

TRANSPORT & LOGISTIK

Regional Air Traffic in Germany

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Germany is a regional air traffic diaspora

Christoph Brützel

Abstract:

The article compares regional airport infrastructures in Germany to those of other European countries and analyzes recent developments and situation of traffic at German regional airports. Type of services are segregated into hub feeder services, connections to European cities relevant for business travel and private travel destinations. It shows that, compared to other large European countries the landscape of regional airports in Germany is less dense and that traffic there is mostly restricted to hub feeders, major leisure destinations and other destinations for private air travel.

Keywords:

Aviation, Airlines; Regional Airports, Regional Air Traffic Market, Point-to-Point Air Traffic, German Air Traffic Market

Landscape of Regional Airports in Germany

The landscape of German commercial airports with regular scheduled services shows that large areas of the Republic are not connected to the national and international air traffic network or are only connected via regional airports.



Figure 1: Landscape of German airports

In political discussions, the existence of smaller regional airports is repeatedly called into question, on the one hand, with reference to their inadequate economic viability and supposed burden on public funds, and on the other hand there is talk of the country being overcrowded with useless airport infrastructures. After the airport infrastructure in Europe had partially been privatized, it was redefined from the position of a public service offering to a competitively organized service offering. Correspondingly regulatory policy was adjusted resulting into an EU Guideline in 2014 which prohibits subsidizing airport infrastructure from 2024 at the latest¹.

On the other hand, individual federal states and municipalities repeatedly emphasize the importance of "their" regional airports for the traffic and economic structure of their region. In the relevant airport concepts of the

¹ Guidelines on State aid to airports and airlines 2014/C 99/03

European Union², the member states³ and (in Germany) the federal states⁴, the maintenance of regional airport structures is also proclaimed to relieve the international hubs and large, sometimes congested commercial airports, not least in terms of a more extensive distribution of noise and pollutant emissions. Finally, the visions of future taxi companies and efficient regional jets with electric propulsion inspire the future hopes of regional airport operators. In this context, reference can be made to the latest statements by the National Air traffic Conference of the Federal Republic of Germany.⁵

Compared to other European countries (Great Britain, France, Spain, Italy), Germany is proving to be a regional air traffic diaspora. A current evaluation of the supply of scheduled services by commercial airports shows that not only is the number of airports from which scheduled services are offered significantly lower in Germany, but that especially smaller airports with less than 100 frequencies in the weekly scheduled services are in short supply.

Landscapes of Airport Infrastructure

Frequencies Scheduled Services (11.05.-17.05.2020)

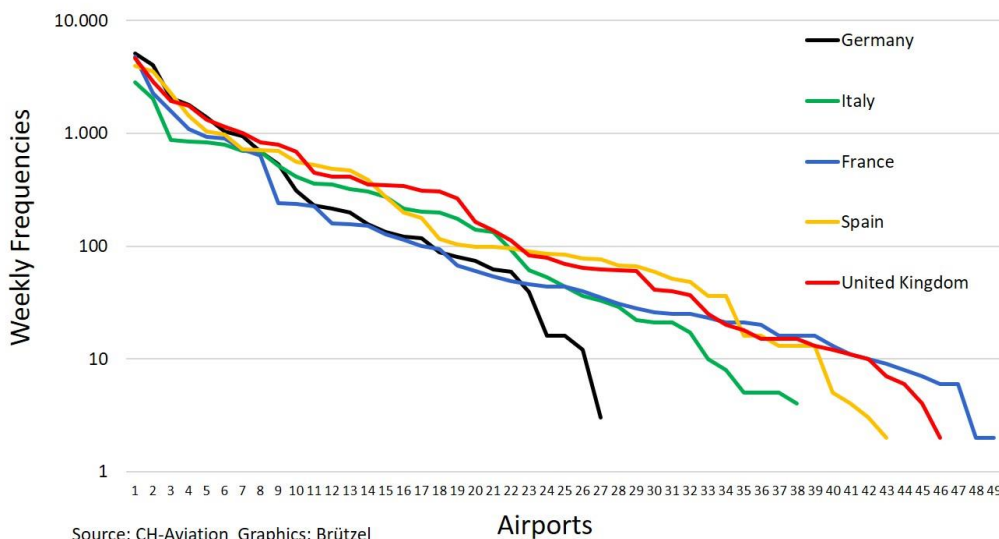


Figure 2: Landscape of airport infrastructures in selected European countries

So, if regional airports in Germany are under permanent pressure to justify themselves, the comparative graph shows that the other countries in the European Union are much more exposed when it comes to cutting off uneconomic airport infrastructure from public subsidies. Whereas for United Kingdom one might argue that there are quite some airports at remote Islands to be served, this is not true for all other countries displayed in Figure 2.

The following analysis includes the traffic development at 16 German regional airports. It compares to a similar analysis published by the author early 2018⁶. The selection of this analysis and the earlier one includes all “International Airports” according to the German Air Traffic Act (§ 27d LuftvG) and those regional airports where more than 200.000 passengers departed in 2017 or 2019. Smaller airports with sustainably less than 200.000 passengers, like Sylt Westerland (140.000 passengers in 2019), Mannheim (35.000) and Heringsdorf (20.700), have not been included in the tables and comparing analysis though there will be some scheduled flights offered in

² European Commission (2015), par. 2.2.

³ Bundesregierung Deutschland (2009), p. 32 ff.; Bundesminister für Verkehr (2017), Abs. D II.

⁴ i.e. Landesregierung NRW (2014), p.87 f.

⁵ National Air Traffic Conference (2019)

⁶ Brützel, C. (2018)

Summer 2020. At Kassel, some 140.000 passengers were counted in 2019, however there are no scheduled flights offered at this airport according to CH-Aviation this summer.

Regional Airports in Germany

Airport	IATA-Code	Passengers (Thousands)				Flights (scheduled and charter) (Thousands)				Seats / flight* (2020)
		2017	2019	+/-	+/- %	2017	2019	+/-	+/- %	
Hanover	HAJ	5.886	6.278	392	6,7%	53,1	55,2	2.121	4,0%	150
Nuremberg	NUE	4.175	4.107	- 68	-1,6%	43,2	39,7	-3.466	-8,0%	136
Bremen	BRE	2.536	2.291	-245	-9,6%	22,5	21,6	- 911	-4,1%	140
Leipzig/Halle	LEJ	2.350	2.614	264	11,2%	61,5	70,1	8.579	13,9%	150
Dortmund	DTM	2.001	2.691	690	34,5%	13,3	17,5	4.250	32,1%	177
Memmingen (2019)	FMM	1.180	1.723	543	46,0%	n.a.	n.a.	n.a.	n.a.	187
Dresden	DRS	1.703	1.598	-105	-6,1%	18,8	17,6	-1.211	-6,4%	137
Hahn	HHN	2.358	1.436	-922	-39,1%	18,4	13,3	-5.077	-27,6%	186
Karlsruhe/Baden-Baden	FKB	1.237	1.333	96	7,8%	10,5	9,6	- 868	-8,3%	183
Niederrhein	NRN	1.885	1.245	-640	-34,0%	11,4	7,6	-3.888	-34,0%	189
Munster/Osnabruck	FMO	960	977	17	1,7%	10,5	10,9	370	3,5%	110
Paderborn/Lippstadt	PAD	733	696	- 37	-5,0%	8,0	8,5	534	6,7%	144
Friedrichshafen	FDH	515	491	- 24	-4,7%	6,6	7,2	563	8,5%	97
Saarbrücken	SCN	373	345	- 28	-7,5%	6,0	5,4	- 555	-9,3%	111
Erfurt-Weimar	ERF	276	158	-118	-42,8%	3,2	1,9	-1.331	-41,6%	187
Rostock-Laage (2019)	RLG	291	148	-143	-49,1%	n.a.	n.a.	n.a.	n.a.	98
Total		28.459	28.130	-329	-1,2%	286,9	286,0	- 890	-0,3%	150

* Scheduled services 11.-17.05. 2020; Source: CH-Aviation Source Airport Data: ADV; airports

Figure 3: Regional airports in Germany (selected)

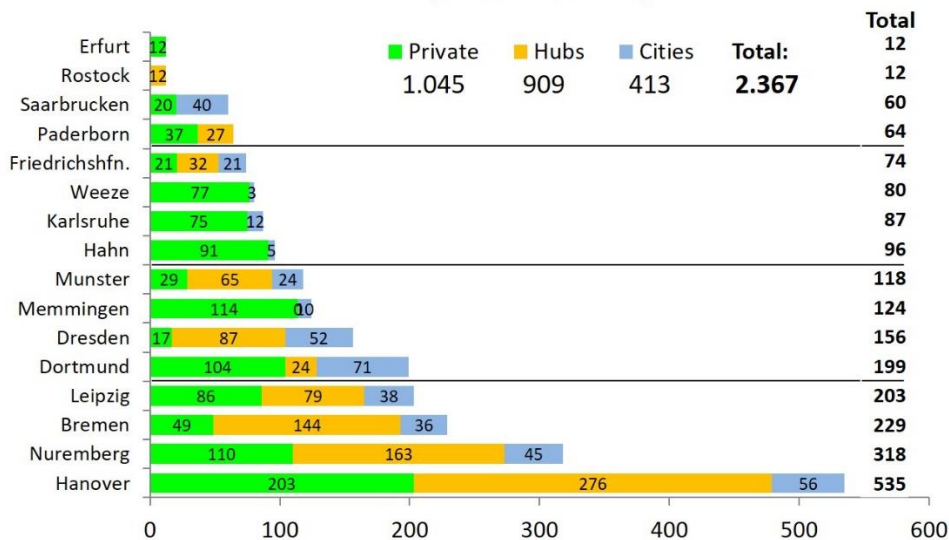
An overview of selected German regional airports shows that traffic at these airports continues to decline overall, contrary to the average growth of commercial airports.

For the other larger commercial airports reported by the German Airport Association (ADV), the number of scheduled and package tour charter flight movements grew by an average of just under five percent (4.96 percent) in the comparable period.

Contrary to the general trend, Dortmund and Leipzig/Halle were still able to make considerable gains; the biggest losers were the classic Ryanair bases at Hahn and the Lower Rhine (Weeze), Nuremberg, Erfurt-Weimar and Rostock-Laage. The evaluation of the current scheduled flight planning for a week of May within the 2020 summer flight schedule provides information about the current traffic structure. The scheduled services published via OAG/CH-Aviation are supplemented by the services of Corendon Airlines, which will increasingly serve German regional airports this year following the bankruptcy of Germania in 2019.

Traffic at German Regional Airports

Frequencies Scheduled Services
(11.05.-17.05.2020)



Sources: CH-Aviation; Corendon Airlines Graphics: Brützel

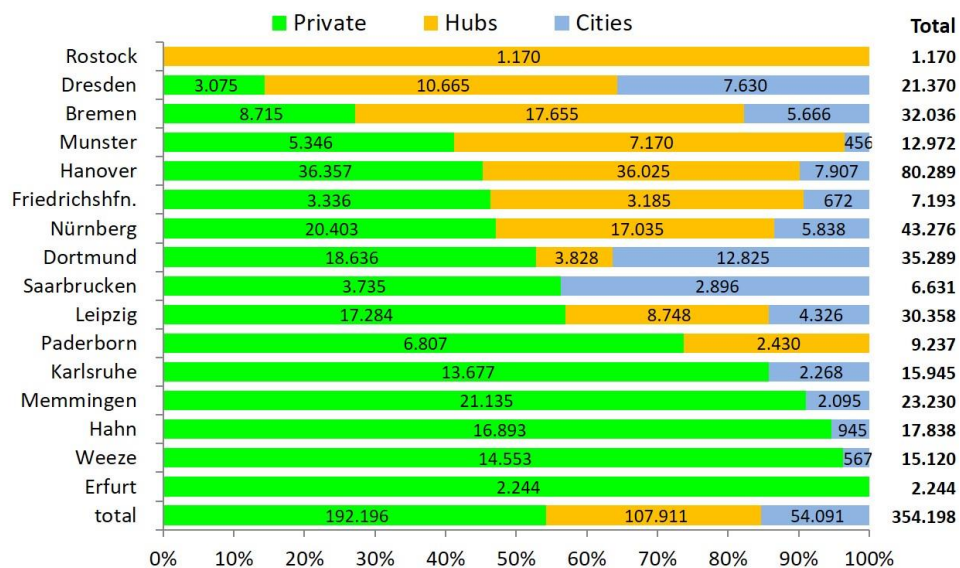
Figure 4: Traffic structure at German regional airports (frequencies offered)

For the evaluation, traffic was divided into the categories "Private", "Hubs" and "Cities". City connections were classified as those connections that are also relevant for business travel and to which at least one of the airports offers a daily connection on weekdays. All connections to typical holiday destinations and other offers with less than five weekly frequencies were classified as private destinations.

The traffic shares become even clearer if the available seats are considered instead of frequencies.

Traffic Structure at German Regional Airports

Seats offered Scheduled Services
(11.05.-17.05.2020)



Sources: CH-Aviation Graphics: Brützel

Figure 5: Traffic structure at German regional airports (seats offered)

The share of private travel is already above 50 percent of the total supply for the sample week of May of which the analysis is based on. For the entire summer schedule period, it is likely to be significantly higher.

Private travel connections to hot water and city destinations offered by low-cost carriers and leisure carriers dominate the province and the classic LCC departure bases at Weeze, Hahn, Memmingen and Karlsruhe/Baden-Baden. But holiday destinations are also gaining in importance at the other regional airports, with more than 180 seats per each flight.

Regional flight offers with less than 70 seats can be counted on two hands. Lufthansa Group has withdrawn completely from this market and buried the regional partner platform it operated several years ago. British Airways has put a few feet in the door at Friedrichshafen and Bremen. In addition, Munster and Saarbruecken and Mannheim were able to gain partners in AIS, DAT and Rhein-Neckar-Air, who operate individual connections with their own or wet leased equipment, the marketing of which is managed by Flex-Flight - especially via the indirect sales channels. The lack of economic viability of such services in the German market is illustrated, inter alia, by the fact that BA and Sund Air just recently decided to discontinue the FDH-HAM service. Sylt Air offers scheduled connections to Hamburg during the summer operating a Cessna 404 Turboprop with 9 seats and a Partenavia 68 (5 seats) depending on the actual demand.

Regional Air Traffic with less than 60 Seats per Flight

Scheduled Services
(11.-17.05. 2020)

From	To	Freq. /Week	Aircraft	Seats	Airline	Operator
Hanover	Edinbourg	4	ERJ145	49	Loganair	Loganair
Mannheim	Berlin	8	DO328	34	RNA / Flex Flight	MHS
Mannheim	Hamburg	8	DO328	34	RNA / Flex Flight	MHS
Friedrichshafen	Hamburg	11	DO328	32	British Airways	Sun-Air
Friedrichshafen	Düsseldorf	10	DO328	32	British Airways	Sun-Air
Friedrichshafen	Toulouse	3	DO328	32	British Airways	Sun-Air
Bremen	Toulouse	3	DO328	32	British Airways	Sun-Air
Munster	Berlin	5	BAE J32	19	AIS / Flex-Flight	AIS Airl.
Munster	Groningen	10	BAE J32	19	AIS / Flex-Flight	AIS Airl.
Munster	Stuttgart	9	BAE J32	19	AIS / Flex-Flight	AIS Airl.
Westerland	Hamburg	11	various	5-9	Sylt Air	Sylt Air

Source: CH-Aviation

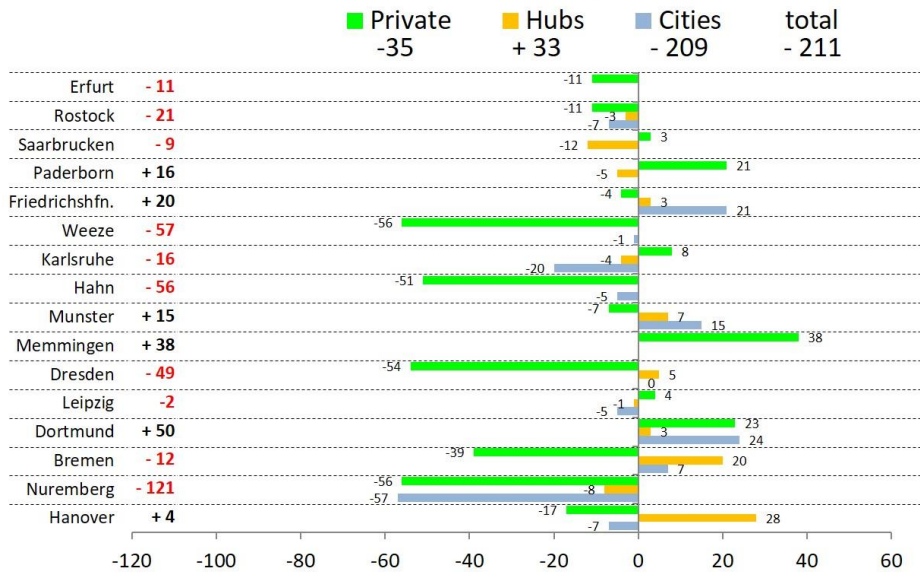
Figure 6: Regional air traffic with less than 60 seats per each flight

In the United Kingdom, however, regional air services to the Channel Islands and destinations in the Irish and Scottish seas continue to play a certain role. Loganair operates a fleet of 41 aircraft from 7 to 50 seats and flies from Edinburgh to Hanover four times a week with Embraer RJ 145s. At the 33 British airports with less than 50 scheduled daily scheduled flight movements (see chart above), 50 percent of all services are offered with aircraft under 58 seats. It must, however, be considered that there are quite some remote airports at remote islands in the Irish and Scottish sea are to be served there.

A comparison differentiated by airport according to traffic type shows that, compared with the situation two years ago, the proportion of feeder traffic to hubs is increasing, while the number of seats available to holiday destinations is declining.

Traffic Development at German Regional Airports

Frequencies Scheduled Services
(20. KW 2020 vs. 2018)



Sources: CH-Aviation, Corendon Airlines Graphics: Brützel

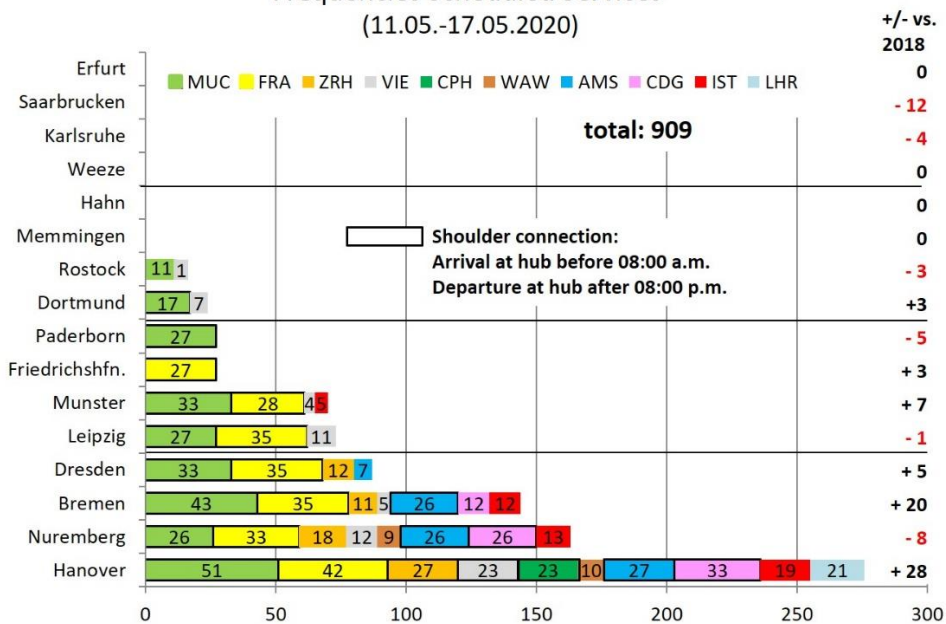
Figure 7: Traffic Development at German Regional Airports (2020 vs. 2018)

Hub connectivity - not always high-quality

A more detailed analysis of hub connections shows that the reported increase in frequencies to hubs concentrates at Hanover and Bremen.

Hub Connectivity from German Regional Airports

Frequencies Scheduled Services
(11.05.-17.05.2020)



Sources: CH-Aviation Graphics: Brützel

Figure 8: Hub Connectivity from German Regional Airports

From the airports examined, 70 percent of all feeder flights depart to the hubs of Lufthansa Group in KW 20 2020. Star Alliance partners SAS and Lot provide additional five percent to their hubs. Apart from Hanover, British Airways has withdrawn completely from the feeder service to London Heathrow from German regional airports. Air France/KLM keeps presence at Hanover, Bremen and Nuremberg. At these airports, Lufthansa Group is countering their offers by connecting to all four of its hubs.

Turkish Airways continues to connect German regional airports to its attractive network to Asia and Africa based on its extensive traffic rights - certainly not in harmony with its German Star Alliance partner.

Except for Hanover, Nuremberg and Bremen, only the Lufthansa Group is positioning aircraft at regional airports to organize early morning departures to its hubs.

Except for Munster and Friedrichshafen, the hub connections of the small regional airports have continued to deteriorate. Saarbrücken, too, is now only connected to the global air traffic network by train.

Regular non-stop urban connections only by exemption

Without connecting at hubs, business travelers with the need for daily connections can still only find an adequate pattern of flights on a case-by-case basis.

Point-to-Point flights from German Regional Airports

≥5 Frequencies Scheduled Services
(11.05.-17.05.2020)

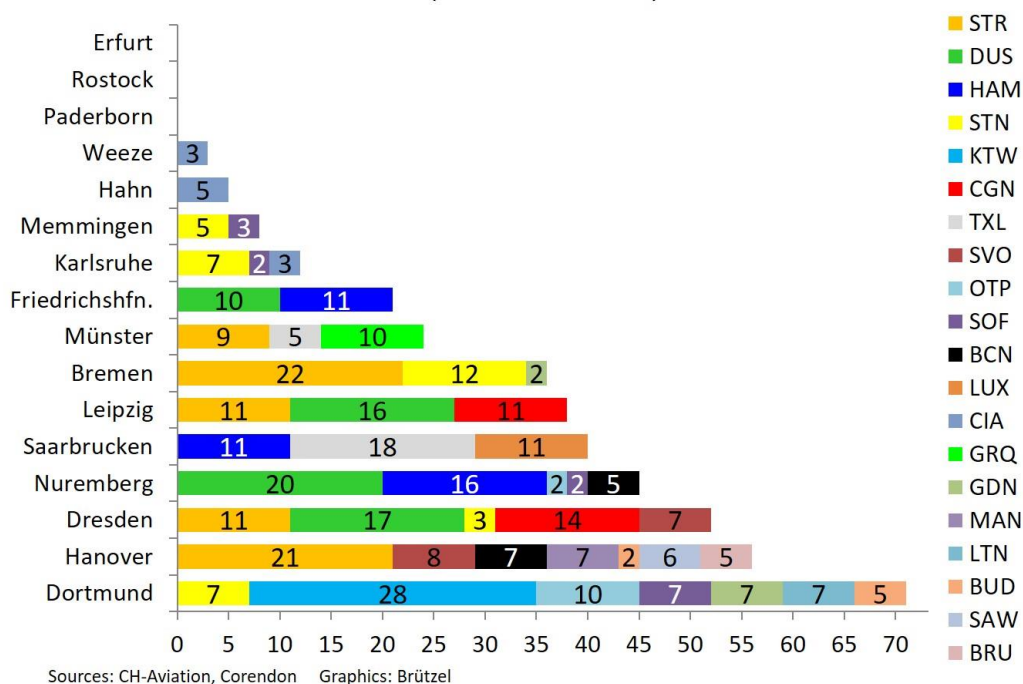


Figure 9: Point-to-point flights from German regional airports

In addition to the occasional city connections with regional equipment already mentioned, domestic flights are solely offered by Eurowings connecting to major airports if there is enough demand and distance. For this purpose, Bombardier DHC8-400 (76 seats) of the LGW and WDL are still being used in some cases. When the wet lease contracts expire in 2021, however, the turboprop era will be over here as well.

In Dortmund, Wizzair operates an intensive connection from its bases in Eastern and South-Eastern Europe. Especially the four daily frequencies to Katowice are remarkable. This puts Dortmund at the top of all German

regional airports in this segment. Internationally, Ryanair and EasyJet also fly daily to London to their bases in Stansted and Luton.

With a few exceptions, all other destinations can only be reached by changing planes in Frankfurt and/or Munich, if at all. In Weeze, Friedrichshafen, Erfurt and Paderborn there are no connections at all relevant for business travelers.

Leisure travel: Corendon replaces Germania

After the loss of Germania, Corendon is establishing itself as a new source of hope for the smaller regional airports. In Rostock alone, the gap remains unfilled. Here, in addition to military traffic, the exchange of cruise passengers has now been discovered as a business field. However, the charter flights used for this purpose are not shown in this analysis.

The smaller airports almost entirely depend on holiday flights and on Ryanair and Wizzair, which primarily target the segment of private travelers. The few movements with higher demands on infrastructure and operation, however, generate only small revenues from fees and service charges. Thus, these airports can generate valuable contribution margins, if at all, in non-aviation areas such as parking fees, etc.

Market Shares Low Cost / Leisure at Regional Airports Frequencies Scheduled Services (11.05.-17.05.2020)

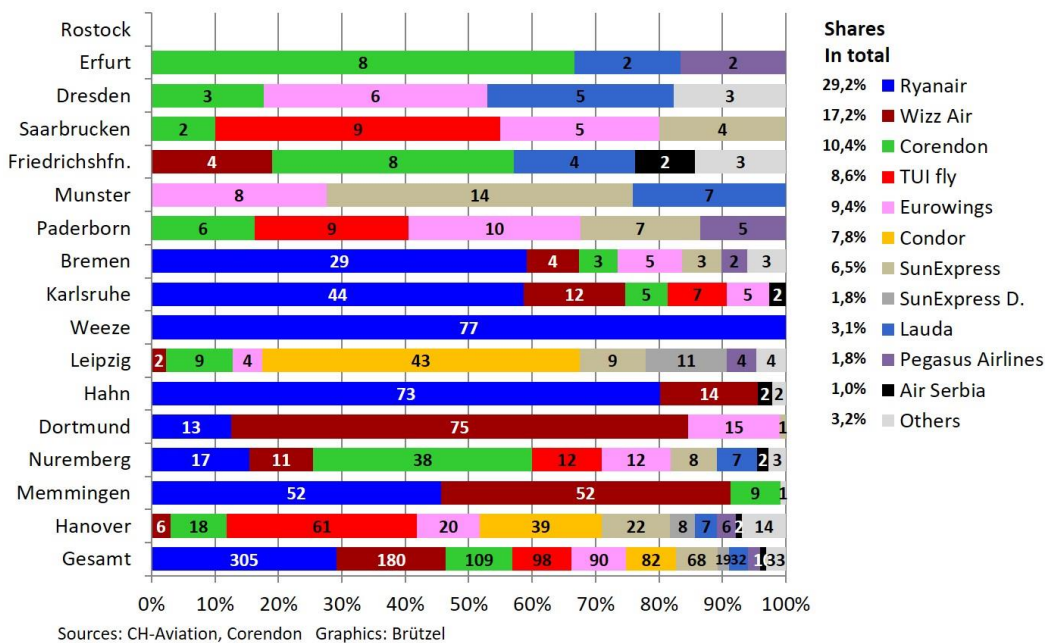


Figure 10: Market shares Low Cost / Leisure at German regional airports

ACMI home base operators and E-aviation as sources of hope?

In summary, the situation of German regional airports remains borderline. With the existing business models in passenger air traffic (network carriers, LCC, leisure carriers), not much will change in this situation when considering the growing headwind from the climate debate. Given the high unit costs of smaller aircraft with conventional engine technology, a return to the classic regional flight offerings is not to be expected.

However, electrically powered aircraft could prove to be a source of hope for this segment. While developments in aircraft types with more than 50 seats are still in the basic study phase, two types with between nine and twelve seats, ZUNUM and Eviation Alice, are in an advanced stage of development. Their purchase prices and reported operating costs of US\$ 250 and US\$ 200 per flight hour respectively could open new market segments. With

operating costs of 7 to 10 US cents per available seat kilometer, scheduled services from airports such as Saarbrücken, Lubeck, Rostock, Erfurt or even Kassel could make sense.

Other than this, there is hardly any hope that airlines will position individual aircraft for night stops at regional airports to allow for departures in the early morning like expected by business travelers particularly. There might, however, be room for ACMI operators to set up a bases at regional airports operating a white tail fleet from there on behalf of distinctive airlines. Wet leases may even be operated in the livery of the client. Connecting to various hubs in the morning and in the evening and operating another roundtrip to private traveler destinations in between might provide enough of feed to operate a fleet even allowing for some spare capacities for the case of AOGs or other disruptions, which otherwise bear a substantial risk of costly three-hour-delays for airlines. The fleet may serve other airlines ACMI or be chartered to tour operators. Such a home base focused value proposition of ACMI / Charter operators may even be more sustainable at times of down cycles of the industries, when ACMI carriers typically are the first ones to be let off by their customers who want to keep their own resources utilized in the first place.

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