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2020 AIR CARGO CUSTOMER EXPERIENCE REPORT

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Air Cargo Customer Experience Report 2020

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1. Report Summary and Overview

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 2020 Air Customer Excellence (ACE) survey conducted annually since 2005 by our affiliated publication, *Air Cargo World*.

In late 2019 and early 2020, approximately 1,550 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 were asked to provide suggestions on what airlines and airport should improve.

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 3.3 will help you determine which areas to focus on:

In terms of improvement suggestions, service in general, competitive rates and capacity again appear to be the main source of concern.

While many airport customers (both airlines and forwarders) are satisfied with the service they receive, complaints this year focus on customs and handling efficiency as well as airside space constraints.

The report is supplemented by a spreadsheet, which allows you to run your own queries for airlines on 13 and airports on 14 different measurers 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 feedback on elements that you would like to see included in our next survey to be conducted in late 2020. Please contact us if you would like a specific overview of the results achieved by your airport or airline.

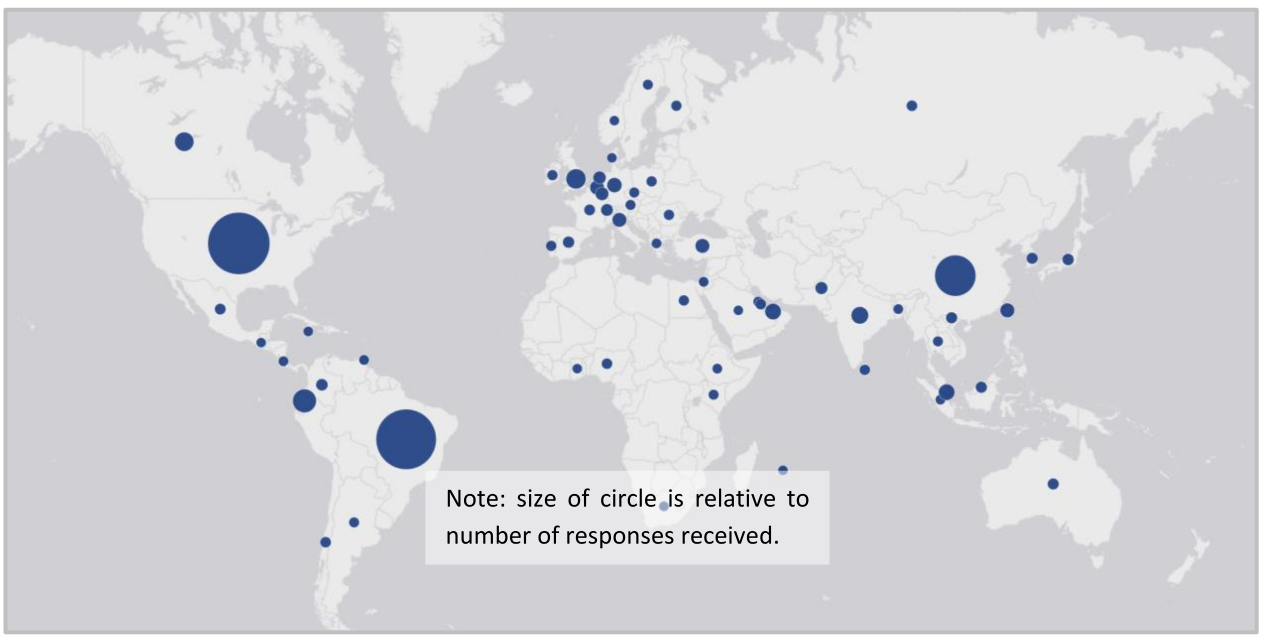
2. Survey and Methodology

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 2019 and early 2020 by our affiliated publication, *Air Cargo World*, the world's largest-circulation magazine on air cargo. Between mid-November 2019 and mid- January 2020, 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 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 1,550 responses from a mix of freight forwarders, airlines and other companies involved in the air logistics supply chain. Respondents (see Figure 1) came from over 80 countries. However, most responses were received from customers in the United States (46%), Brazil (13%), Europe (11%) and China (8%).

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 or are ranked according to their score. Where there were insufficient responses for a single carrier this carrier has been omitted from the ranking. 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 for each of their top three carriers. Airports were judged by forwarders, cargo agents and third-party logistics providers with respect to Performance, Value and Facilities for each of their top three airports. In total, the survey yielded around 800 carrier and 2000 airport evaluations.

2.2 Airline Survey Methodology and Scope

In the last two surveys, 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 (see Figure 2).

Figure 2 - Airline Survey Questions

Performance	Value	Service
Timeliness of delivery as promised	Rate competitiveness	Quality of customer service
Space availability	Availability and quality of special services	Tracking and tracing of shipments
Main-deck capacity	Route network	e-AWB cabability

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 for 10 different items. The 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, Korean Air ranked first place, followed by Cathay Pacific and Singapore Airlines (see Figure 4). Last year's top three carriers were Emirates, Qatar Airways and Singapore Airlines.

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

Rank	Carrier	Overall	Performance	Value	Service
1	Korean Air	108	105	110	109
2	Cathay Pacific Airways	106	107	105	107
3	Singapore Airlines	104	106	103	103
4	China Airlines	103	107	102	100
5	Lufthansa	101	96	101	105
6	Emirates	101	99	102	101
7	Qatar Airways	101	102	102	100
8	Air France	100	95	105	100
9	Air China	94	96	95	90
10	Federal Express	92	88	90	98

Figure 5 - Smaller Carriers (< 1 million tonnes)

Rank	Carrier	Overall	Performance	Value	Service
1	Southwest	110	116	101	113
2	Cargolux	102	105	102	97
3	Air Canada	101	100	101	103
4	Delta Air Lines	99	96	99	101
5	American Airlines	98	98	97	98
6	United Airlines	98	94	102	98
7	EVA Air	98	96	97	100
8	British Airways	95	92	96	98
9	Saudi Arabian Airlines	95	102	92	90
10	Etihad Airways	95	100	86	99
11	Turkish Airlines	94	94	99	90
12	AirBridgeCargo Airlines	88	88	91	84

Among smaller carriers (with less than 1 million tonnes of freight handled), Southwest Airlines Cargo topped this year's ranking (see Figure 5), followed by Cargolux and Air Canada. Last year's top three carriers were Delta, AirBridgeCargo and Etihad Airways. Southwest did not feature in last year's ranking due to insufficient responses but topped the ranking in 2018.

3.2 Airline Customer Satisfaction

Freight forwarders are generally satisfied with the airline customer experience they receive from their top 3 carriers. For example, 75% of respondents said that the quality of customer service received from their carriers was either good or very good (see Figure 6). This share is smaller than last year as 85% of respondents scored the quality of customer service as good or very good. . 80% of airlines ranked tracking and tracing capabilities as good or very good and showed similar levels of satisfaction with regard to e-AWB availability (see Figure 7). According to IATA, e-AWB penetration was close to 70% in January 2020, compared to about 60% a year earlier.

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 8). There is definitely a desire for better space availability and main-deck capacity.

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 9). The desire for better rates is a common theme across surveys but capacity access appears to have improved compared to last year (see Chapter 3.3).

Figure 6 - How Customers Rate Airline Customer Service

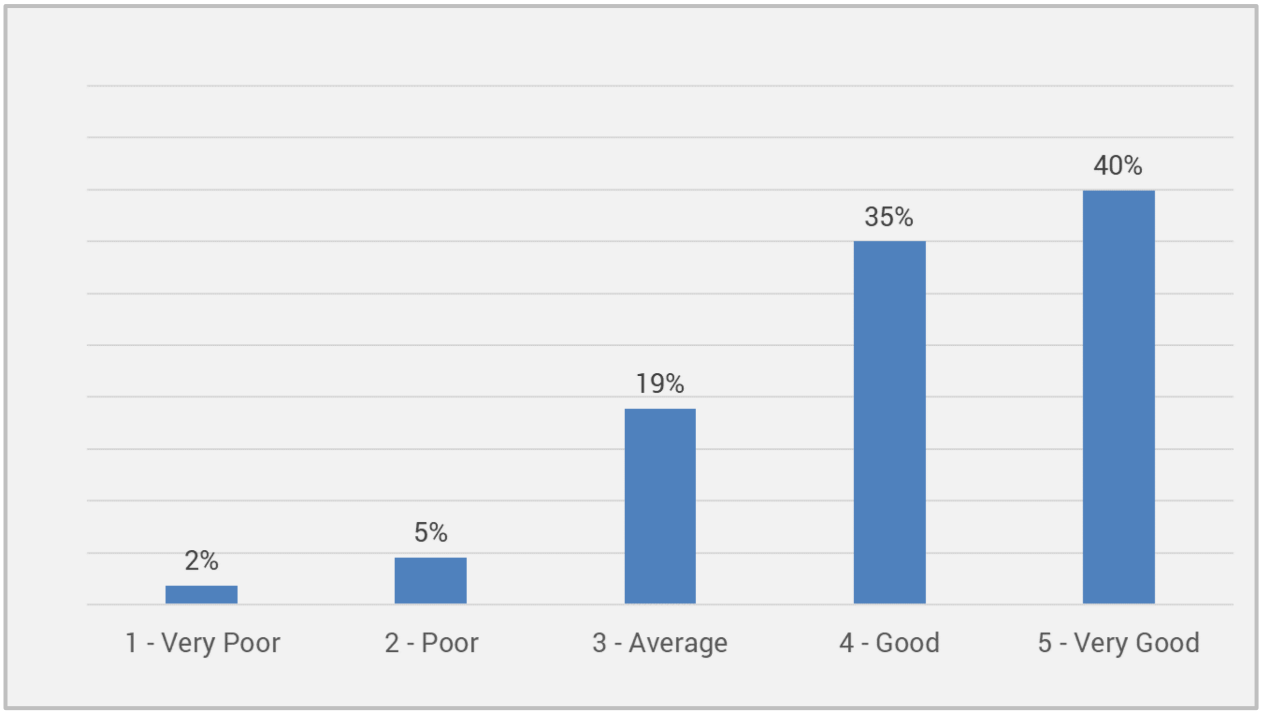


Figure 7 - How Customers Rate Airline Track and Trace and e-AWB Capabilities

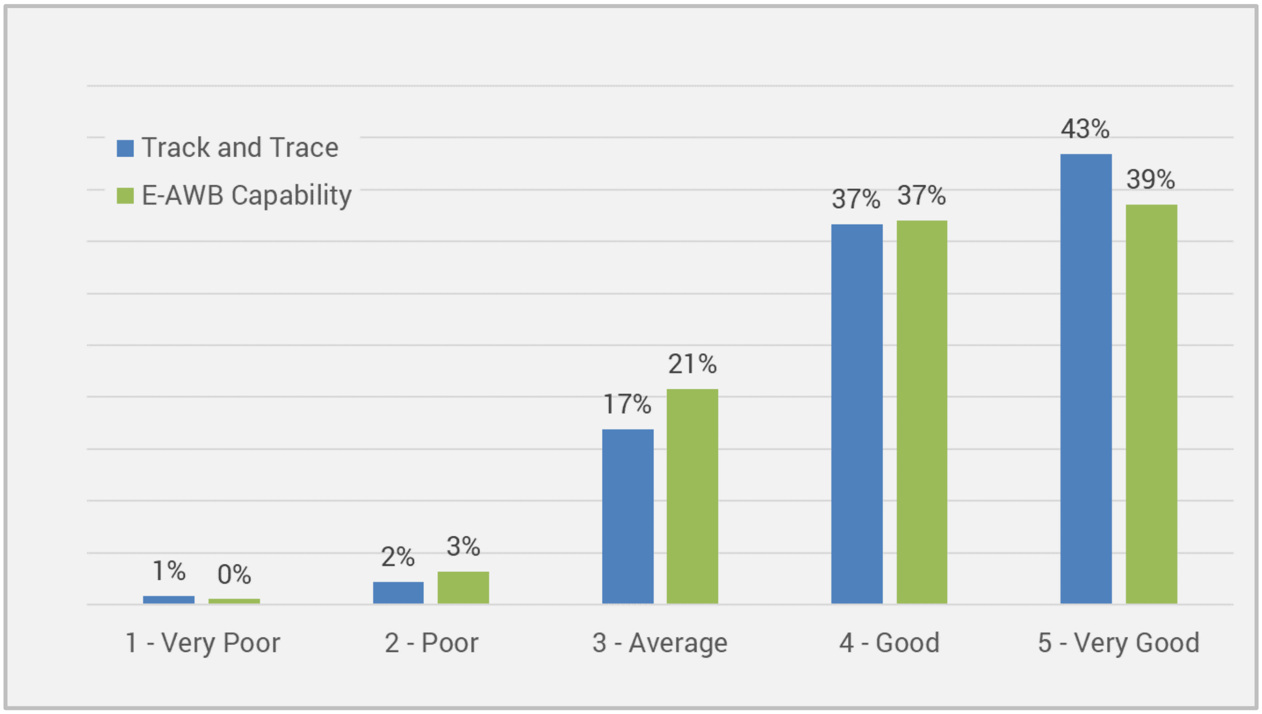


Figure 8 - How Customers Rate the Performance of their Airlines

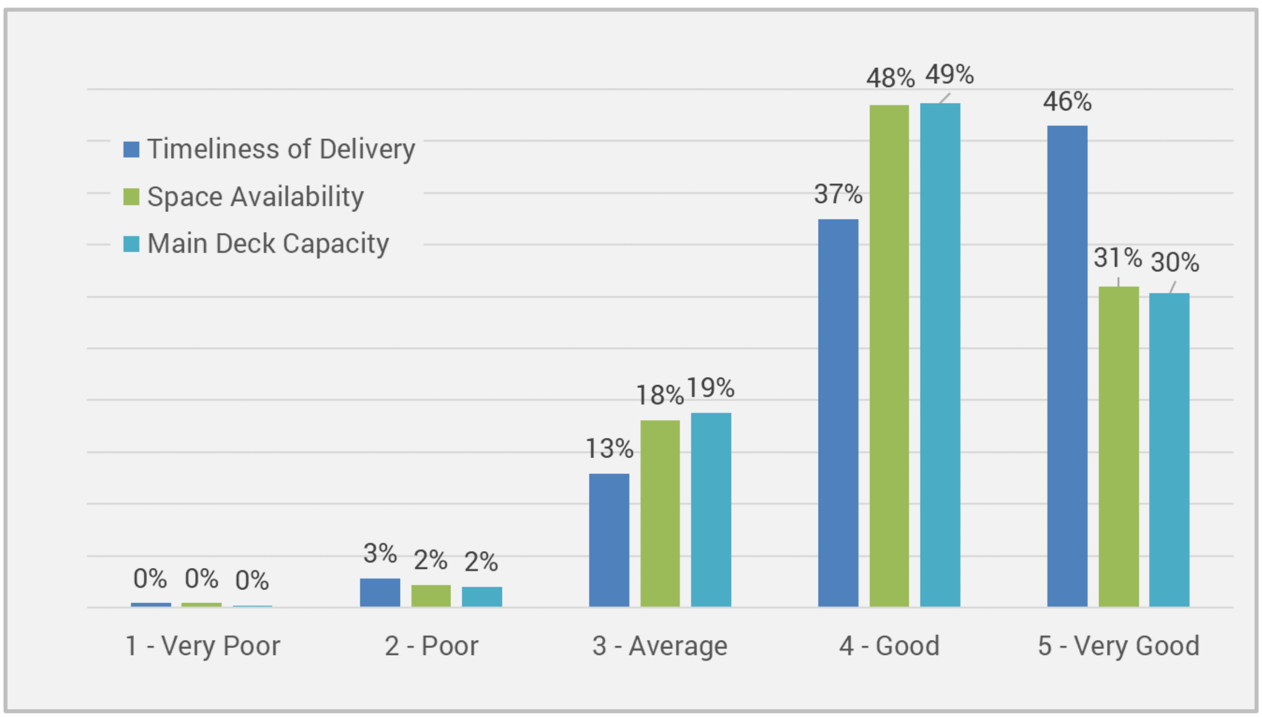
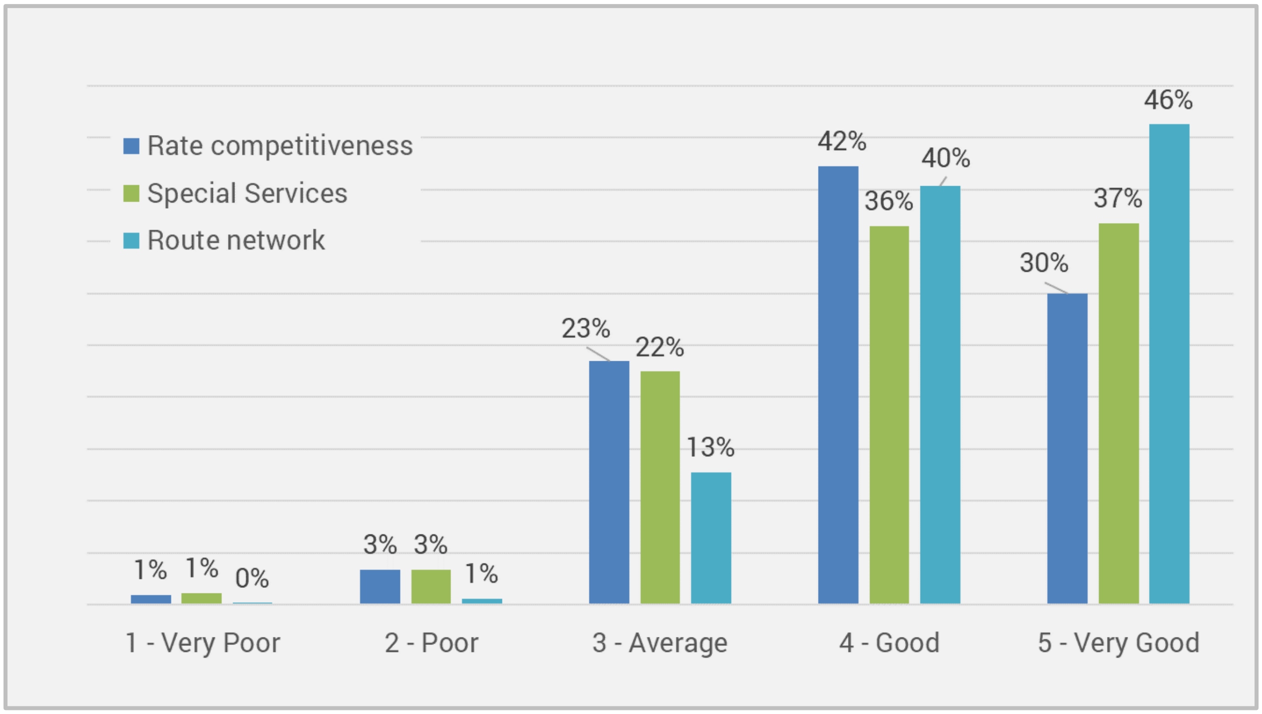


Figure 9 - How Customers Rate the Value they Receive from their Airlines



There is also a desire from customers to be able to access better special services – be it for perishables, pharmaceuticals, express, e-commerce or other special products. Based on our research, this is the segment where there is the most growth potential. Although cargo volumes in 2019 dropped by over 3%, special products did well.

3.3 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 10). Compared to last year's survey access to capacity and space availability was less of a concern but still prominent.

Figure 10 - 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), Memphis, Dubai and Seoul topped his years ranking. Last year's top three were Shanghai Pudong, Hong Kong and Singapore.

Among airports in the 400,000 - 1 million tonne size category, Cincinnati, Dallas DFW and Luxembourg occupy the first three places in this year's ranking of airports (see Figure 12). There has been quite some change in customer perception in the past twelve months, with only Luxembourg remaining in the top three. Atlanta, Luxembourg and Moscow SVO were voted the top three airports last year.

Among small airports, the Quito airport in Ecuador again was ranked on 1st place, ahead of Indianapolis and Sao Paolo Campinas (see Figure 13).

Figure 11 - Large Airports (>= 1 million tonnes)

Rank	Airport	Overall	Performance	Value	Facilities
1	Memphis, MEM	115	111	116	117
2	Dubai, DXB	111	110	107	114
3	Seoul, ICN	110	110	108	110
4	Singapore, SIN	109	109	110	109
5	Amsterdam, AMS	103	103	107	101
6	Shanghai, PVG	102	102	103	102
7	Miami, MIA	102	102	101	102
8	Hong Kong, HKG	102	111	104	97
9	Tokyo Narita, NRT	99	109	100	95
10	Los Angeles, LAX	97	96	98	97
11	Paris, CDG	97	94	93	99
12	Chicago, ORD	95	92	93	96
13	London Heathrow, LHR	94	93	96	94
14	Taipei, TPE	94	96	100	91
15	Frankfurt, FRA	93	92	97	93
16	Guangzhou, CAN	92	90	95	92
17	New York , JFK	92	85	91	95
18	Beijing, PEK	91	93	89	90

Figure 12 - Medium Airports (400,000 - 999,000 tonnes)

Rank	Airport	Overall	Performance	Value	Facilities
1	Cincinnati, CVG	118	111	122	119
2	Dallas Fort-Worth, DFW	107	108	105	108
3	Luxembourg, LUX	103	104	103	103
4	Atlanta, ATL	99	93	99	102
5	Toronto, YYZ	94	89	94	97
6	São Paulo, GRU	94	92	92	96
7	Madrid, MAD	93	87	85	99
8	Brussels, BRU	93	99	85	93
9	Liège, LGG	92	83	92	96
10	Newark, EWR	91	90	97	88
11	Vancouver, YVR	86	86	88	86

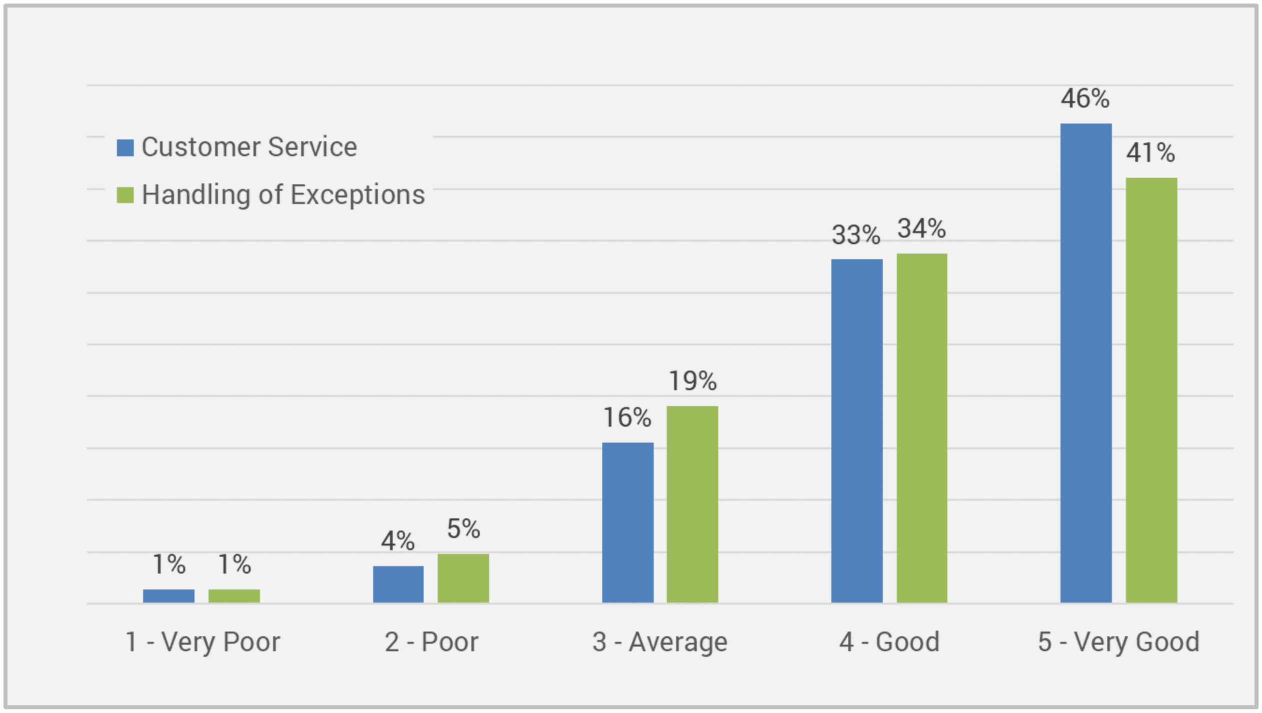
Figure 13 - Small Airports (<400,000 tonnes)

Rank	Airport	Overall	Performance	Value	Facilities
1	Quito, UIO	120	120	121	119
2	Indianapolis, IND	116	116	121	113
3	Campinas, VCP	113	113	109	115
4	Abu Dhabi, AUH	110	114	116	107
5	Guayaquil, GYE	107	107	112	104
6	Houston, IAH	100	99	93	102
7	Bogotá, BOG	98	93	105	98
8	San Francisco, SFO	97	100	93	98
9	Milan, MXP	97	93	97	99
10	Seattle, SEA	95	96	98	94
11	Bangkok, BKK	94	92	95	95
12	Boston, BOS	94	99	98	90
13	Philadelphia, PHL	92	98	86	91
14	Rio de Janeiro, GIG	90	86	88	92
15	Washington, IAD	87	89	84	88
16	New York, LGA	81	81	86	78

4.2 Airport Customer Satisfaction

Customers appear to be less satisfied with their airports than with their airlines. Nevertheless, over 75% of respondents rated airport customer service and handling of exceptions as either good or very good (see Figure 14). This does represent a slight improvement over last year's survey.

Figure 14 - How Customers Rate Airport Customer Service



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 almost two thirds were satisfied that they were receiving value for money (see

Figure 15). Customer perception of customs clearance efficiency dropped slightly compared to last year's survey.

A key determinant of the quality of an airport is the quality of the facilities offered. Not all fall within the direct responsibility of the airport, although the airport generally does have an influence on the choice of handling agents that can offer services there.

Figure 16 provides an overview of how forwarders and airlines rate the facilities at the top airports they operate from. Generally, customers seem satisfied by what they get, but airside ramp capacity and operational restrictions are frequently mentioned as requiring more attention. Compared to last year's survey, customers have indicated some improvement in specialty cargo capabilities.

Figure 15 - How Customers Rate the Value they Receive from their Airports

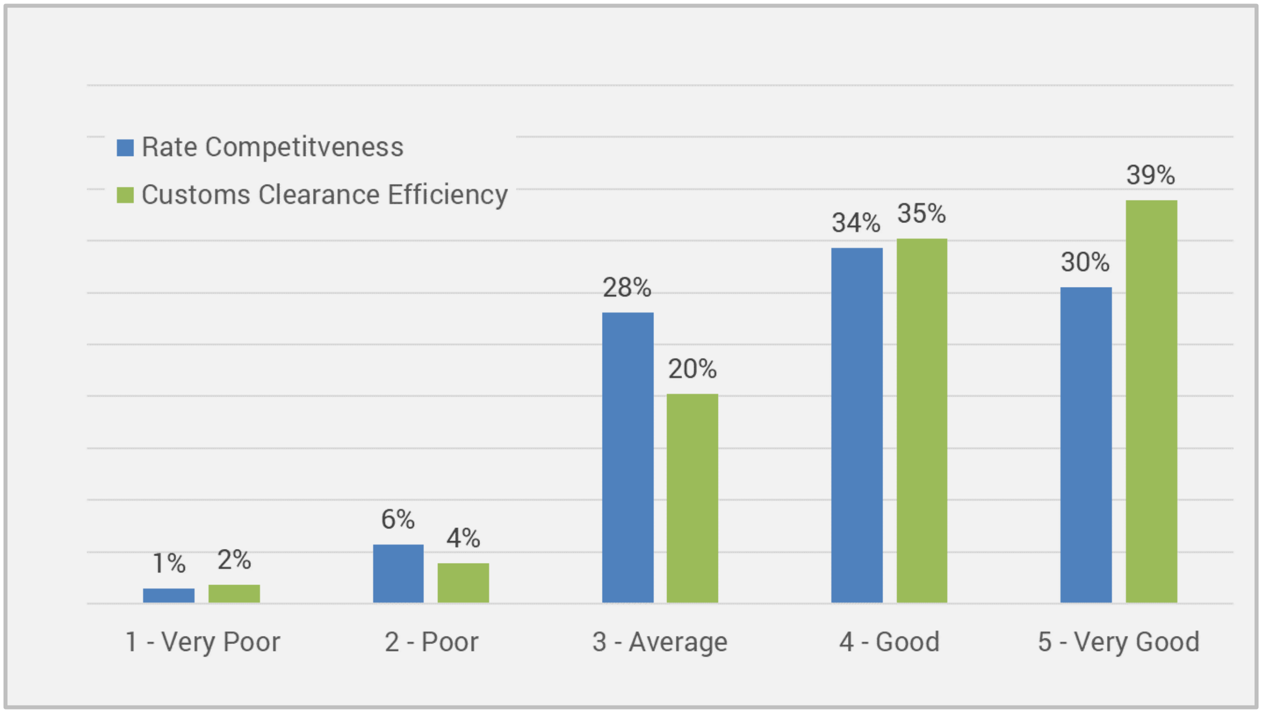


Figure 16 - How Customers Rate their Airport Facilities

Airport	Very Poor	Poor	Average	Good	Very Good
Airside Capacity	1%	5%	22%	35%	37%
Apron Capacity	1%	4%	17%	32%	46%
Warehousing	2%	4%	19%	34%	41%
Speciality Cargo Capabilities	1%	4%	18%	35%	43%
Operational Restrictions	1%	5%	24%	31%	39%
Ground Connectivity	1%	3%	17%	32%	47%

4.3 Airport Customer Improvement Suggestions

While many airport customers (both airlines and forwarders) are satisfied with the service they receive, this year the most common complaints center around customs and handling efficiency and speed (see Figure 17). Last year's improvement suggestions centered around the quality of cargo handling, lack of warehouse space, slots and inefficiencies related to ground access, and other infrastructure, as well as customer service more generally.

Figure 17 - Airport Customer Improvement Suggestions

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 Cathay Pacific as number one. In previous years, the ranking was topped by Air Bridge Cargo and Lufthansa Cargo, respectively.

On the airport side, Memphis (MEM) was this year's winner, followed by Ecuador's Quito (UIO). Other notable specialty cargo airports in different world regions included: Singapore (SIN), Dubai (DXB) and Luxembourg (LUX, see Figure 18). All of these airports also led in their regional categories last year.

Figure 18 - Specialty Cargo Scores

Category	Location	Company/ Airport	Score
Carrier	World	Cathay Pacific	108
Airport	Word	Memphis, MEM	118
	Latin America	Marisal Sucre, UIO	117
	North America	Memphis, MEM	118
	Asia	Singapore Changi, SIN	111
	Africa, India, Middle East	Dubai International, DXB	114
	Europe	Luxembourg, LUX	109

6. About Cargo Facts Consulting

Cargo Facts Consulting is a specialised air logistics advisory and research firm. Formerly also known as Air Cargo Management Group, we have been in business since 1978. Since 2019, we are based in Luxembourg, with offices in New York and Seattle.

Our clients turn to us for deep advice, data and insights on key aspects that effect product development, marketing, fleet planning and strategy in air logistics. These clients come from across the whole air cargo and express business and include financial institutions and investment firms, leasing companies, government, aircraft manufacturers and conversion companies, airlines, express companies, airports and other service providers.

Our consulting experience spans projects that encompass airline network planning, fleet planning, due diligence, route development, investment assessment, air cargo and express market analysis, and aircraft technology. Our data and forecasts populate financial models related to many facets of the business, and our analysis is used in product development by a wide range of company. We also provide deep analytics for the type of data- and mission-related marketing in the aviation sector.

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 actionable solutions, not just data and research based on critical needs and business objectives. We facilitate business evolution that yields greater profits and efficiency. And we do so often through long-term relationships that create a deep and more-meaningful dialogue with our customers.

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