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AIR CARGO CUSTOMER EXPERIENCE REPORT



CFCInsights.com

Air Cargo Customer Experience Report

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1. Summary and Conclusions

This report explores customer experience in airfreight logistics. The central question we look to answer is, how do today's airfreight customers view their experiences with carriers and airports? The report is based on results of the 2019 Air Customer Excellence (ACE) survey conducted annually since 2005 by our affiliated publication, *Air Cargo World*. In late 2018, approximately 1,900 respondents – mainly freight forwarders and airline executives – provided their assessment of the performance of each of their top three airlines and airports. In addition to the qualitative assessment of their airlines, freight forwarders provided quantitative information on the kind of service they are currently receiving with regard to advance booking, cut of and recovery times, notification of exceptions and how long they need to wait for compensation when things do not go as planned.

Forwarders experience a wide range of service levels from their airlines. While some airlines offer a high standard of service, others do not. We hope that the insights from Chapter 3.2 and improvement suggestions in Chapter 3.4 will help you determine which areas to focus on:

- Advance booking requirement: most carriers require no more than 1-2 days to access space.
- Pre-flight cut off and post flight recovery: only about 20% of carriers offer cut off times of less than 2 hours and 27% offer recovery times of within two hours.
- Notification of exceptions: respondents indicated that only 12% of the airlines they use offer real-time updates and notifications, and in 27% of cases customers received no notification at all.
- Time to pay compensation: when commitments are not met 17% - settle within a week but most airlines require at least a month to remit compensation.

In terms of improvement suggestions, access to capacity and competitive rates appear to be the main source of concern, followed by flight schedules and the network offered by their airlines.

While many airport customers (both airlines and forwarders) are satisfied with the service they receive, common complaints include the quality of cargo handling, lack of warehouse space, customer service, slots and inefficiencies related to ground access, and other infrastructure.

The report is supplemented by a spreadsheet, which allows you to run your own queries for airlines on 13 and airports on 14 different measures of performance and experience. The ranking of airlines is also discussed in chapter 3, and airports in chapter 4. Chapter 5 contains a discussion of which airports and airlines performed best in the transportation of specialty cargo -- perishables, dangerous goods, pharma, animals and oversized goods.

We welcome your questions and also feedback on elements that you would like to see included in our next survey to be conducted in late 2019.

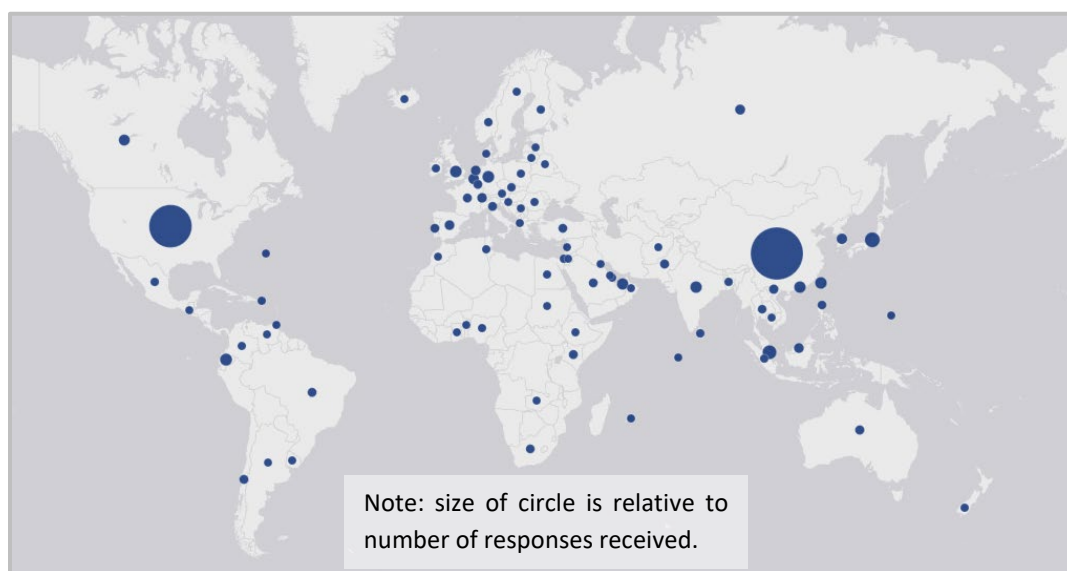
2. Survey and Methodology

2.1 Background

The *Air Cargo Customer Experience Report* is a summary and analysis of the data generated by the annual *Air Cargo Excellence (ACE)* survey conducted in late 2018 by our affiliated publication, *Air Cargo World*, the world's largest-circulation magazine on air cargo. Between October and December 2018, we surveyed customers on the service being provided by their top three airlines and airports. The survey has been conducted annually by *Air Cargo World* since 2005 and also forms the basis of the annual *Air Cargo Excellence (ACE)* awards presented to the top airlines and airports by the magazine.

This year's survey generated approximately 1,900 responses, of which the majority (40%) were freight forwarders and 20% were airlines. Respondents came from over 80 countries; however, half of all responses were received from customers in the United States and China (see Figure 1).

Figure 1 - Respondents by Country



This survey scores cargo carrier and airports based on several performance factors. Scores are indexed to a baseline of 100. Scores greater than 100 represent above-average performance, while those below, represent below average performance. Carriers are ranked according to their score. Where there were insufficient responses for a single carrier this carrier has been omitted from the ranking. An example is Southwest Airlines, which ranked no 1 in 2018. A separate ranking is also provided at the end of this report for facilities in the category of "specialty cargo" – those handling oversize, heavy, environmentally controlled, or high-value goods.

Carriers were evaluated by freight forwarders, who were asked to give a numerical rating for Performance, Value, and Service over the previous twelve months. Airports were judged by forwarders, cargo agents and third-party logistics providers with respect to Performance, Value and Facilities.

2.2 Airline Survey Methodology and Scope

In the latest survey, the performance dimensions for the airline survey were expanded substantially, yielding a much richer dataset. Apart from data on the location, business and role of the respondent, each forwarder was asked to rank their top three airlines and airports on performance, value and service criteria, as well as provide a quantitative indication of certain performance and service parameters (see Figure 2).

Figure 2 - Airline Survey Questions

	Performance	Value	Service
Qualitative measures (used to develop performance scores)	Timeliness of delivery as promised Space availability Main-deck capacity	Rate competitiveness Availability and quality of special services Route network	Quality of customer service Tracking and tracing of shipments e-AWB capability
Quantitative measures (not used to develop performance scores)	Pre-flight cut off times Recovery times after flight arrival Advance booking requirements for non-peak capacity		Length of time for payment of compensation for cargo loss or failure to meet delivery commitments Notification of exceptions e-AWB % of total

Forwarders were also asked to state the main factor that each of their carriers should do to improve the customer experience and service offering.

2.3 Airport Survey Methodology and Scope

As in previous years, airports are evaluated on their Performance, Value, and Facilities. (Survey elements used to develop the scope are shown in Figure 3).

Figure 3 - Airport Survey Questions

Performance	Value	Facilities
Customer service Handling of exceptions	Rate competitiveness Customs clearance efficiency	Airside capacity Apron capacity Warehousing Speciality cargo capabilities Operational restrictions Ground connectivity

3. Airline Survey Results

3.1 Carrier Rankings

Airlines were ranked in two size categories – over and under 1 million tonnes per annum. Among large carriers, Emirates ranked first place, followed by Qatar Airways and Singapore Airlines (see Figure 4). Last year's top three carriers were Cathay Pacific, Air France-KLM and Lufthansa Cargo.

Figure 4 - Large Carriers (>= 1 million tonnes)

Rank	Carrier	Customer Service	Performance	Value	Overall
1	Emirates Airlines	105	105	103	104
2	Qatar Airways	102	102	101	102
3	Singapore Airlines	99	101	101	101
4	Lufthansa	104	99	99	100
5	China Airlines	102	99	100	100
6	Cathay Pacific	102	100	98	100
7	Air France-KLM	98	97	103	100
8	China Southern Airlines	95	100	97	97
9	China Cargo Airlines	92	99	95	95
10	Air China	93	97	94	95
11	Korean Air	96	96	92	94
12	All Nippon Airways	93	94	93	93

Figure 5 - Smaller Carriers (< 1 million tonnes)

Rank	Carrier	Customer Service	Performance	Value	Overall
1	Delta Air Lines	112	109	110	111
2	AirBridgeCargo Airlines	100	108	103	104
3	Etihad Airways	99	103	100	101
4	Turkish Airlines	98	99	105	101
5	Air Canada	95	99	102	98
6	United Airlines	97	99	98	98
7	American Airlines	100	94	99	98
8	Nippon Cargo Airlines	94	97	98	97
9	EVA Air	100	93	95	96
10	Saudi Arabian Airlines	95	92	99	96
11	Cargolux	91	98	97	96
12	Thai Airways Int'l	91	95	96	94
13	IAG Group	87	87	99	91
14	Japan Airlines	90	94	88	90

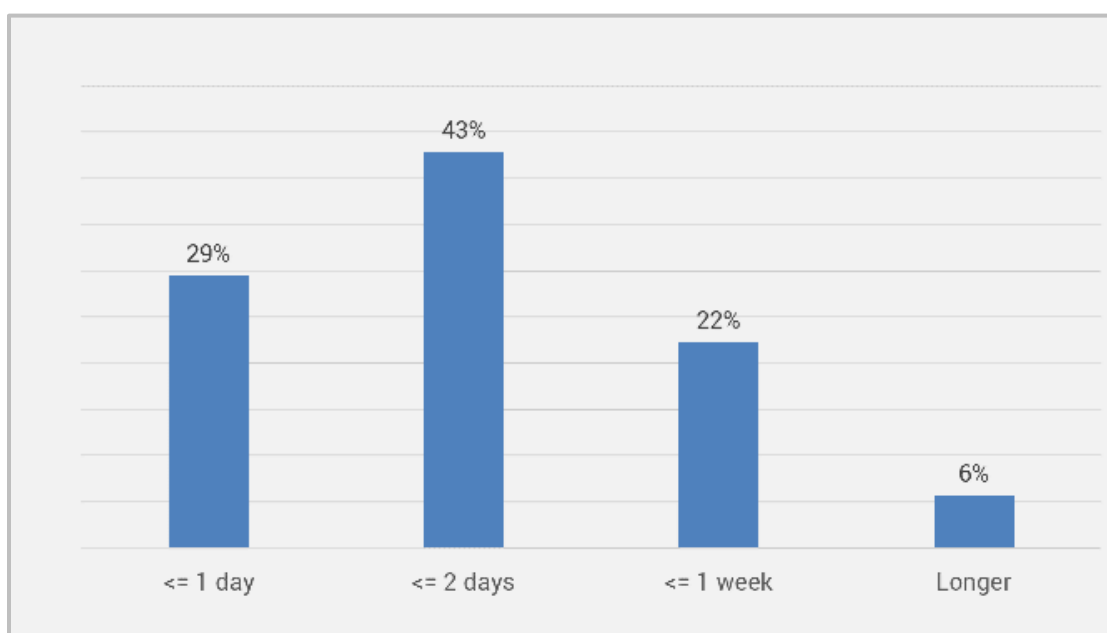
Among smaller carriers (with less than 1 million tonnes of freight handled), Delta airlines topped this year's ranking (see Figure 5)., moving up from third place last year Southwest Airlines, which was the highest scoring airline in last year's survey, was not included in this year due to insufficient responses. ACMI carriers such as Atlas Air or Aerologic have also been excluded from the ranking as they operate in a different business segment.

3.2 Airline Service Offerings

Forwarders responding to the Air Cargo Excellence deal with a range of different service levels among airlines – from good to bad to ugly. This section gives an overview of the typical services levels experienced by respondents from booking, shipment and post shipment claims. As mentioned under Chapter 2.2, these figures were not used to develop the ACE scores.

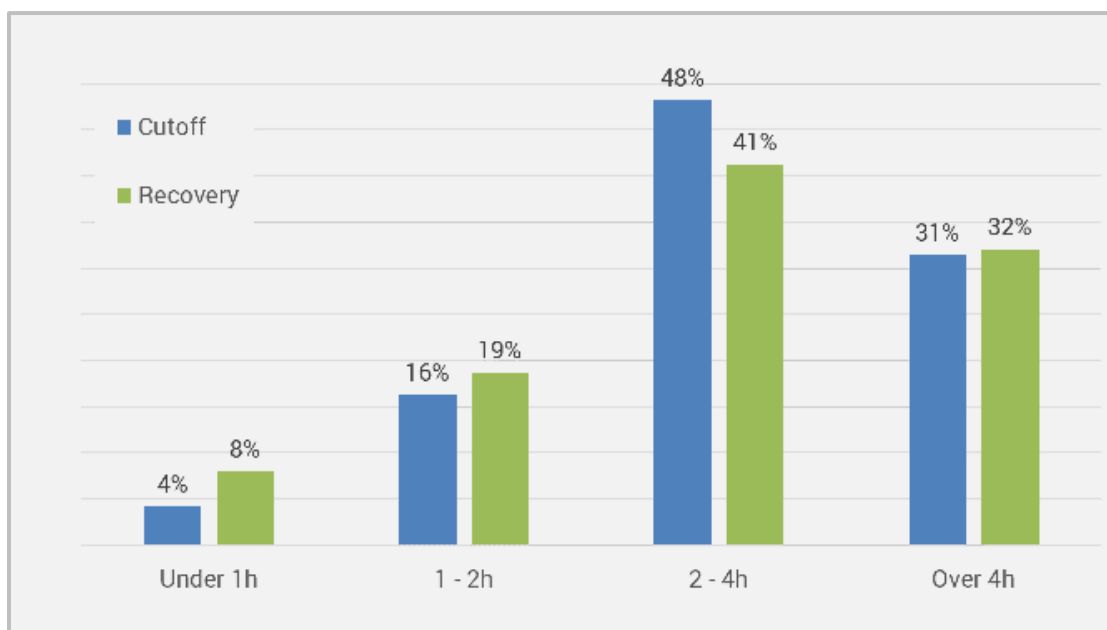
Respondents to the survey were asked how far in advance their carriers generally require them to book space during non-peak periods. Almost three quarters required no more than 1-2 days advance booking and only a small minority required longer than a week (see Figure 6).

Figure 6 - Advance Booking Requirement



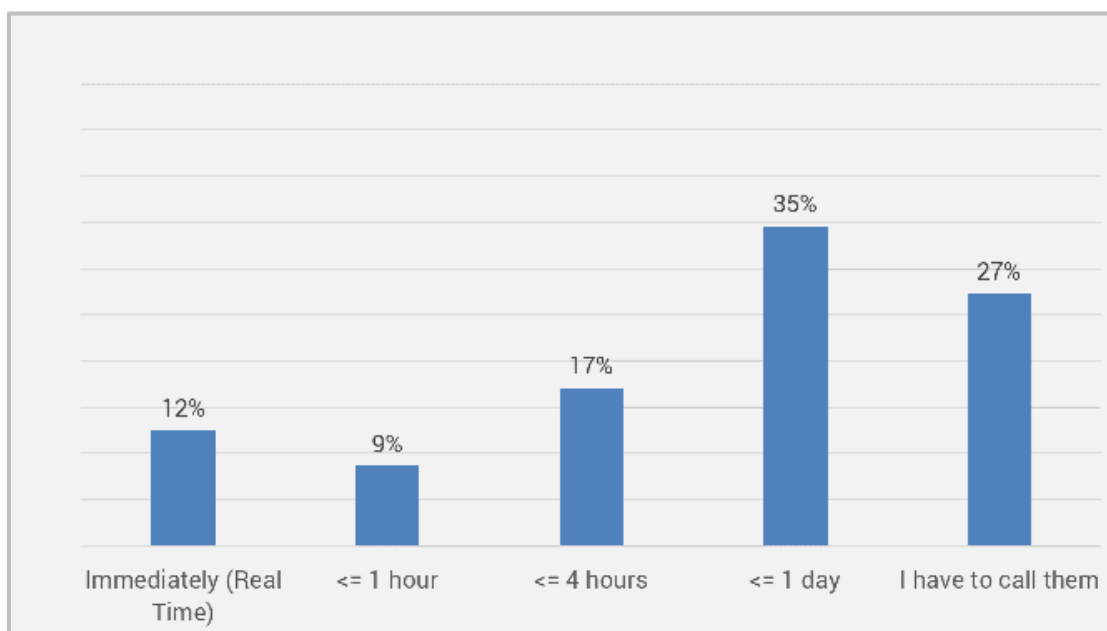
Pre-flight cut off and post-flight recovery times also vary significantly between carriers (see Figure 7). The majority of carriers offer cut off times between two and four hours, while close to one third of carriers require at least four hours. While there is not a clear correlation between the performance score received by a carrier, some carriers have positioned themselves well by offering cut off times of under two or even one hour. All of the top ranked carriers offer short cut off times.

Figure 7 - Cut off and Recovery Times Offered by Airlines



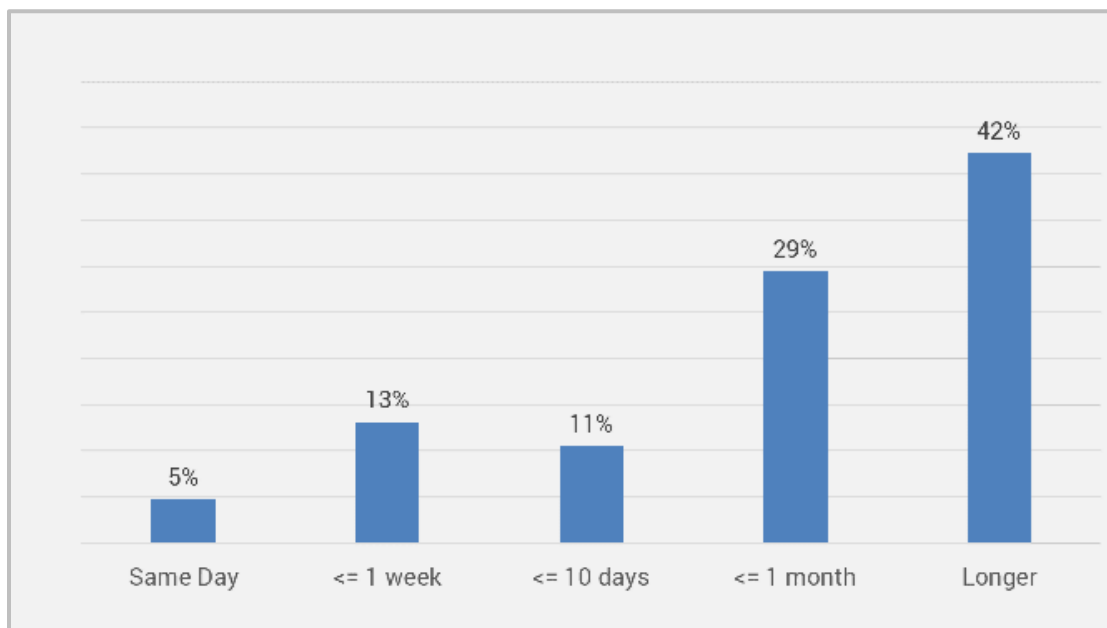
When things go wrong or there are changes to flight schedules or flight delays, customers expect to be notified. However, respondents indicated that only 12% of the airlines they use offer real-time updates and notifications (see Figure 8). In a third of all cases, customers are only notified 4-24 hours later and in a quarter of cases they are not notified at all or are required to proactively call the carrier.

Figure 8 - Notification of Exceptions



When it comes to the time taken to pay compensation for loss of cargo or failure to meet delivery guarantees, very few carriers – about 17% - settle within a week (see Figure 9). Most require at least a month to remit compensation.

Figure 9 - Time to Pay Compensation



3.3 Airline Customer Satisfaction

Despite the fact there are clearly shortcomings particularly with regard to notification of exceptions (Figure 8) or time to pay compensation (Figure 9), freight forwarders are generally satisfied with the airline customer experience they receive from their top 3 carriers. For example, 85% of respondents said that the quality of customer service received from their carriers was either good or very good (see Figure 10). Even though 27% of respondents said that they receive no notification of exceptions, 84% of airlines ranked tracking and tracing capabilities as good or very good (see Figure 11). Perhaps air cargo customers have become accustomed to service levels that would be considered unacceptable in other industries or even other segments of the business such as express or e-commerce.

However, while customers are happy with their carriers networks, they are somewhat less enthusiastic about the rates and specialty cargo services offered by their carriers (see Figure 12). Rates and capacity were the main items mentioned by forwarders asked on what they felt could be improved (see Chapter 3.4).

Forwarders are also generally satisfied with the performance of their airlines. The survey covered three areas – timeliness of delivery as promised, availability of space and availability of main-deck capacity (see Figure 13). Forwarders indicated in the survey that they would be interested in better access to space as well as main-deck capacity from their combination carriers who do not or no longer operate freighters.

Figure 10 - How Customers Rate Airline Customer Service

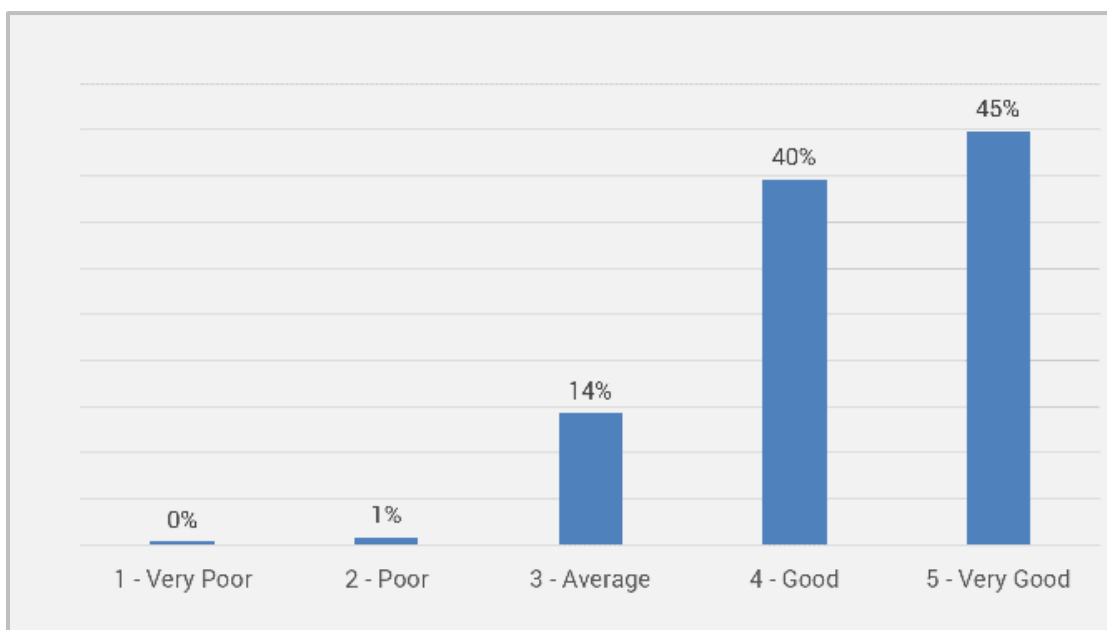


Figure 11 - How Customers Rate Airline Track and Trace and e-AWB Capabilities

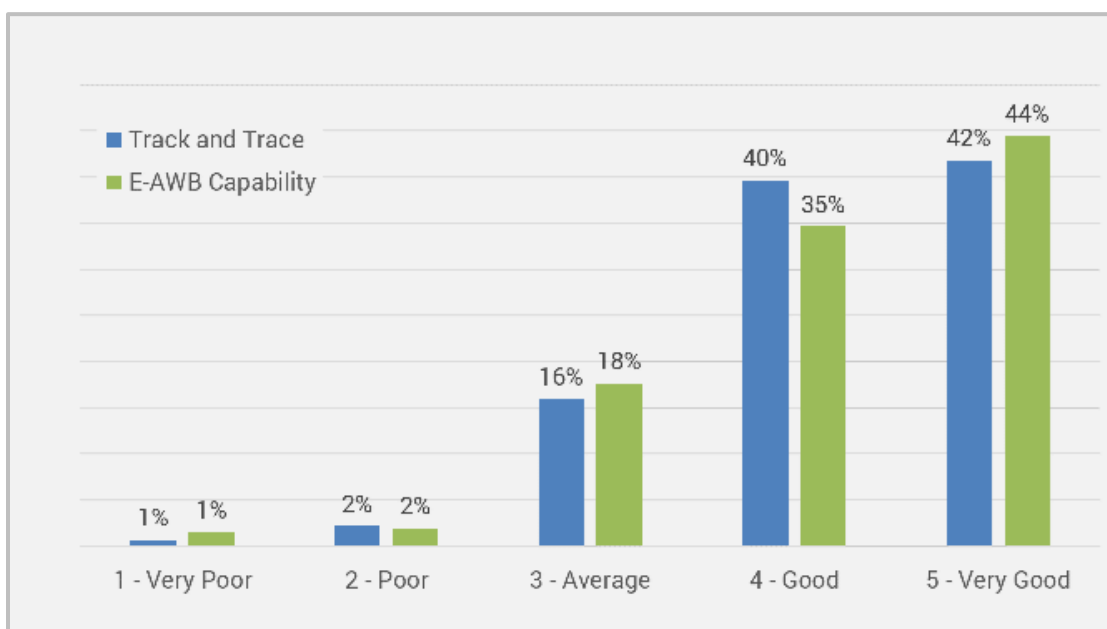


Figure 12 - How Customers Rate the Value they Receive from their Airlines

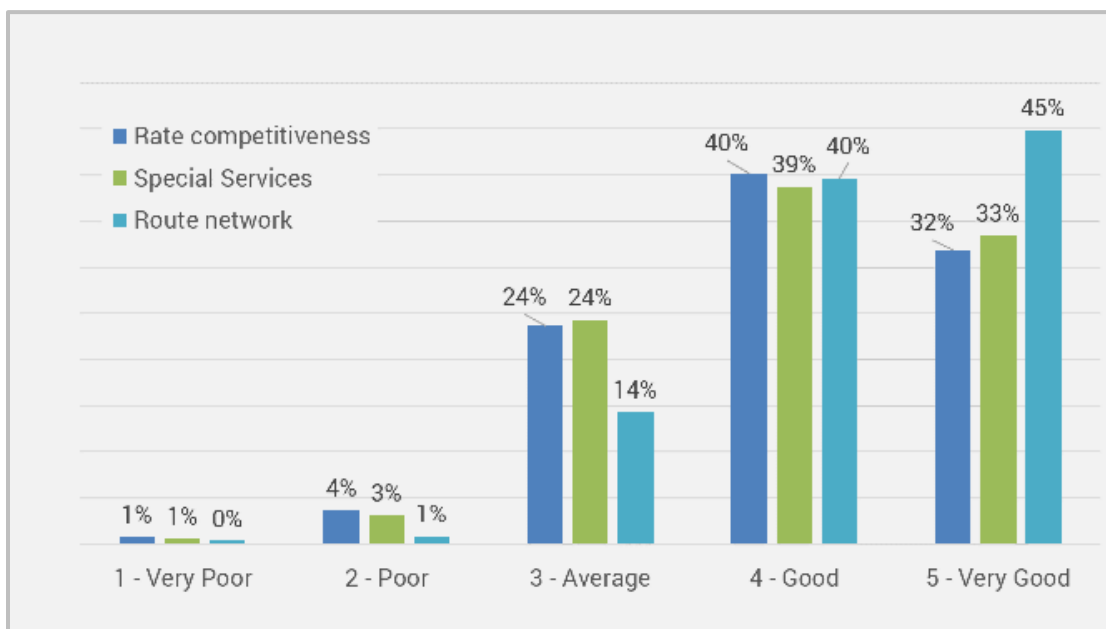
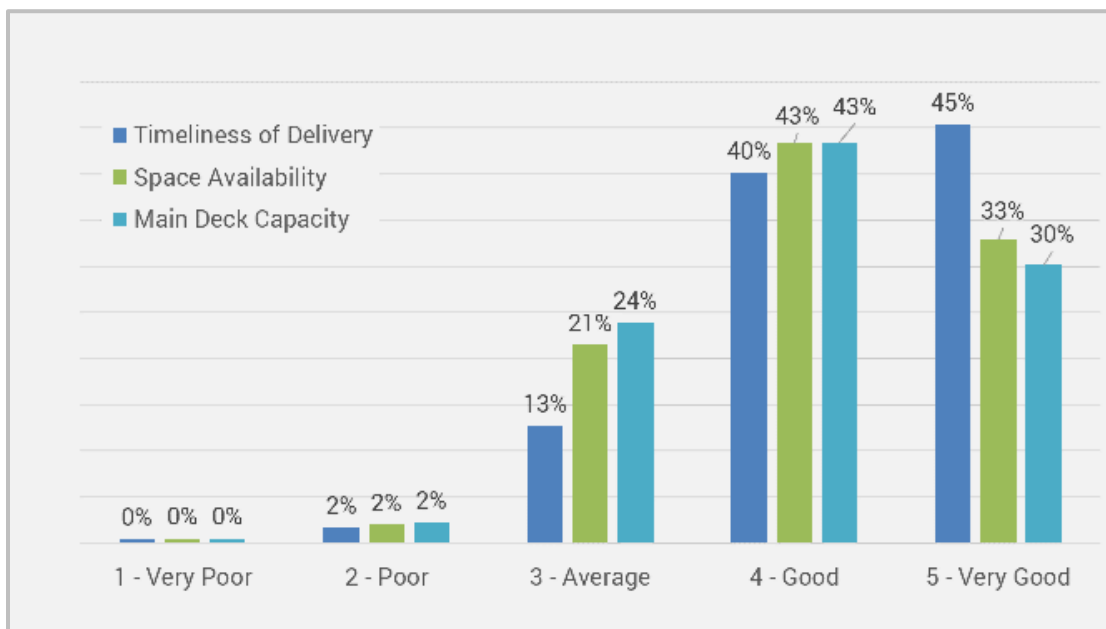


Figure 13 - How Customers Rate the Performance of their Airlines



3.4 Airline Customer Improvement Suggestions

For each of their top carriers, customers were asked to provide improvement suggestions. While many customers were satisfied with their airlines, access to capacity and competitive rates appear to be the main source of concern, following by flight schedules and the network offered by their airlines (see Figure 14).

Figure 14 - Airline Customer Improvement Suggestions



4. Airport Survey Results

4.1 Airport Rankings

As with airlines, airports are ranked within categories determined by tonnes handled per year: Large (> 1 million), Medium (400,000-999,999), and Small (< 400,000). Among large airports (with more than 1 million tonnes handled), Shanghai Pudong airport topped this year's ranking, followed by Hong Kong and Singapore. Hong Kong, Singapore and Dubai occupied the first three places last year, while Shanghai was ranked 12th.

Among airports in the 400,000 - 1 million tonne size category, Atlanta, Luxembourg and Moscow SVO (Sheremetyevo International Airport) occupy the first three places in this year's ranking of airports (see Figure 16). There has been quite some change in customer perception in the past twelve months. Previously, Oakland and Toronto were ranked highest in this category.

Among small airports, the Quito airport in Ecuador again was ranked on 1st place, ahead of Guayaquil, Ecuador, which last year ranked number 4 (see Figure 17).

Figure 15 - Large Airports (>= 1 million tonnes)

Rank	Airport	Performance	Value	Facilities	Overall
1	Shanghai Pudong, PVG	112	114	113	113
2	Hong Kong, HKG	110	109	108	108
3	Singapore, SIN	108	107	108	108
4	Dubai International, DXB	114	101	107	107
5	Amsterdam, AMS	102	102	102	102
6	Miami , MIA	97	100	105	102
7	Tokyo Narita, NRT	103	107	98	101
8	Frankfurt, FRA	99	97	97	98
9	Guangzhou , CAN	101	95	95	96
10	Los Angeles, LAX	93	94	94	94
11	London Heathrow, LHR	95	93	93	93
12	Chicago O'Hare, ORD	86	90	90	89
13	New York JFK	86	88	85	86

Figure 16 - Medium Airports (400,000 - 999,000 tonnes)

Rank	Airport	Performance	Value	Facilities	Overall
1	Atlanta, ATL	102	106	105	104
2	Luxembourg, LUX	100	101	102	101
3	Moscow, SVO	101	100	101	101
4	Dallas-Fort Worth, DFW	98	101	98	99
5	Newark, EWR	87	95	96	93
6	Kansai International, KIX	93	95	91	92
7	Brussels, BRU	88	90	92	91
8	São Paulo, GRU	85	78	94	89

Figure 17 - Small Airports (<400,000 tonnes)

Rank	Airport	Performance	Value	Facilities	Overall
1	Quito, UIO	121	111	121	119
2	Guayaquil, GYE	105	99	103	103
3	Detroit, DTW	106	108	99	103
4	Seattle-Tacoma, SEA	92	101	94	95
5	San Francisco, SFO	91	98	92	93
6	Chubu Centrair, NGO	92	90	84	87

4.2 Airport Customer Satisfaction

Customers appear to be less satisfied with their airports than with their airlines. Nevertheless, over 70% of respondents rated airport customer service and handling of exceptions as either good or very good (see Figure 18). Three quarters of airport customers surveyed indicated that they felt that the level of customs clearance efficiency at their top airports was either good or very good and over 60% were satisfied that they were receiving value for money (see Figure 19).

Figure 18 - How Customers Rate Airport Customer Service

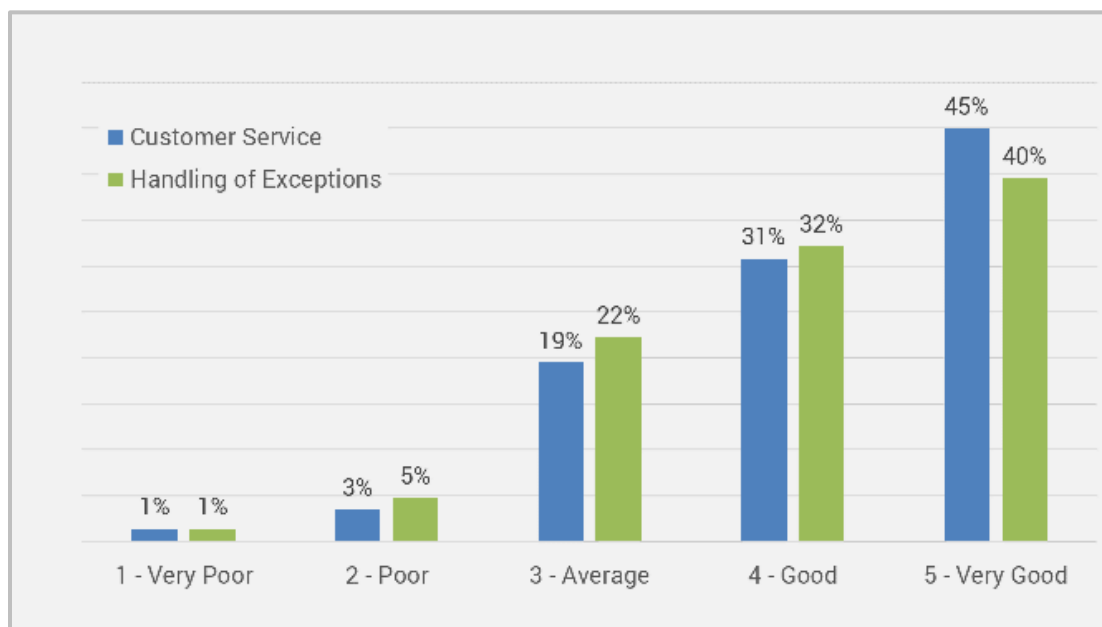
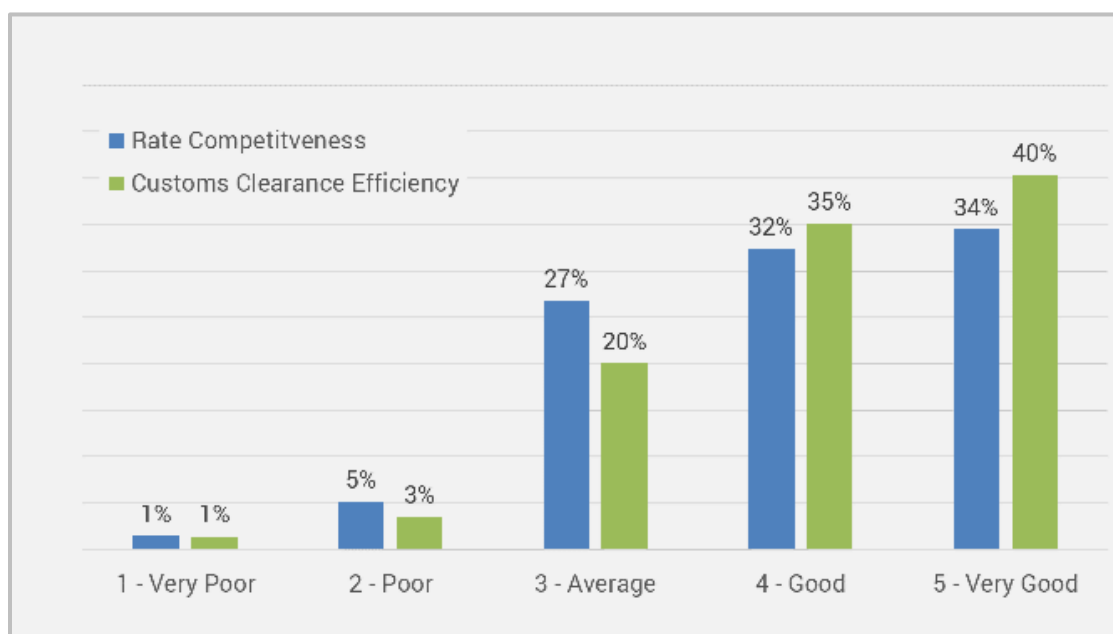


Figure 19 - How Customers Rate the Value they Receive from their Airports



Airport	Very Poor	Poor	Average	Good	Very Good
Airside Capacity	1%	4%	25%	36%	35%
Apron Capacity	1%	3%	16%	31%	48%
Warehousing	2%	5%	20%	32%	41%
Speciality Cargo Capabilities	2%	3%	23%	33%	39%
Operational Restrictions	2%	3%	24%	30%	41%
Ground Connectivity	1%	3%	17%	33%	47%

While many airport customers (both airlines and forwarders) are satisfied with the service they receive, common complaints include the quality of cargo handling, lack of warehouse space, customer service, slots and inefficiencies related to ground access, and other infrastructure (see Figure 21)

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5. Specialty Cargo Results

In addition to handling general cargo efficiently and being recognized for service and performance, airlines and airports need to handle high-profit specialty cargo to survive in what is all too often a commodity business. Successfully delivering perishables, dangerous goods, pharma, animals and oversized goods can make the difference between profit and loss.

Survey respondents rated candidates in these niche categories and they chose Air Bridge Cargo as number one. In the previous two years, Lufthansa Cargo topped this category, but as Air Bridge Cargo has expanded both its fleet, network and product offering, it has become more attractive to forwarders.

On the airport side, Ecuador's Quito (UIO) was again the clear winner, with 122 points for specialty cargo, 100 being average. Other notable specialty cargo airports in different world regions included: Miami (MIA), Singapore (SIN), Dubai (DXB) and Luxembourg (LUX, see Figure 22).

Figure 22 - Specialty Cargo Scores

Category	Location	Company/ Airport	Score
Carrier	World	Air Bridge Cargo	110
Airport	World	Marisal Sucre, UIO	122
	Latin America	Marisal Sucre, UIO	122
	North America	Miami, MIA	109
	Asia	Singapore Changi, SIN	117
	Africa, India, Middle East	Dubai International, DXB	110
	Europe	Luxembourg, LUX	110

6. About Cargo Facts Consulting

Since 1978, we have been helping the global air cargo industry make better business decisions and investments. We strive to be the most knowledgeable and highly-valued provider of strategic advice to the global air freight transportation and logistics industry. We provide answers and actionable solutions, not just data and research. We are flexible and creative. We have passion for seeing the implementation of advice that drives greater profits and efficiency.

CFC has provided advisory services to a wide range of clients, including airports, airlines, express companies, service providers, aircraft manufacturers and conversion companies, leasing companies, financial institutions and investment firms. CFC's consulting experience spans projects that encompass airline operations, network planning, fleet planning, route development, air cargo and express market analysis, and aircraft technology.

Cargo Facts Consulting (CFC) conducts extensive and ongoing research into various aspects of the air freight, express and logistics business. Key reports available to subscribers include the annual 20-year freighter forecast and supporting analytical tools, E-Commerce Logistics Report and Air Cargo Customer Experience Report, an analysis of service quality of airlines and airports.

CFC is affiliated with the New York and Seattle based organization that publishes the monthly Cargo Facts Newsletter (www.cargofacts.com), Air Cargo World (www.aircargoworld.com) and weekly Cargo Facts Update and runs the Cargo Facts Aircraft Symposium in the US, Cargo Facts Asia and since 2019 Cargo Facts EMEA. Through the media organization, CFC has a unique and high visibility insight into industry trends and individual airport and airline developments as they happen.

We live and breathe air cargo. Our staff are a mix of industry veterans and analysts with a passion for the business and deep technical and quantitative skills.

Since 2019, CFC – previously also known as Air Cargo Management Group (ACMG) – is based in Luxembourg and has offices in New York and Seattle, as well as further staff located in Spain, Israel and Canada.

Appendix 1 – Detailed Airline Scores

Carrier	Size Category	OVERALL Score	Timeliness of Delivery	Space availability	Main-Deck Capacity	Performance	Rate competitiveness	Specialty cargo	Route network	Value	Customer service	Track & trace	e-AWB capability	Service
Delta Air Lines	< 1m tonnes	111	109	108	100	109	115	102	110	110	113	111	111	105
Emirates Airline	>= 1m tonnes	104	108	102	105	105	89	110	110	103	103	107	105	102
AirBridgeCargo Airlines	< 1m tonnes	104	102	110	118	108	103	110	98	103	105	99	94	99
Qatar Airways	>= 1m tonnes	102	99	100	109	102	105	94	103	101	98	105	105	104
Etihad Airways	< 1m tonnes	101	104	104	103	103	111	100	91	100	94	100	105	102
Turkish Airlines	< 1m tonnes	101	94	106	99	99	109	101	103	105	95	99	101	102
Singapore Airlines	>= 1m tonnes	101	100	102	101	101	104	99	101	101	95	102	101	98
Lufthansa	>= 1m tonnes	100	104	94	99	99	85	110	101	99	99	105	107	95
China Airlines	>= 1m tonnes	100	98	99	101	99	98	103	98	100	100	103	103	92
Cathay Pacific	>= 1m tonnes	100	102	100	99	100	89	101	104	98	99	101	107	93
Air France-KLM	>= 1m tonnes	100	95	99	99	97	102	108	101	103	94	99	101	96
Air Canada	< 1m tonnes	98	97	100	100	99	108	98	99	102	93	101	89	93
United Airlines	< 1m tonnes	98	97	98	106	99	102	93	100	98	99	97	97	112
American Airlines	< 1m tonnes	98	97	91	88	94	106	88	100	99	97	101	102	100
China Southern Airlines	>= 1m tonnes	97	98	101	90	100	101	92	97	97	98	95	92	99
Nippon Cargo Airlines	< 1m tonnes	97	101	100	89	97	109	98	89	98	102	95	85	98
EVA Air	< 1m tonnes	96	95	88	100	93	95	96	93	95	98	101	101	95
Saudi Arabian Airlines	< 1m tonnes	96	90	92	97	92	107	102	90	99	100	88	99	97
Cargolux	< 1m tonnes	96	91	100	106	98	92	104	96	97	95	86	94	100
China Cargo Airlines	>= 1m tonnes	95	94	104	96	99	93	96	96	95	92	91	94	94
Air China	>= 1m tonnes	95	95	99	95	97	90	95	98	94	91	92	97	100
Korean Air	>= 1m tonnes	94	96	98	93	96	80	94	101	92	97	97	96	95
Thai Airways International	< 1m tonnes	94	99	94	78	95	100	94	94	96	100	100	69	91
All Nippon Airways	>= 1m tonnes	93	103	92	79	94	91	94	94	93	97	96	85	91
IAG Group	< 1m tonnes	91	84	87	100	87	100	100	97	99	83	86	93	87
Japan Airlines	< 1m tonnes	90	101	84	100	94	89	90	87	88	100	92	71	90

Appendix 2 – Detailed Airport Scores

Airport	Size	OVERALL	Customer Service	Handling of Exceptions	PERFORMANCE	Rate Competitiveness	Customs Clearance Effic'ncy	VALUE	Airside Capacity	Apron Capacity	Warehousing	Specialty Cargo Capabilities	Operational Restrictions	Ground Connectivity	FACILITIES
Mariscal Sucre Int'l., UIO	< 400K tonnes	119	120	122	121	120	103	111	129	116	120	122	123	120	121
Shanghai Pudong Int'l., PVG	1 million+ tonnes	113	112	112	112	116	112	114	109	114	114	114	113	112	113
Hong Kong Int'l. Airport, HKG	1 million+ tonnes	108	109	111	110	104	113	109	104	103	111	112	106	106	108
Singapore Changi Int'l., SIN	1 million+ tonnes	108	107	110	108	103	110	107	110	100	101	117	113	106	108
Dubai Int'l., DXB	1 million+ tonnes	107	114	114	114	100	103	101	108	96	111	110	108	105	107
Hartsfield-Jackson Atlanta, ATL	400K - < 1m tonnes	104	102	102	102	106	106	106	106	112	97	105	104	109	105
José Joaquín de Olmedo Int'l., GYE	< 400K tonnes	103	104	107	105	106	91	99	103	101	103	103	103	104	103
Detroit Met. Wayne County, DTW	< 400K tonnes	103	110	102	106	112	104	108	104	103	90	99	98	102	99
Amsterdam Schiphol, TPE	>= 1m tonnes	102	104	100	102	101	102	102	96	103	103	108	95	106	102
Miami Int'l., MIA	>= 1m tonnes	102	94	100	97	100	100	100	103	97	102	109	106	107	105
Narita Int'l., NRT	>= 1m tonnes	101	103	104	103	105	109	107	98	103	103	104	85	97	98
Luxembourg (Findel), LUX	400K - < 1m tonnes	101	101	99	100	102	100	101	100	110	96	110	98	102	102
Sheremetyevo Int'l., SVO	400K - < 1m tonnes	101	101	101	101	100	100	100	111	89	101	109	98	96	101
Dallas-Fort Worth Int'l., DFW	400K - < 1m tonnes	99	96	100	98	102	100	101	100	121	100	97	95	96	98
Frankfurt am Main, FRA	>= 1m tonnes	98	99	100	99	91	103	97	103	97	98	105	83	98	97
Guangzhou Baiyun Int'l., CAN	>= 1m tonnes	96	103	99	101	94	95	95	97	82	99	93	96	99	95
Seattle-Tacoma Int'l., SEA	< 400K tonnes	95	92	92	92	100	102	101	94	91	93	88	103	96	94
Los Angeles Int'l., LAX	>= 1m tonnes	94	93	93	93	94	95	94	99	91	93	93	95	94	94
London Heathrow, LHR	>= 1m tonnes	93	95	95	95	91	95	93	92	84	95	99	88	95	93
Newark Liberty Int'l., EWR	400K - < 1m tonnes	93	84	90	87	95	95	95	97	94	91	96	98	99	96
San Francisco Int'l., SFO	< 400K tonnes	93	92	91	91	100	97	98	98	94	86	94	89	96	92
Kansai Int'l., KIX	400K - < 1m tonnes	92	93	93	93	95	94	95	87	106	89	97	94	85	91
Brussels National Airport, BRU	400K - < 1m tonnes	91	93	81	88	92	88	90	96	91	95	99	72	99	92
Chicago O'Hare Int'l., ORD	>= 1m tonnes	89	88	85	86	91	89	90	92	89	86	96	88	89	90
São Paulo-Guarulhos Int'l., GRU	400K - < 1m tonnes	89	87	83	85	82	75	78	100	101	86	90	93	96	94
Chubu Centrair Int'l., NGO	< 400K tonnes	87	96	88	92	87	93	90	74	114	85	82	86	83	84
John F. Kennedy Int'l. JFK	>= 1m tonnes	86	83	88	86	86	90	88	90	89	81	89	87	79	85