)
- SP-ENF (B737 - 400)
- SP-ENH (B737 - 400)
- SP-ENI (B737 - 400)
- SP-ENK (B737 - 400)
- SP-ENY (B737 - 800)
- SP-ENZ (B737 - 800)
- SP-ENX (B737 - 800)
- SP-ENW (B737 - 800)
- SP-ENV (B737-800)
- SP-ENU (B737-800)
- SP-ENT (B737-800)

737-800.

Figure 4. City pairs and the most common used aircrafts [8].

### 2.6. Departures

- Bulgaria (Burgas, Varna)
- Czech Republic (Prague)
- Cyprus (Paphos)
- Croatia (Dubrovnik, Pool, Split, Zadar)
- Egypt (Hurgarda, Sharm El Sheikh, Marsa Alam, Taba)
- France (Lyons, Nantes, Paris, Toulouse)
- Greece (Chania, Heraklion, Kavala, Blackbird, Rhodes, Thessaloniki, Zakynthos, Araxos, Corfu, Athens, Airport Kefalonia)
- Spain (Almeria, Barcelona, Fuerteventura, Girona, Lanzarote, Madrid, Mallorca, Menorca, Malaga, Sevilla, Las Palmas de Gran Canaria, Tenerife)
- Kenya (Mombasa)
- Morocco (Agadir)
- Poland (Warsaw (base), Katowice (base), Gdańsk, Bydgoszcz, Poznan (base), Wroclaw (base), Łódź, Cracow, Rzeszow, Lublin)
- Portugal (Faro, Madeira)
- Sri Lanka (Colombo)
- Thailand (Phuket, Bangkok)
- Tunisia (Enfidha, Monastir, Djerba)
- Turkey (Antalya, Bodrum, Dalaman, Izmir)
- Israel (Tel Aviv ,Eilat)

- Italy (Catania, Lamezia Terme, Olbia)
- United Arab Emirates (Dubai)

### 2.7. SprintAir

The group brings together three companies SprintAir SA, SprintAir Cargo Sp. with o.o, and SprintAir Aviation School Sp. with o.o SprintAir Group companies provide services in the aviation market, specializing in both air freight, carrying out operations on behalf of partners such as UPS, TNT and Post Poland, as well as passenger flights in both types of operations scheduled flights as well as charter flights. From June 2011. SprintAir performs a scheduled passenger air service on the route Zielona Gora - Warszawa. From november 2011. As a subcontractor Polish Airlines LOT carrier performing daily flights from and to Bydgoszcz. In April of 2013. Began, also on behalf of LOT Polish Airlines, operate a daily flight Warsaw - Katowice, from November 2013 LOT resigned from the services SprintAir SA. In the operational base of the Warsaw Chopin Airport. In addition to air transportation group companies also carry out training activities conducted through operating in groups of two training centers: TRTO (training for pilots on the type SF340) and the Aviation Security training center (training of security screeners). [11]

### 2.8. Travel Service Poland

A charter airline based in Warsaw. It started May 9, 2012, following the first flight from Warsaw Chopin Airport. It is a subsidiary company which is the parent company Travel Service. All flights are made Boeing 737-800 aircraft.[12]

### 2.9. SkyTaxi

Polish charter airline based in Wroclaw. Performs passenger and cargo flights within the European Union, the Middle East and North Africa.

Since 2004 SkyTaxi is certified JAR-OPS 1 awarded by the Polish Civil Aviation Office in Poland [13]

### 2.10. Exin

Polish airline specializing in cargo transportation. The airline's headquarters in Lublin, and the base of operations is Katowice. [14]

## 3. Conclusions

2014 years was successful for LOT. Michael Leman, who in the company is responsible for the implementation of new products says the company for the first time in many years will have a so-called operating profit, which will make money on transporting passengers.

Since 2012, the company implemented a recovery plan. They released among other things, part of the administration, as amended agreements with certain employees. The carrier also received aid. In early December, he was paid the second tranche.[15]

More and more passengers are choosing LOT-class a higher standard. With Dreamliners, after three quarters of this year, the number of people traveling in Business Class

and LOT Airlines Premium Class on long-haul routes grew by 48% compared to the same period last year.

The flagship carrier machines, Boeing 787 Dreamliner, attracting more and more passengers who value convenience and comfort. This is not only thanks to the most modern passenger aircraft, but mainly the result of continuous improvement of on-board product which offers Airlines.

Last year, the Polish aboard aircraft transported 5 million passengers and 45 thousand tons of cargo. In relation to the previous year's results transportation passenger increased by 16.7%, while cargo tonnage by 15.9%. The largest share the market had a Polish Airlines LOT.[16]

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## REFERENCES

- [1] LOT Polish Airlines (11 November 2014). "LOT Moments Introduced By LOT Polish Airlines". Retrieved 24 April 2015.
- [2] "History 2000-2009". LOT Polish Airlines. Retrieved 9 July 2010.
- [3] Kazda,A. Mrázová, M.: Low-Cost Carriers - Business Model Development,In: Transport and communications : scientific journal. - ISSN 1339-5130. -No. 1 (2015), s. 1-5.
- [4] Porębska,E. Caban,J. Sopoćko,M.: Development of courier services in Poland, In: Transport and communications : scientific journal. – ISSN 1339-5130. - No. 1 (2015), s. 25-31.
- [5] LOT rezygnuje z połączeń atlantyckich - Finanse - WP.PL. Finanse. Retrieved 30 October 2011.
- [6] L, J (28 October 2015). "LOT Polish Airlines / airBaltic Launches Codeshare Service from late-Oct 2015". Airline Route. Retrieved 28 October 2015.
- [7] IATA - Airline and Airport Code Search. iata.org. Retrieved 23 June 2015.
- [8] Mrazová, M.:Long-haul low-cost operations - yes or not? In: Zvyšovanie bezpečnosti a kvality v civilnom letectve 2015 : medzinárodná vedecká konferencia organizovaná v rámci riešenia projektu Brokerské centrum leteckej dopravy pre transfer technológií a znalostí do dopravy a dopravnej infraštruktúry ITMS 26220220156 : Zuberec, 28.-30. január 2015. Žilina: MADO plus, 2015. - ISBN 978-80-971908-0-4. - S. 61-64.
- [9] Dan Michaels and Andy Pasztor (1 November 2011). "Plane Makes Crash Landing in Poland". Wall Street Journal.
- [10] Endres, Günter G. (January 1973). "Airline History No. 29: LOT—Polish Airlines". Air Pictorial. Vol. 35 no. 1. pp. 22–28.
- [11] Novák Sedlačková A. Turiak, M.:Comparison of selected global airline
- [12] alliances indices In: Logistyka. - ISSN 1231-5478. - Nr. 6 (2014).L, J (1 December 2015). "AEROFLOT / LOT Polish Airlines Expands Codeshare Routes from late-Nov 2015". Airline Route. Retrieved 1 December 2015.

- [13] Adam Jońca, *Samoloty linii lotniczych 1957-1981*, WKiŁ, Warsaw 1986, ISBN 83-206-0530-X
- [14] "SMALL PLANET AIRLINES SP. Z O.O.". *kompany.com*. Retrieved 23 June 2015.
- [15] Hradecky, Simon. "Accident: Exin AN26 at Tallinn on Mar 18th 2010, gear and engine trouble". *Aviation Herald*. Retrieved 18 March 2010.
- [16] Contact Data." Enter Air. Retrieved on 4 January 2011. "Enter Air Sp. z o.o. Okęcie Business Park – Zephyrus building ul. 17 Stycznia 45 B 02-146 Warszawa, Polska" – Polish address: "Enter Air Sp. z o.o. Okęcie Business Park – budynek Zephyrus ul. 17 Stycznia 45 B 02-146 Warszawa, Polska"
- [17] Tomová, A. Drugaj, M.: Non-aeronautical business at choosen airports: a comparative analysis, In: *Práce a štúdie = Studies : Katedra leteckej dopravy, Fakulta prevádzky a ekonomiky dopravy a spojov Žilinská univerzita v Žiline : Air transport department, Faculty of operation and economics of transport and communications University of Žilina. - Žilina: Žilinská univerzita, 2015. - ISBN 978-80-554-1029-6. - S. 41-47.*