Monthly Traffic Results
Frankfurt Airport

with Annual Report

December 2022

Traffic category	December absolute	Δ%	January to December absolute	Δ%
Passengers (arr.+dep.+transit)	3,971,406	46.2%	48,923,474	97.2%
Airfreight (metric tons) (arr.+dep.+tr.)	155,177	-19.3%	1,966,116	-13.4%
Airmail (metric tons) (arr.+dep.+tr.)	4,494	-8.7%	43,316	-6.5%
Aircraft Movements (arr.+dep.)	30,157	7.9%	382,211	45.9%
MTOWs (metric tons) (arr.)	1,962,020	7.8%	24,247,141	37.1%
Traffic Units (arr.+dep.+tr.)*	5,568,121	18.8%	69,017,802	43.8%
Traffic Units (arr.+dep.)**	5,531,290	19.0%	68,496,102	44.1%
Cargo (metric tons) (arr.+dep.+tr.)	159,671	-19.0%	2,009,433	-13.3%

Traffic Units (TU) are the combined annual values of passengers, cargo, and mail expressed in metric tons.
1 TU = 1 Pax (assessed at 100 kg), or 100 kg of freight or 100 kg of mail.
Cargo refers to the sum of airfreight and airmail volumes, all in metric tons.
However, due to measuring airfreight and airmail in kilograms, rounding diffrences may appear.
* Fraport internal definition: arriving+departing+transit
** As per ADV-definition: arriving+departing.

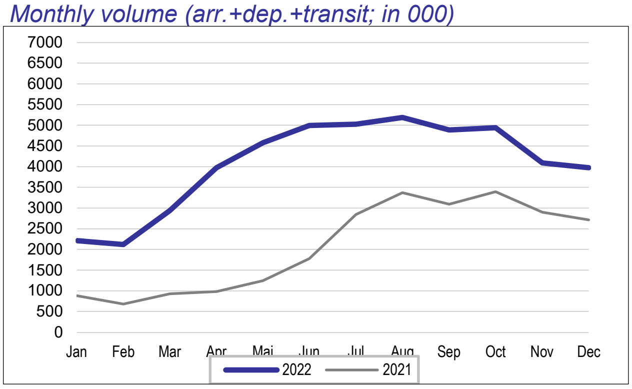
Prepared by UEW-MF, 13.01.2023

Contact: Milena Berst, Tel. +49-172 6725619, Claudia Seibert, Tel. +49-151 15025389.
Document: Monatsbericht ab2004 - Vorlage_v5.xlsm

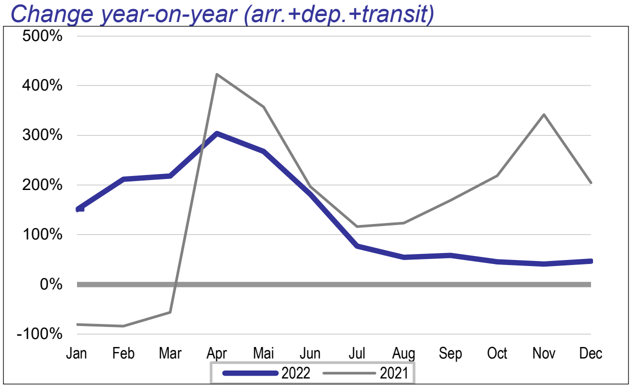
Passengers

December	**3,971,406**	**46.2%**
January to December	**48,923,474**	**97.2%**

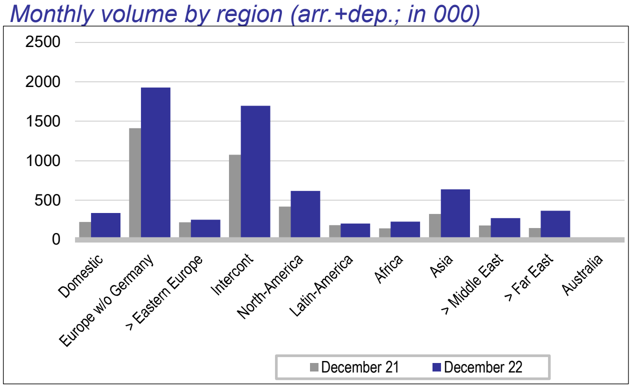
Monthly volume (arr.+dep.+transit; in 000)



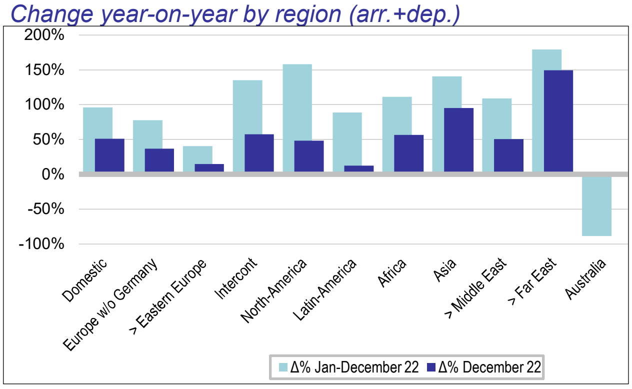
Change year-on-year (arr.+dep.+transit)



Monthly volume by region (arr.+dep.; in 000)



Change year-on-year by region (arr.+dep.)



Regional evaluation by destination; source: BIAF-MAFO

In December 2022, Frankfurt Airport recorded 3.97 million passengers. Due to bad weather conditions at the start of the week of Christmas, the 4 million mark was slightly missed. Compared to December 2021, the passenger count saw an increase of 46.2 %. Compared to December 2019 (before the COVID-19 pandemic) the passenger count in December 2022 was back to about 82 % of that month in 2019.

Compared to the passenger count for European and intercontinental traffic, the count for domestic traffic still had the highest minus rate at about 37 % below the December 2019 count. All destinations in Germany were still below the level before the start of the COVID-19 pandemic. In regard to domestic traffic there was a very slow recovery of business travel.

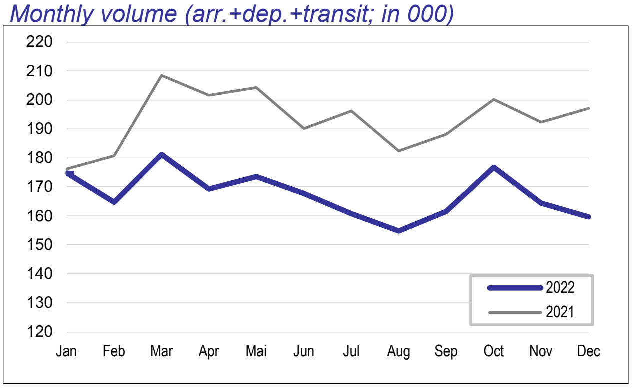
European traffic was only 17 % below the level in December 2019. There was a tremendous increase of the passenger count connected to the Canary Islands in December 2022. There were also higher than the 2019 level passenger counts for destinations in Southeast Europe (specifically Turkey). Next came destinations in northern Europe.

The best recovery was seen for intercontinental traffic which had a passenger count at about 85 % of the 2019 level. There was high demand for travel to and from tourism locations in the Middle East in addition to heavy demand for travel to and from Qatar and Bahrain in connection with the World Soccer Championship tournament. There were also high growth rates connected to destinations in Central Africa. Further positive impulses were the result of the good development of demand for travel to and from destinations in North America.

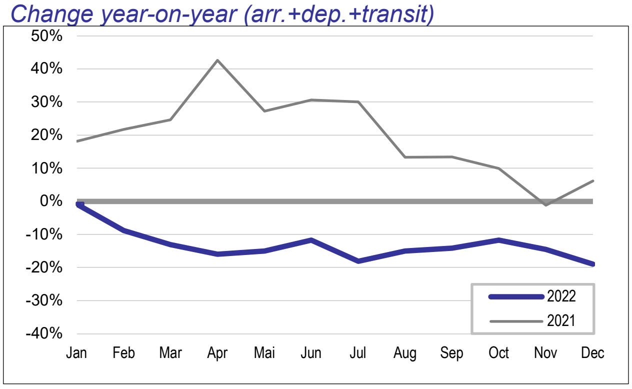
Cargo (t)

December	**159,671**	**-19.0%**
January to December	**2,009,433**	**-13.3%**

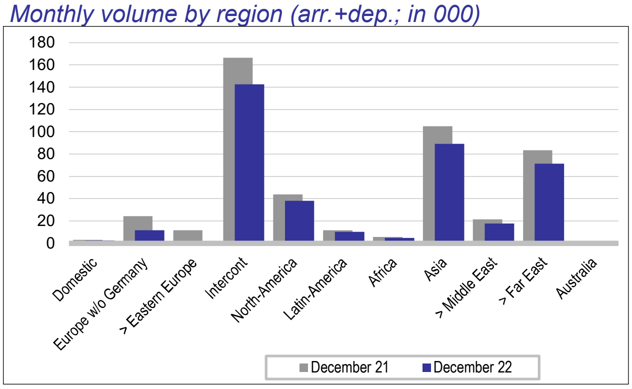
Monthly volume (arr.+dep.+transit; in 000)



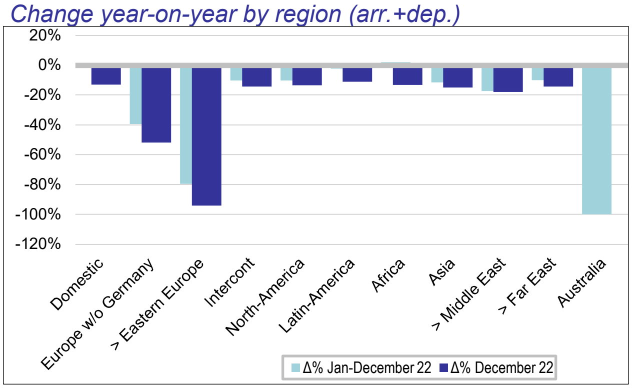
Change year-on-year (arr.+dep.+transit)



Monthly volume by region (arr.+dep.; in 000)



Change year-on-year by region (arr.+dep.)



Regional evaluation by destination; source: BIAF-MAFO

A total of about 159,700 mt of cargo were handled in December 2022. This is approximately 19 % below the count of the record month December 2021. The decline was 6.3 % compared to December 2019 before the start of the COVID-19 pandemic. December 2022 had the lowest count for a December month since the economic/finance crisis back in 2008/2009.

The cargo count was in line with the early economic indicators for December 2022 which indicated a sustained weakness of demand. The dark clouds in regard to the economy, the low number of incoming orders received by many companies and high inventory in storage facilities were just some of the factors that suppressed demand.

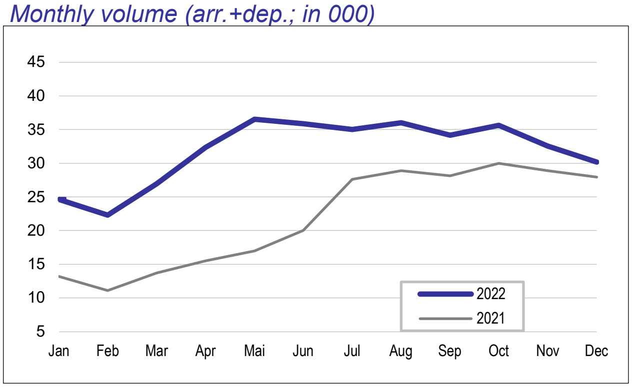
Due to low demand the utilization rate for available capacity on freighter aircraft was down and at the same level as in November. The utilization rate was far below that what was recorded in 2021. Cargo on so-called preighter flights (passenger aircraft carrying only cargo) was down compared to previous months and only at about 2,500 mt in December 2022. Cargo in the belly of passenger aircraft was up by 6.9 % because more passenger services (flights) were being offered. Cargo tonnage on freighter aircraft was down by 28.6 %.

Direct traffic connected to China was down by 14.0 % in December 2022 because numerous "preighter flights" were no longer offered. As result of the war in the Ukraine there was no direct traffic to and from Russia. Consequently, there was an immense decline of 47.5 % regarding continental traffic. As a result of the weakness in demand the early indicators for the United States industry dropped. This is to be seen by the lower amounts reported for US traffic (-14.7 %).

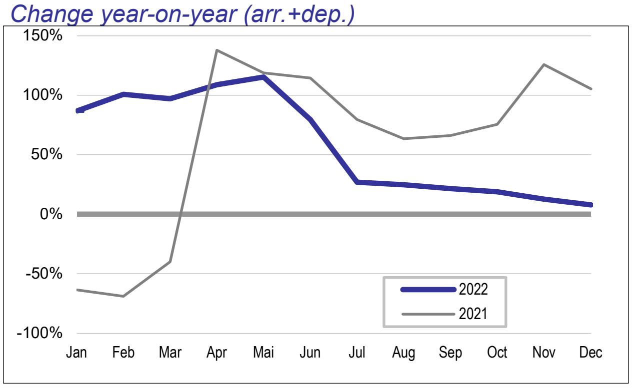
Aircraft Movements

December	**30,157**	**7.9%**
January to December	**382,211**	**45.9%**

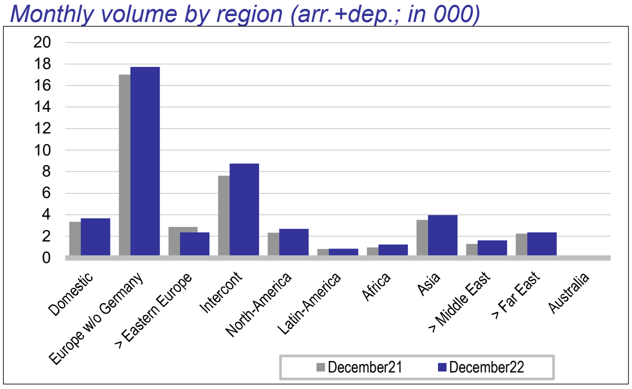
Monthly volume (arr.+dep.; in 000)



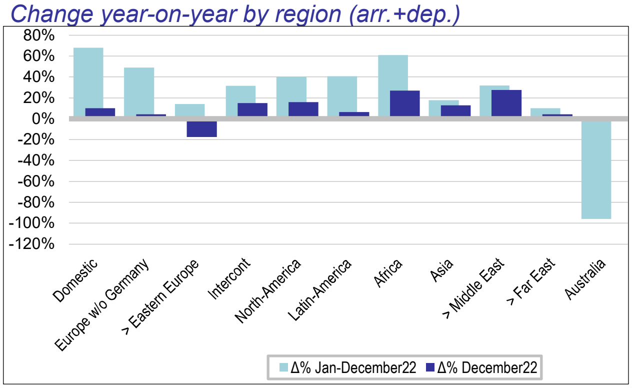
Change year-on-year (arr.+dep.)



Monthly volume by region (arr.+dep.; in 000)



Change year-on-year by region (arr.+dep.)



Regional evaluation by previous/next en-route stop; source: BIAF-MAFO

In December 2022, Frankfurt Airport reported 30,157 aircraft movements (takeoffs and landings). There would have been more than 32,000 aircraft movements had it not been for numerous flight cancellations due to bad weather conditions. Compared to December 2021, there were about 2,200 more aircraft movements (+7.9 %). The count for December 2022 is at 82 % of the 2019 level.

Domestic traffic was impacted far more by flight cancellations. Consequently, in December 2022 there were only 3,264 passenger flights connected to other airports in Germany. This was an increase of 12.5 % compared to December 2021 and 63 % of the December 2019 level. Regarding Europe the growth rate was 5.6 % (16,733) and the count was at 81 % of the December 2019 level. The best growth was seen this winter for Southeast Europe (Albania, Cyprus, Turkey). There was also high demand for travel to and from destinations in northern Europe (Norway, Iceland, Finland).

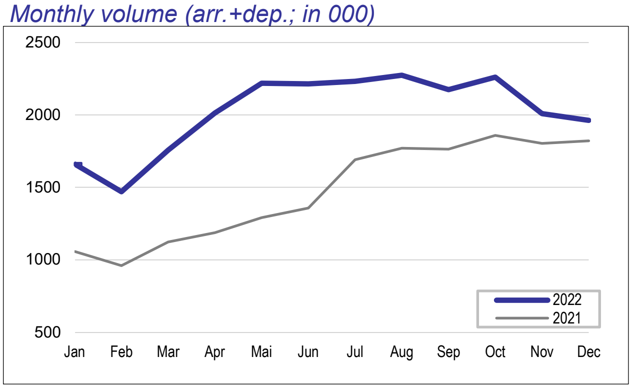
The best recovery was seen for intercontinental passenger services (flights) and was up by 31.7 % to 7,291 aircraft movements compared to December 2021. This was also 88 % of the December 2019 level before the start of the COVID-19 pandemic. Regarding North America the count was at 97 % of the 2019 level. The count for Middle America was above the 2019 level. The count for the Middle East was at 93 % of the 2019 level. Even the Far East experienced dynamic growth compared to 2021 and was back to 77 % of the 2019 level.

Regarding the cargo segment the aircraft movement count was down by 28.2 % to 2,003 freighter aircraft flights. Compared to 2019 this was still a growth rate of 17.5 %. The growth rate was mainly based on intercontinental freighter aircraft movements (+21.7 %). However, freighter aircraft movements within Europe were also about 8.9 % above the 2019 level before the start of the COVID-19 pandemic. For months there have been fewer and fewer so-called preighter flights (passenger aircraft carrying cargo only) and there were only 102 of these flights in December 2022 (most of them to China).

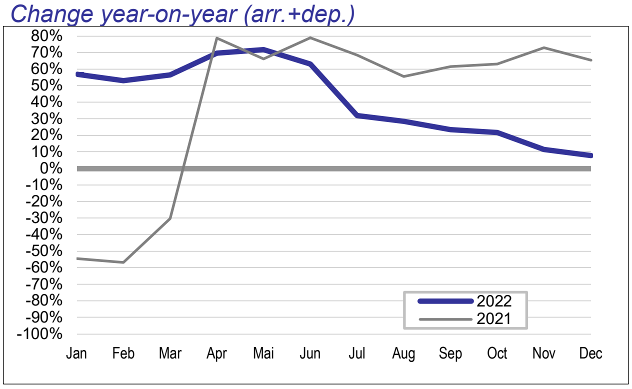
Maximum Take Off Weights / MTOW (t)

December	**1,962,020**	**7.8%**
January to December	**24,247,141**	**37.1%**

Monthly volume (arr.+dep.; in 000)



Change year-on-year (arr.+dep.)



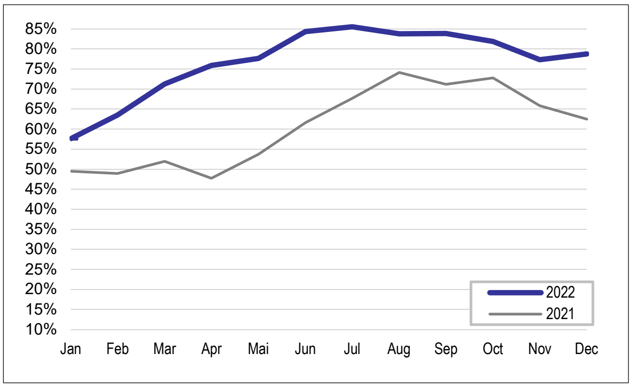
MTOWs in December 2022 were at approximately 1.96 million tons (7.8 % above December 2021) and at about 83 % of the pre-crisis level. The 2 million level would have been easily surpassed had it not been for numerous flight cancellations due to bad weather conditions. In December 2022 the count of aircraft movements and MTOW developed proportionately due to there being fewer flights to and from other German airports.

Consequently, the MTOW per aircraft landing increased (compared to previous months) significantly to about 130 tons. Utilization also climbed noticeably due to numerous flight cancellations and reached new record levels compared to other December months. The seat load factor was 78.7 % and the quotient passengers per passenger aircraft movement was 145.5.

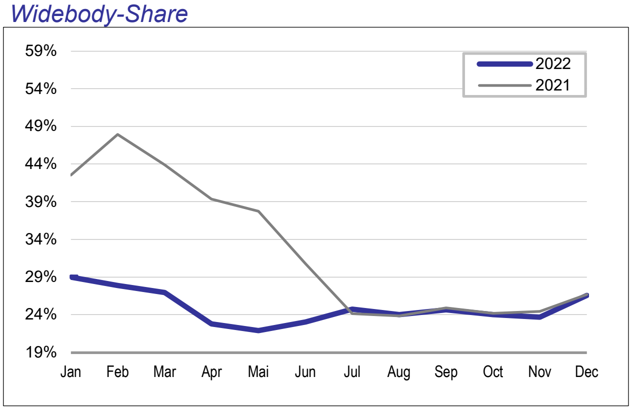
Special Information

The seat load factor in December 2022 was at 78.7% versus 62.5% in the same month last year.
The share of widebody aircraft was at 26.6% (December 21: 26.7%).
The ratio 'passengers per passengerflight (sheduled & charter)' was at 145.5 vs. 111.8 in the same month last year.
Compared to the same month last year the flight punctuality rate decreased by 20.1%-points and was at 48.1%.

Seat Load Factor



Widebody-Share



Passengers

January to December **48,923,474** **97.2%**

The year 2022 was distinguished by an increased recovery of air traffic after the dramatic declines in 2020 and 2021 as result of the COVID-19 pandemic. The passenger count at Frankfurt Airport in 2022 was 48.9 million. This was an increase of 97.2 % compared to the year 2021. The 2022 passenger count was 69 % of the 2019 level before the start of the COVID-19 pandemic.

At the start of the year 2022 the spread of the Omicron variant during the first quarter of the year and continued travel restrictions as result of the pandemic still negatively impacted the development of traffic. However, the concentration of intercontinental traffic at Frankfurt Airport helped to cushion the decline of the count of passengers at Frankfurt Airport.

The effects of the war in the Ukraine were hardly noticed after the discontinuation of traffic to and from affected countries (Russia, Ukraine, Belarus) because of the low volume of traffic in the first place. With the gradual lifting of traffic restrictions due to the COVID-19 pandemic and the desire to travel again there was a huge surge of travel demand starting in April of 2022. During the last quarter of 2022 business travel also finally started to pick up again.

During the Easter vacation travel period there was even more travel from and to many traditional tourism locations than in 2019 before the start of the COVID-19 pandemic. In July and August 2022 the passenger count was over the 5 million mark for the first time again since November 2019. In June 2022, for the first time, there was one day with over 180,000 passengers. The 21st of August 2022 had the highest passenger count with 182,700 passengers at Frankfurt Airport.

The daily passenger counts during the summer months were relatively high. There were, however, some capacity bottlenecks as result of fewer scheduled passenger services (flights) due to handling problems on the ground. Some cancellations due to strikes in the summer and bad weather conditions in December negatively impacted the passenger count.

Traffic to and from other airports in Germany was negatively impacted by low demand for business travel and reduced offered passenger services (flights) as result of capacity bottlenecks (ground handling problems). Overall, domestic travel was still at only 55 % of the 2019 level before the start of the COVID-19 pandemic. Until the end of the third quarter, business travel to and from business capitals in Europe was still relatively weak.

In contrast to the above, there was a good increase of traffic to and from many vacation destinations in Europe and levels were in some cases even higher than in 2019 before the start of the COVID-19 pandemic. Greece recorded almost the same level as in 2019 and in 2022 Turkey and Cyprus were even above 2019 levels. The same applies for the Canary Islands. Passenger counts for North Europe profited from a very high demand for travel on routes to and from Norway.

Intercontinental traffic experienced a remarkable recovery as the year progressed. This was mainly due to "sunny" destinations (e.g. Dominican Republic, the Maldives). Starting the second quarter of 2022 there was a remarkable recovery connected to North America. The Far East (specifically traffic to and from China) came in last regarding an increasing passenger count due to many travel restrictions, as result of the COVID-19 pandemic, having not yet been lifted.

Cargo

January to December **2,009,433** **-13.3%**

Compared to the absolute record year 2021, the cargo count in 2022 was down by 13.3 % to about 2.0 million mt. This volume was 5.6 % below 2019 before the start of the COVID-19 pandemic. Nonetheless, it was still 4.8 % above the level during the finance/economic crisis 2008/2009.

During the first quarter of 2022, the pre-crisis level could still be maintained. But then the downward trend set in due to less available capacity as result of the war in the Ukraine and lower demand in general. During the summer months there were further capacity adjustments for operative reasons. This resulted in less cargo being handled. During the second half of 2022 the air cargo tonnage was down by 15.4 %. During the first half of 2022 it was only down by 11.2 %.

Air cargo development followed the procurement manager indices. The indices slipped significantly downwards as the year progressed. The reasons were of course impairments based on the COVID-19 pandemic (specifically in China) and the impact of the Russian invasion into Ukraine. This all helped to intensify inflation which had been on the rise to begin with.

The worldwide cargo yields in 2022 were at a high level and about twice as high as in the pre-crisis year 2019 despite dynamics declining as result of weakening demand and higher belly load capacities due to more passenger aircraft movements. This is specifically noticeable on the route Frankfurt to North America where the yield declined during the second half of the year. Overall, the North America count was down by 10.2 % but still above the level in 2019 before the start of the COVID-19 pandemic.

In 2022 so-called preighter flights (passenger aircraft carrying cargo only) were mainly deployed for flights to and from China because there were far fewer passenger aircraft flights than before the start of the COVID-19 pandemic. About 60 % of these preighter flights were connected to China. There were heavy declines connected to flights to and from Shanghai as result of the extensive lockdown. However, during the second half of 2022 the amount of cargo tonnage on this route increased again by 21.5 %.

In 2022 China traffic was down by 6.9 % but still above the level in 2019 before the start of the crisis. Regarding Northeast Asia traffic the high 2021 amount of traffic to and from South Korea could not be achieved. Nonetheless, it was still 29.0 % above the 2019 level. There was a high growth rate connected to Taiwan. There were noticeable negative counts for cargo tonnage connected to major markets such as Hong Kong (-20.6 %) and Japan (-20.2 %). There were positive counts for Southeast Asia, specifically Thailand (+16.3 %) and Vietnam (+8.1 %).

In regard to Latin America (-2.4 %) the growing air cargo market Mexico was 4.7 % above the already high level in 2021.On routes to and from Africa there was an increase of 1.9 % due to more passenger aircraft flights enabling more cargo in the belly on the aircraft. However, the overall tonnage count was still about one-third below the amount what was recorded in 2019. Regarding East Europe traffic there was a decline of 79.5 % due to vanished freighter aircraft capacities.

As result of more offered passenger services (flights) the amount of cargo on passenger aircraft increased by 13.6 % whereas the volume on freighter aircraft declined because of the reduction of the so-called preighter flights (-22.2 %). Compared to 2019 this means that still about 20 % of the belly load amount is missing. However, the tonnage on freighter aircraft is still 5.2 % above the pre-crisis level. Consequently, the "freighter aircraft cargo share" was high in 2022 but lower than in 2021.

Aircraft Movements	**January to December**	**382,211**	**45.9%**
Maximum Take Off Weights / MTOW (t)	**January to December**	**24,247,141**	**37.1%**

In the year 2022, the third year after the start of the COVID-19 pandemic, the recovery is in full swing. With 382,211 aircraft movements this is 74 % of the pre-crisis level and a growth of 45.9 % compared to 2021. This positive result is mainly due to quarters II, III and IV. During the first quarter of 2022 the development was still quite shaky due to the lockdown. The most aircraft movements were in May with almost 36,600. The highest amount was on the May 22 with a total of 1,290 aircraft movements.

MTOWs in the year 2022 were up by 37.1 % over against 2021 to a count of 24.2 million tons. This is 76 % of the 2019 level. The average MTOW per aircraft landing was down by 6.1 % to 126.9 t compared to 2021 and thus close to the pre-crisis level. This effect was caused by the decline of freighter aircraft traffic and a substantial recovery of vacation air travel.

There were 341,397 passenger aircraft movements in the year 2022 and this is 71 % the 2019 level. Compared to 2021 the utilization of passenger aircraft flights was up by 22 % to a seat load factor of 78.1 %. As of June 2022 new records were achieved almost each month. The same applies for the quotient passengers per passenger aircraft movement. Compared to 2021 the quotient was up by 26 % to 143.2.

Passenger aircraft movements connected to Germany in 2022 achieved 59 % of the 2019 level. The recovery is slow due to many short notice cancellations and sluggish demand for business travel. Nonetheless, the approximately 18,000 aircraft movements connected to Germany represents a growth rate of almost 80 % compared to 2021. Most of these aircraft movements were connected to Munich, Berlin and Hamburg.

The offered passenger services (flights) connected to Europe were the growth generator in 2022 and reached 72 % of the pre-crisis year 2019. There was a plus of 52 % compared to 2021 and approximately 220,000 aircraft movements connected to Europe. The offered passenger services (flights) connected to tourism countries (such as Turkey, Greece and Cyprus) were even more than in 2019. The same applies for Norway. East Europe is still at only about 50 % of the pre-crisis level in 2019.

The passenger aircraft movements connected to intercontinental locations in 2022 were at 77 % of the 2019 level. The approximately 81,000 aircraft movements (intercontinental destinations) were a growth of 60 % compared to 2021. The best progress for all continents was seen for America (now at 89 % of the 2019 level). North America is at 90 % of the 2019 level. Traffic with Middle America is even above the 2019 level. The growth generators were the Dominican Republic, Costa Rica and Mexico. The count for South America progressed below average.

South Africa came in second with 76 % of the 2019 level. There was dynamic growth connected to Egypt, Tunisia and Morocco compared to 2021. Asia placed last with 66 % of the 2019 level. Traffic connected with the Far East is recovering slowly. More passenger services (flights) are being offered for India, Singapore, Thailand and Vietnam. There is less traffic connected to China, Hong Kong, Taiwan and Japan. There is dynamic recovery in regard to the Middle East.

After two years of a significantly higher offer of freighter aircraft flights the count of freighter aircraft flights in 2022 is in direction of the pre-crisis level. In 2022 there were 27,872 freighter aircraft movements. This is -19.0 % compared to 2021. Due to more passenger aircraft movements with available belly capacities there were 50 % fewer so-called preighter flights (passenger aircraft carrying cargo only) than in 2021. There were about 5,600 such flights in 2022. Freighter aircraft movements connected to Europe were almost back to pre-crisis level. There were approximately 5,800 more freighter aircraft movements connected to intercontinental destinations in 2022 than in 2019.

Tables

Month

Type of traffic		Aircraft Movements abs.	Δ%	Passengers abs.	Δ%	Air Freight (t) abs.	Δ%	Air Mail (t) abs.	Δ%
Total (civil aviation traffic)	arr.+dep.+tr.	30,157	7.9%	3,971,406	46.2%	155,177	-19.3%	4,494	-8.7%
	arriving	15,104	8.0%	1,941,729	49.3%	70,593	-23.2%	2,285	-5.4%
	departing	15,053	7.8%	2,020,442	43.2%	81,824	-15.6%	2,209	-11.6%
	arr.+dep.	30,157	7.9%	3,962,171	46.1%	152,418	-19.3%	4,494	-8.6%
	transit			9,235	69.8%	2,759	-19.4%	0	-95.0%
Commercial traffic	arr.+dep.	29,650	7.9%	3,961,821	46.1%	152,418	-19.2%		
Scheduled/Charter	arr.+dep.	29,291	8.2%	3,960,955	46.1%	152,418	-19.2%		
	transit			9,235	69.8%	2,759	-19.4%		
Passenger flights	arr.+dep.	27,288	12.3%	3,960,955	46.1%	53,080	8.6%		
Freighter flights	arr.+dep.	2,003	-28.2%			99,338	-29.0%		
Mail flights	arr.+dep.	0	n.def.					0	n.def.
Other traffic	arr.+dep.	359	-8.7%	866	-7.1%				
Non-comercial traffic	arr.+dep.	507	6.7%	334	54.6%	0	>100%		
Ferry flights	arr.+dep.	433	8.0%						

for information only:

	Air Cargo (t) abs.	Δ%
arr.+dep.+tr.	159,671	-19.0%
arr.+dep. (acc. to ACI-definition)	156,912	-19.0%

Year-to-date

Type of traffic		Aircraft Movements abs.	Δ%	Passengers abs.	Δ%	Air Freight (t) abs.	Δ%	Air Mail (t) abs.	Δ%
Total (civil aviation traffic)	arr.+dep.+tr.	382,211	45.9%	48,923,474	97.2%	1,966,116	-13.4%	43,316	-6.5%
	arriving	191,112	45.9%	24,571,733	98.2%	918,888	-15.5%	21,341	-18.0%
	departing	191,099	45.9%	24,249,865	95.9%	1,005,280	-11.9%	21,941	8.9%
	arr.+dep.	382,211	45.9%	48,821,598	97.0%	1,924,169	-13.7%	43,282	-6.3%
	transit			101,876	181.1%	41,948	-1.9%	34	-79.0%
Commercial traffic	arr.+dep.	374,105	46.0%	48,816,588	97.0%	1,924,158	-13.7%		
Scheduled/Charter	arr.+dep.	369,269	46.6%	48,803,429	97.1%	1,924,158	-13.7%		
	transit			101,864	213.6%	41,948	-1.9%		
Passenger flights	arr.+dep.	341,397	57.0%	48,803,429	97.1%	593,896	14.0%		
Freighter flights	arr.+dep.	27,872	-19.0%			1,330,262	-22.1%		
Mail flights	arr.+dep.	0	n.def.					0	n.def.
Other traffic	arr.+dep.	4,836	10.7%	13,159	20.9%				
Non-comercial traffic	arr.+dep.	8,106	42.5%	5,010	126.3%	11	>100%		
Ferry flights	arr.+dep.	6,775	42.9%						

for information only:

	Air Cargo (t) abs.	Δ%
arr.+dep.+tr.	2,009,433	-13.3%
arr.+dep. (acc. to ACI-definition)	1,967,450	-13.5%