

Part 2

COVID-19 and the aviation industries in Japan, the United States and Europe

Part 2: COVID-19 and the Japanese, United States and European aviation industries

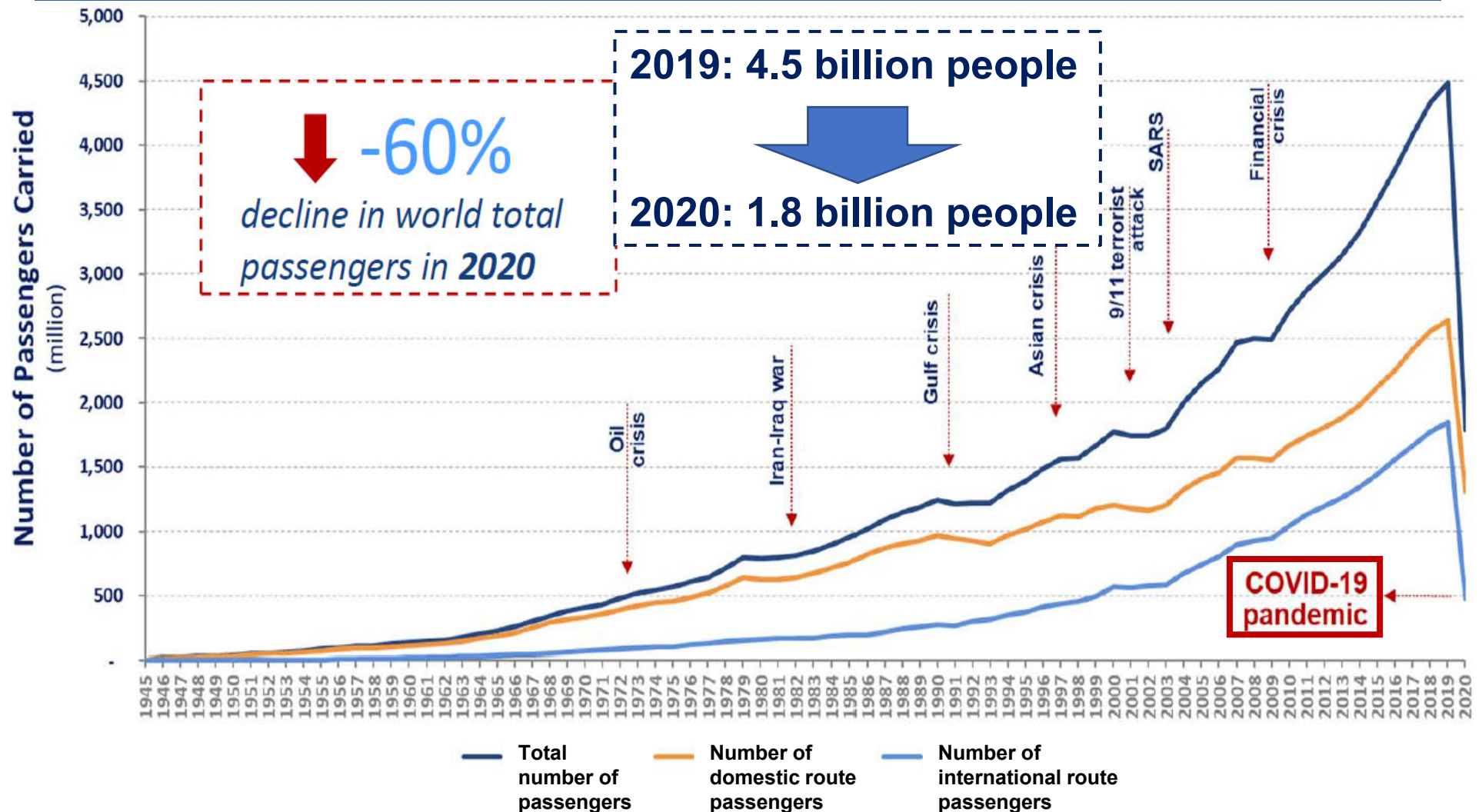
Table of contents

1. Operation and management situation of major airlines and major airports in Japan, the United States and Europe
2. Assistance and measures by the governments of Japan, the United States and Europe
3. Movement toward a new normal
4. Summary

1. Operation and management situation of major airlines and major airports in Japan, the United States and Europe

(1) State of global air passenger transport and trends

Changes in the number of passengers transported worldwide (1945-2020)

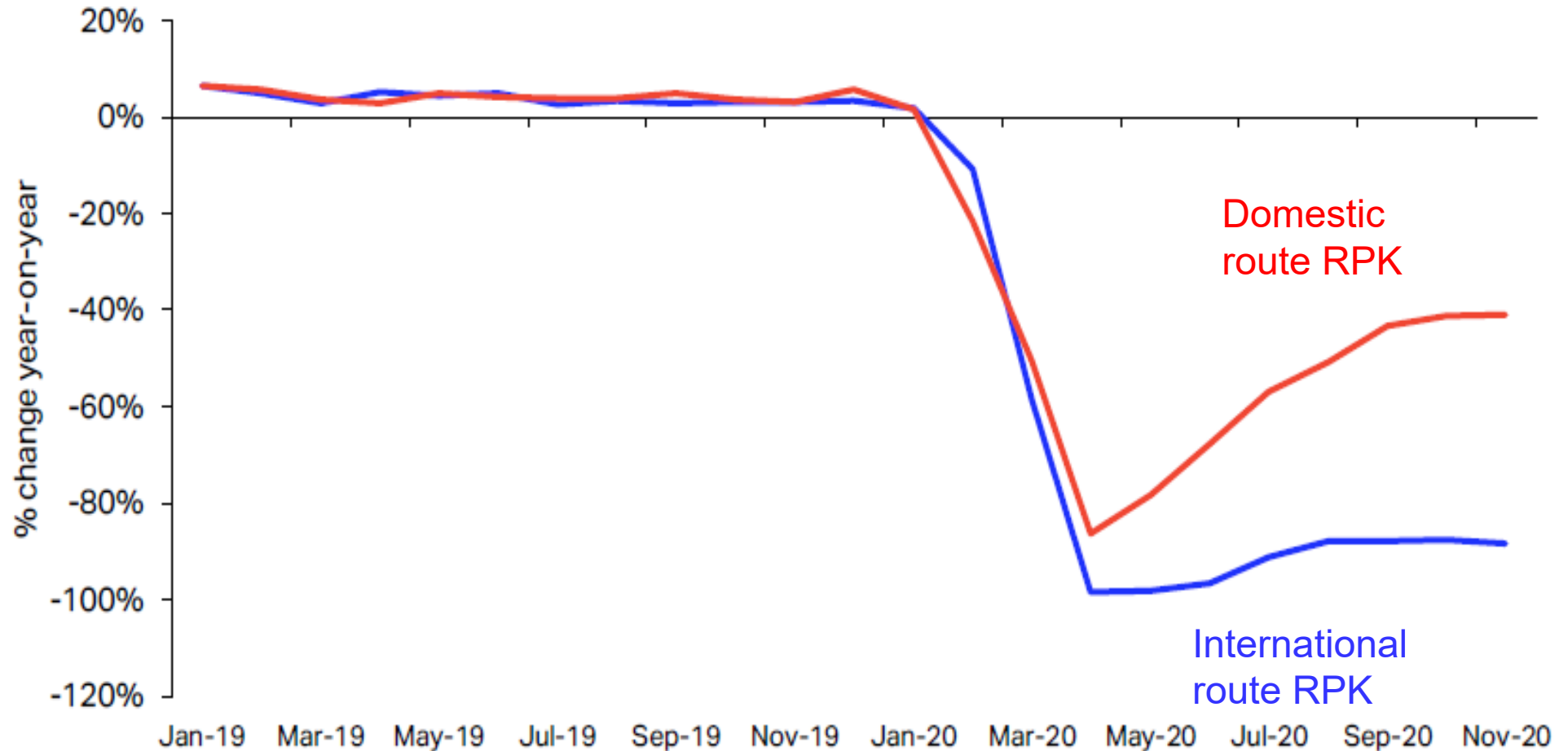


Source: ICAO Presentation

1. Operation and management situation of major airlines and major airports in Japan, the United States and Europe

(1) State of global air passenger transport and trends

Changes in the growth rate of domestic and international route RPKs worldwide



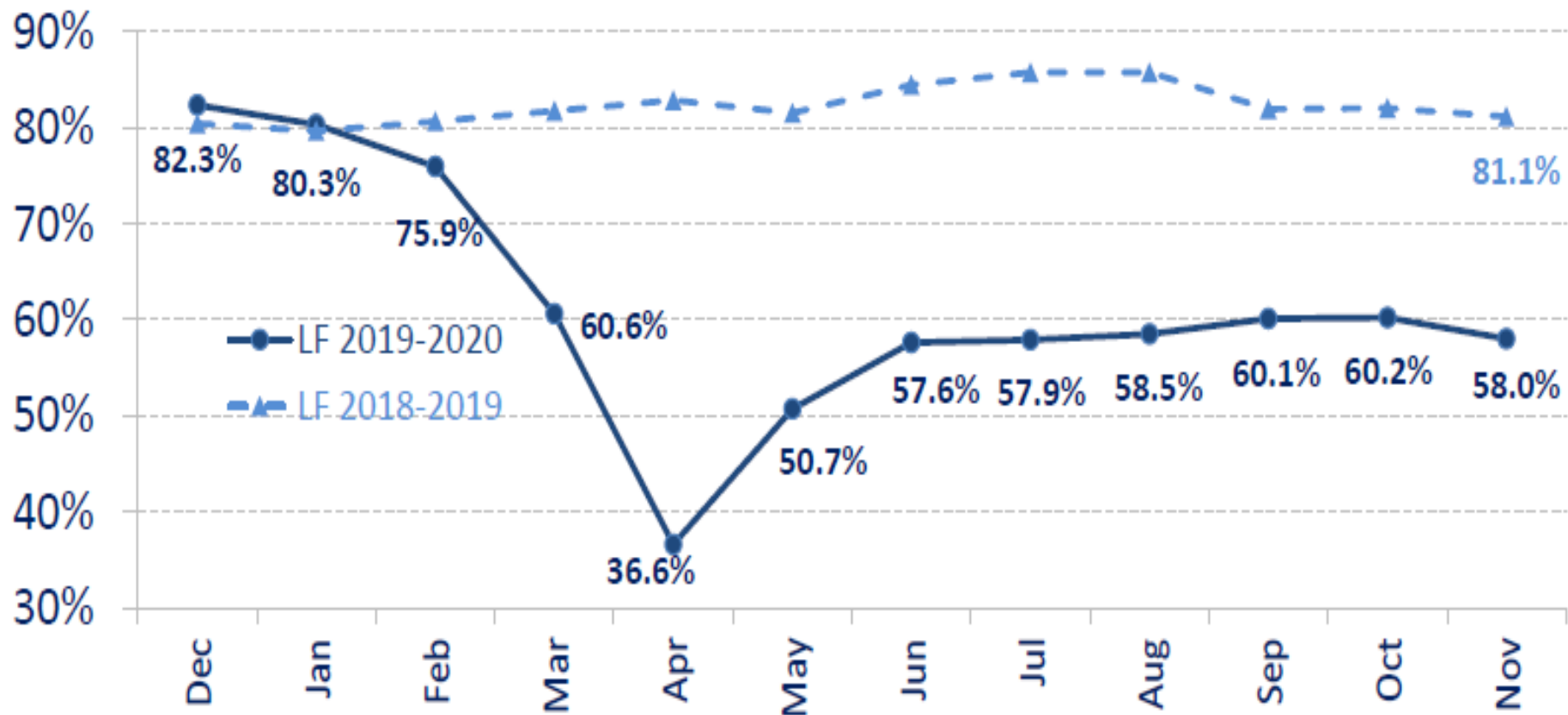
Source: IATA Presentation

*RPK: revenue passenger miles. An indicator of aviation demand calculated by multiplying the total number of passengers by the distance traveled

1. Operation and management situation of major airlines and major airports in Japan, the United States and Europe

(1) State of global air passenger transport and trends

Changes in passenger load factor worldwide



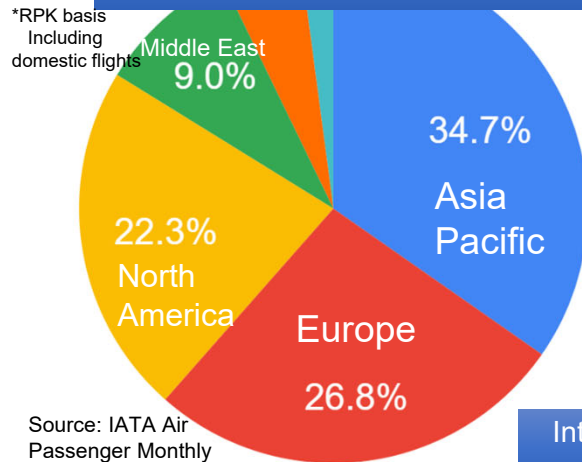
Source: ICAO Air Transport Monthly Monitor

1. Operation and management situation of major airlines and major airports in Japan, the United States and Europe

(2) Operational and management situation of major airlines

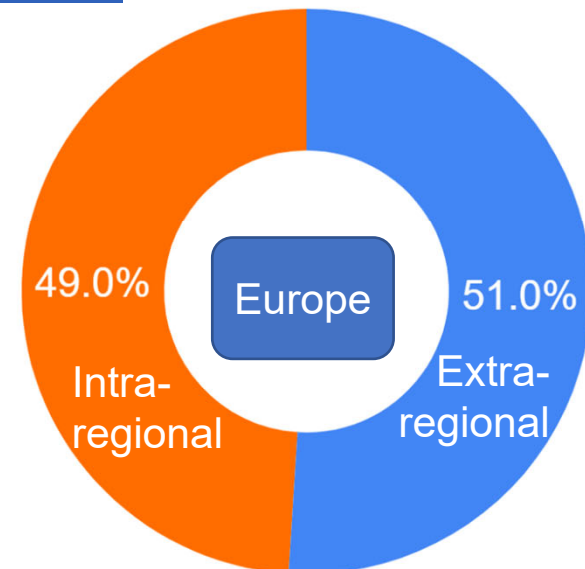
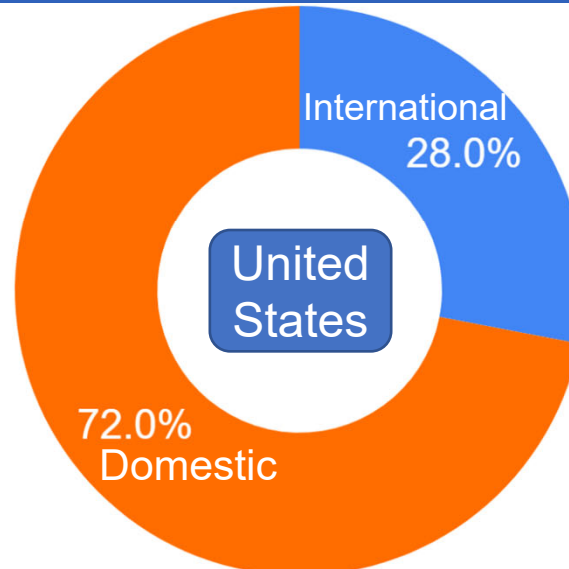
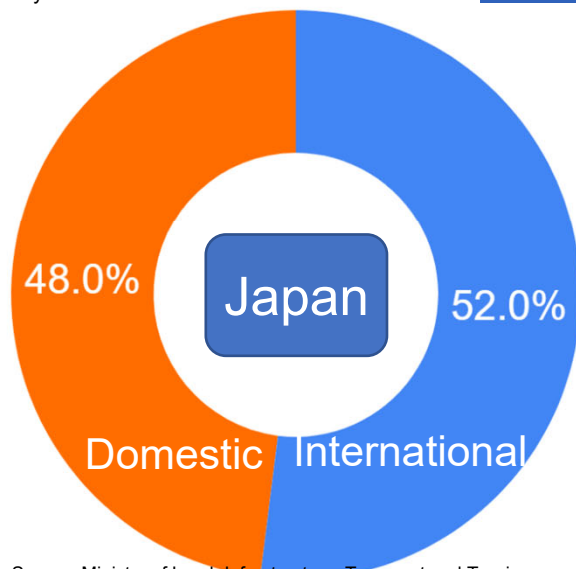
About the passenger airline market in Japan, the United States and Europe

Regional share of passenger airline market (2019)



- ✓ The Asia-Pacific market occupies the largest share of passenger demand by region, followed by Europe and North America.
- ✓ In Japan, the domestic market and the international market account for about a 50% share each.
- ✓ The United States has one of the largest domestic markets in the world. Network carriers account for 90% of the international market.
- ✓ In Europe, the share of intra-regional and extra-regional is about 50% each, but intra-regional also includes many cross-border movements as well.

International (extra-regional) / domestic (intra-regional) share of the passenger airline market in each region (2019)



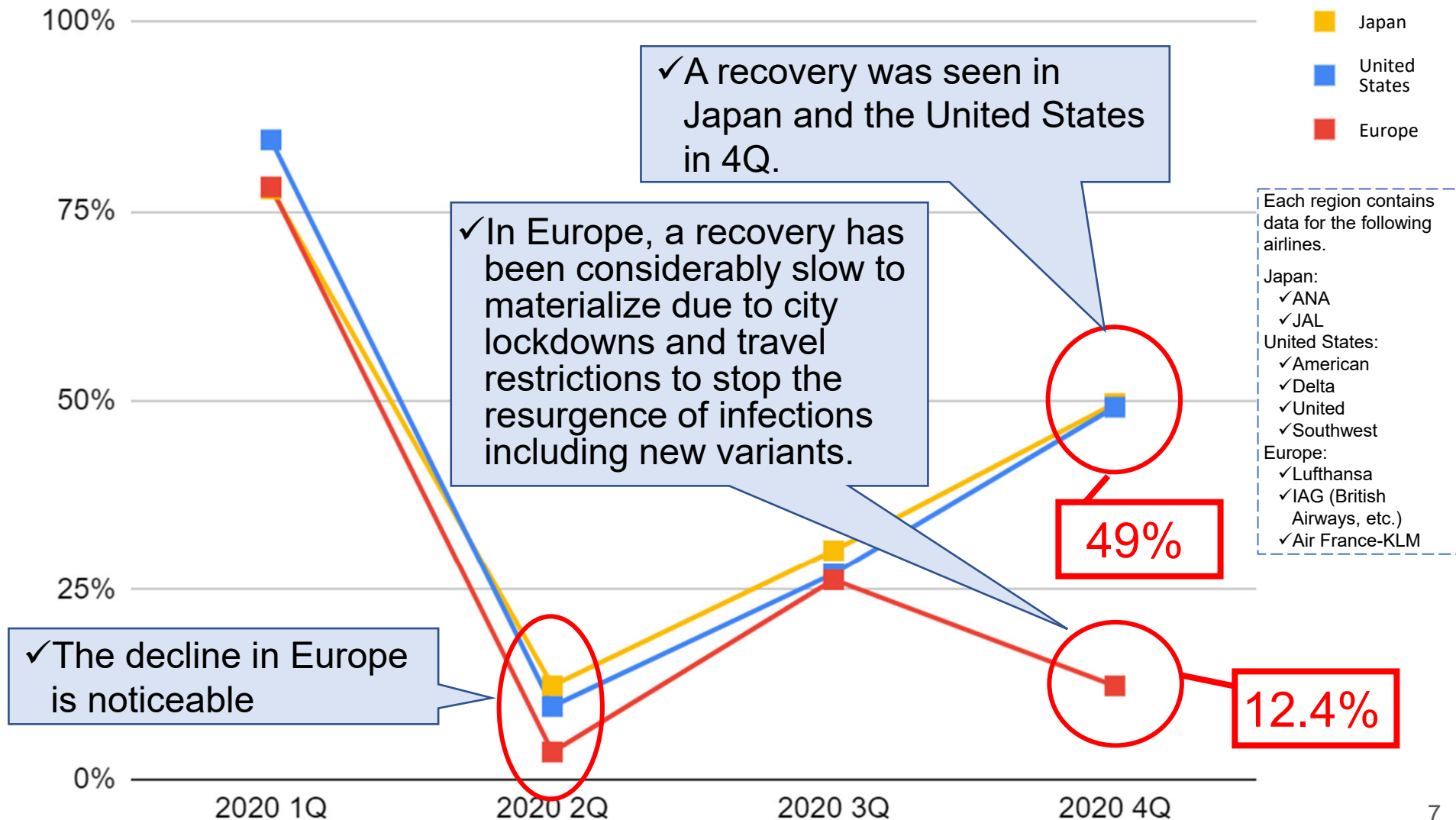
Source: Ministry of Land, Infrastructure, Transport and Tourism statistical data, Center for Aviation Report, etc.

*Figures for Japan and the United States are based on RPK. Figures for Europe only are based on ASK.
TAKAGI Daisuke, The 14th Transport Policy Colloquium - Washington Report, 1, 2021

1. Operation and management situation of major airlines and major airports in Japan, the United States and Europe

(2) Operational and management situation of major airlines

Year-on-year change in RPK for Japan and US domestic flights as well as intra-regional European flights



1. Operation and management situation of major airlines and major airports in Japan, the United States and Europe

(2) Operational and management situation of major airlines

State of domestic airport terminals in the United States (Florida; one day in December 2020)



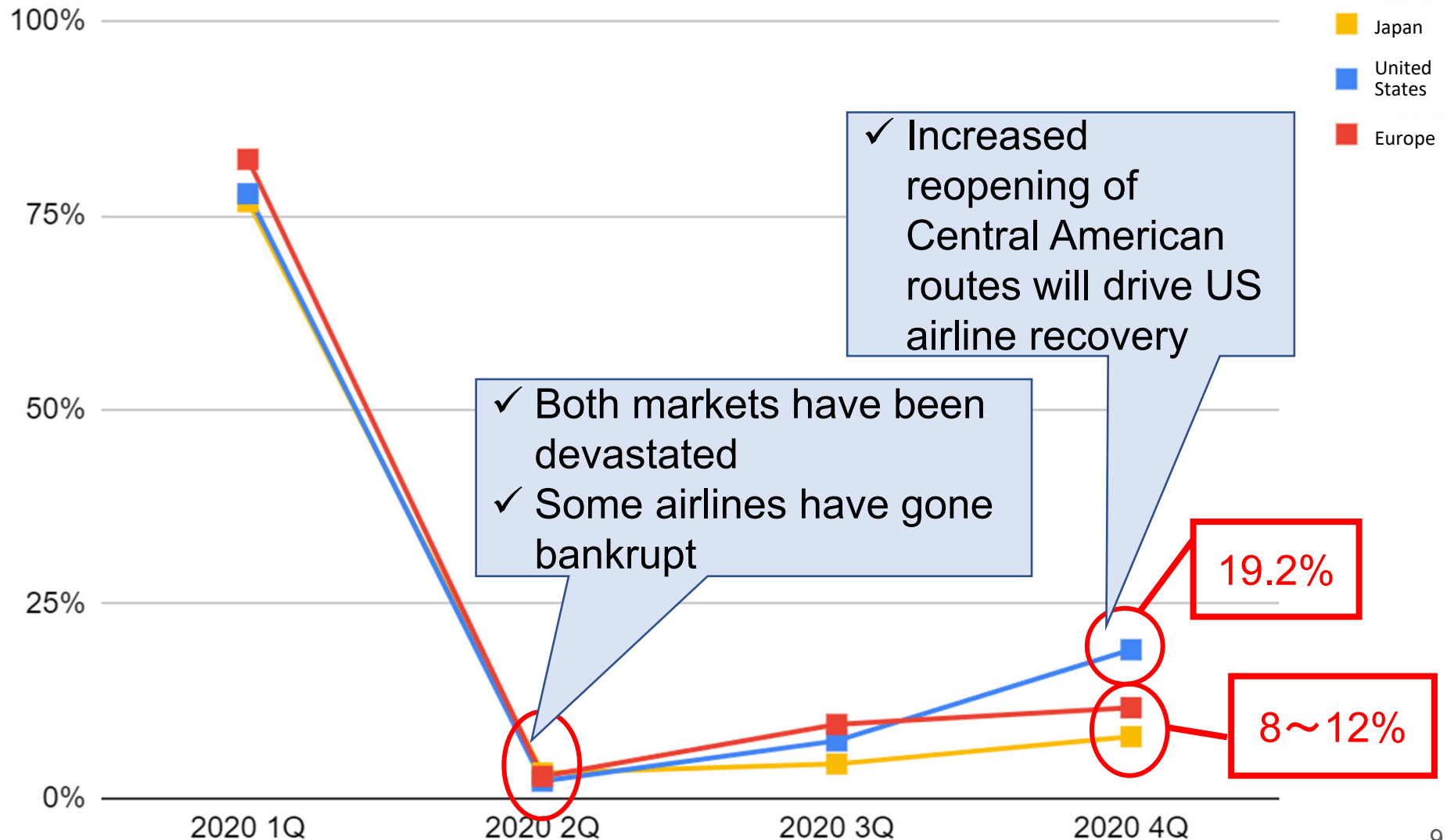
↑ Waiting line for shuttle bus inside the airport

← Domestic terminal concourse

1. Operation and management situation of major airlines and major airports in Japan, the United States and Europe

(2) Operational and management situation of major airlines

Year-on-year changes in RPK for international flights

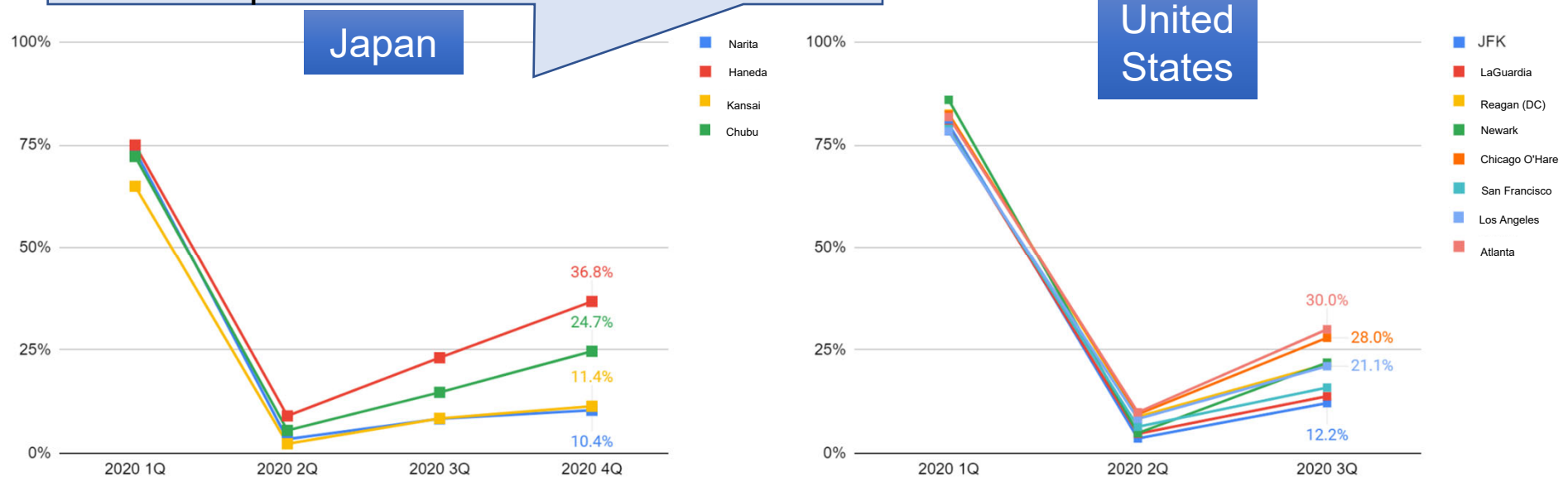


1. Operation and management situation of major airlines and major airports in Japan, the United States and Europe

(3) Operational and management situation at major airports

Year-on-year change in the number of airport passengers (domestic and international total)

- ✓ Domestic flights driving recovery at Haneda in 3Q and beyond
- ✓ Other airports remain slow to recover

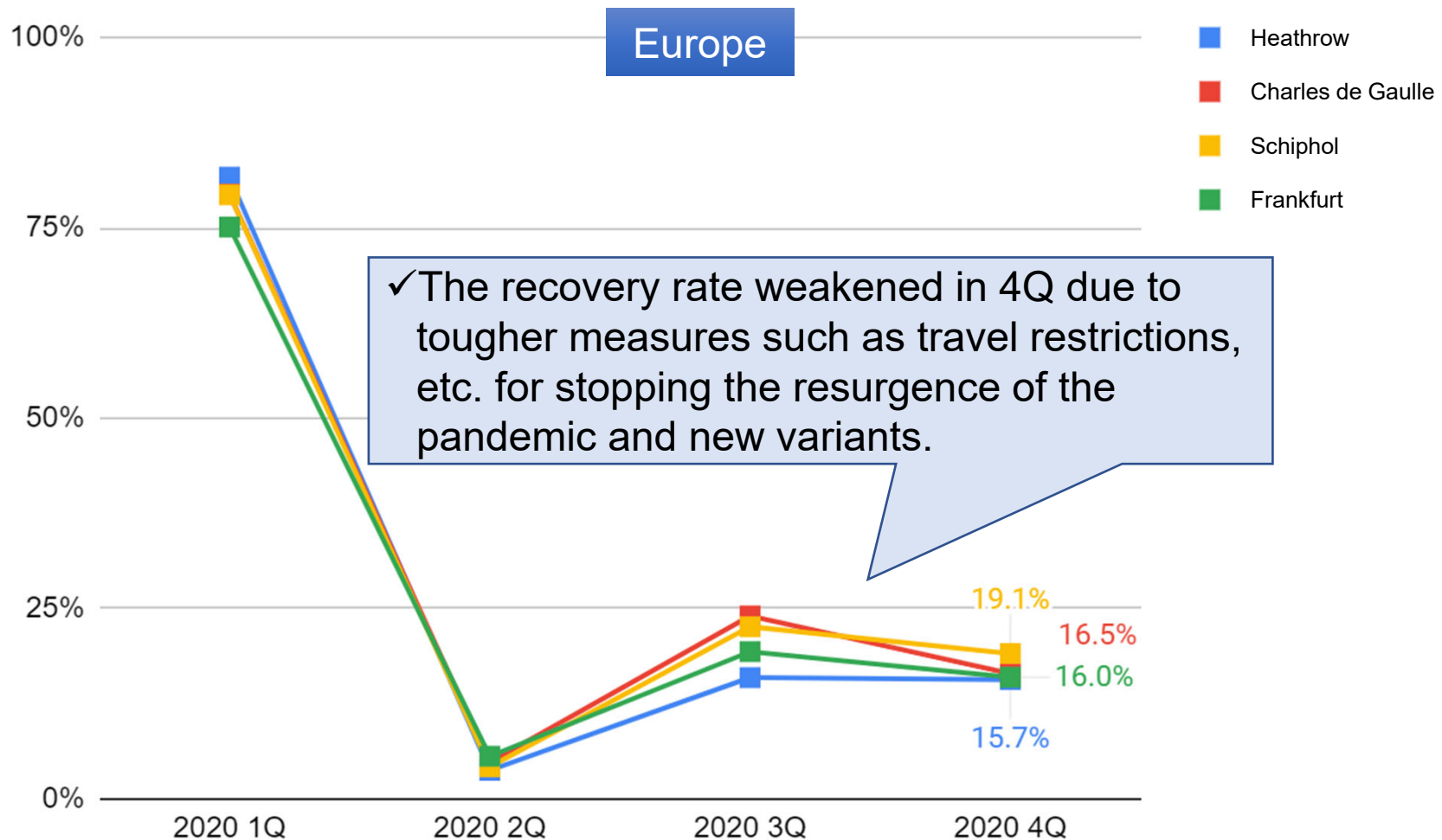


- ✓ Airports serving as major hubs for domestic connections, such as Chicago, Los Angeles, and Atlanta, etc., tend to be more resilient.

1. Operation and management situation of major airlines and major airports in Japan, the United States and Europe

(3) Operational and management situation at major airports

Year-on-year change in the number of airport passengers (domestic and international total)



1. Operation and management situation of major airlines and major airports in Japan, the United States and Europe

(3) Operational and management situation at major airports

Most recent topics and statements on major airports in Japan, the United States and Europe

- ✓ Narita International Airport Co., Ltd. posted a net loss of 42.4 billion yen (\$385 million) in its interim financial results for FY2020, the first loss since privatization.
- ✓ "An additional \$17 billion (1,800 billion yen) will be lost from US airports in the year starting April 2021" (ACI-North America)
- ✓ German airports are expected to lose €3 billion (387 billion yen) from 2020 to 2021, and there is a risk of job losses for 45,000 airport employees
- ✓ London Heathrow Airport, posted a net loss of £1.8 billion (268 billion yen) for 2020
- ✓ Passenger volume for 2020 at European airports was down 70.4% year-on-year, the lowest on record since 1995
- ✓ Easing of European airport slot rules have been extended until the 2021 summer season
- ✓ Reductions and exemptions of landing fees, etc. have been implemented at US airports such as Los Angeles, Dallas, San Jose, and Guam, etc.
- ✓ **"With many airport usage fees and rents have been reduced while non-aeronautical revenue is also declining, cost reductions have proven difficult due to the need for maintaining safety and increasing cleanliness. As a result, major airports including London Heathrow and Amsterdam Schiphol have even postponed airport development plans"** (S & P Global)

2. Assistance and measures by the governments of Japan, the United States and Europe

Assistance and measures by the United States government

○Coronavirus Aid, Relief, and Economic Security Act (CARES Act)

Assistance for airlines

*See explanation in Part 1

Assistance for airports

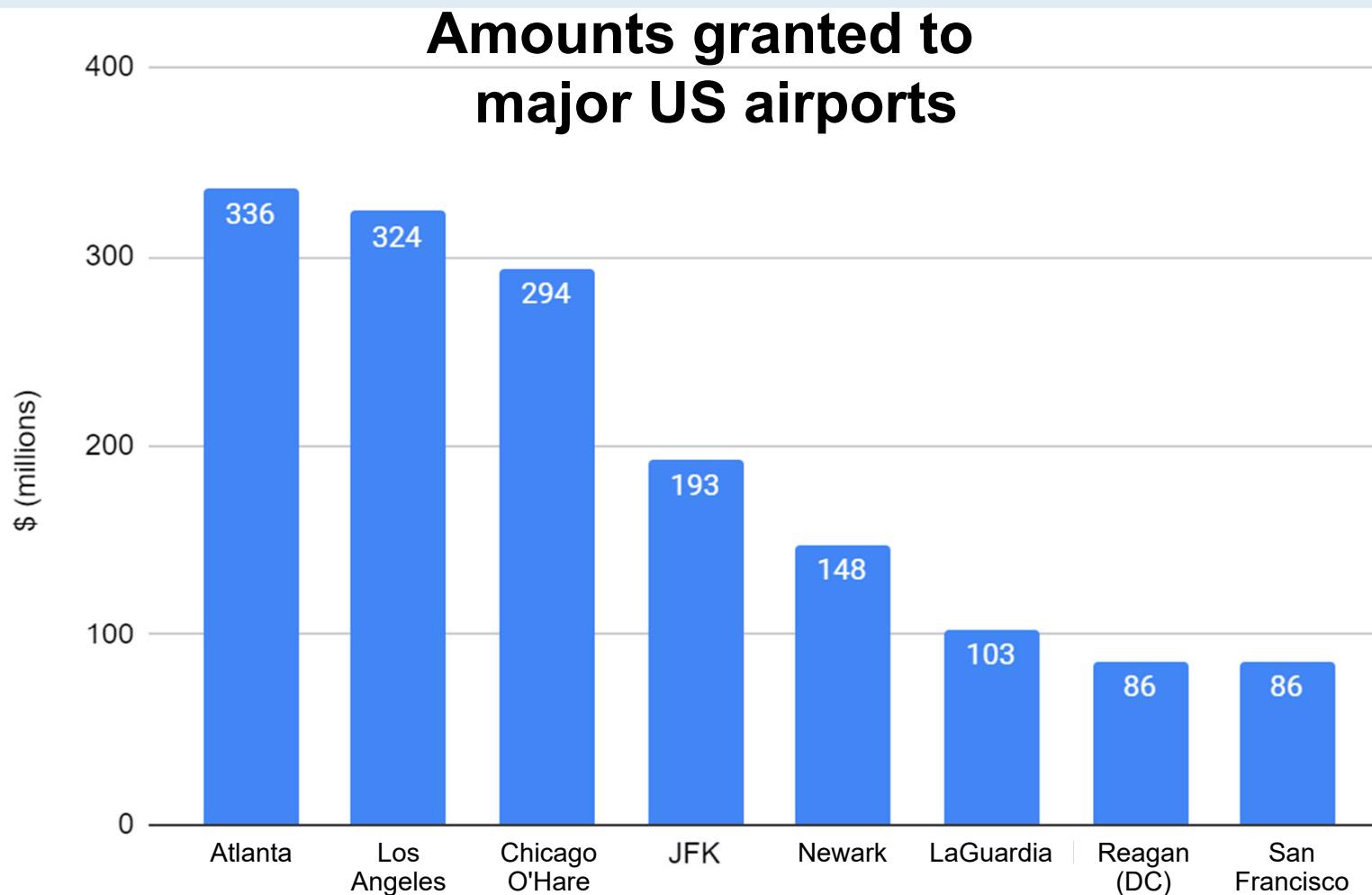
Aid amount: **10 billion dollars**

Objective: Maintain safe operation, continue to provide services and financial support to business operators, secure jobs of employees, stabilize airport credit ratings

- ✓ Appropriated from the general fund, not the Airport and Airway Trust Fund
- ✓ Target airports: Airports covered by the National Plan of Integrated Airport Systems (NPIAS)
- ✓ Available for airport management, competition promotion, marketing, repayment of funds to investors, lobbying, community activities, etc.
- ✓ Target airports divided into 4 groups and granted an amount proportionally divided using individual formulas
- ✓ Required to secure employment of 90% or more of employees as of March 27, 2020 (hub airports and major airports only)

2. Assistance and measures by the governments of Japan, the United States and Europe

Assistance and measures by the United States government



2. Assistance and measures by the governments of Japan, the United States and Europe

Assistance and measures by the United States government

○ Additional measures and remedies for COVID-19

Assistance for airlines

*See explanation in Part 1

Assistance for airports

Aid amount: **2 billion dollars**

- ✓ Appropriated from the general fund as is the case with the CARES Act
- ✓ Subsidies for operation, cleaning, disinfection, services, pathogen spread prevention and debt payments (\$1.79 billion), subsidies for rent reductions and exemptions for parking lots and airport facilities at major airports (\$200 million), etc.
- ✓ Required to maintain at least 90% of employees as of March 27, 2020 until February 15, 2021

2. Assistance and measures by the governments of Japan, the United States and Europe

Assistance and measures by the United States government

○ **Runway to Recovery** (From July 2, 2020; *Revised to December 21, 2020)

3 principles

- (1) Continue to focus on the basics of safety and security
- (2) Promote public health and hygiene in the air transportation system
- (3) Recognize aviation as a driving force for economic recovery

Individual and specific public health measures (Recommendations) as well as their rationale (Rationale) and reference sources (Resources) are presented for each operation phase performed by each entity (airline company, airport operator, etc.) in the air transportation system.

○ **FlyHealthy.gov** (November 12, 2020 onward)

- ✓ A portal site for passengers that provides various up-to-date information
- ✓ A step-by-step guide explaining what guidelines to look for and how to act during all travel processes, from planning a trip to staying at the airport, on board, arriving at a destination, and returning home.

2. Assistance and measures by the governments of Japan, the United States and Europe

Assistance and measures by the EU and European governments

○Temporary Framework

- ✓ Most of the legal basis is in existing EU law
- ✓ Utilizing exceptions to the regulatory system for national assistance (EU Functional Convention, Article 107, Paragraphs 2 and 3)
- ✓ Each member state provides assistance to its own economy by combining those that require notification to the European Commission and those that do not.

Germany

1. €9 billion in government aid to Lufthansa Group
 - Syndicated loan from Reconstruction Finance Corporation (KfW): €3 billion
 - Capital participation by the Economic Stabilization Fund (WSF), acquisition of shares, etc.: €6 billion

<<Conditions of aid>>

 - Repayment by 2026
 - Dividends and share buybacks prohibited
 - Internal assistance to affiliated companies with financial difficulties prohibited
 - Partial sale of slots at Frankfurt Airport and Munich Airport
2. Securing liquidity through loss compensation for airports, loan guarantees, tax exemptions, etc.

2. Assistance and measures by the governments of Japan, the United States and Europe

Assistance and measures by the EU and European governments

France

1. Launch of a scheme to postpone airline tax payments by airlines
 2. €7 billion in government aid to Air France
 - Syndicated loan by multiple banks: €4 billion (up to 90% guaranteed by the government)
 - Direct financing by the French government: €3 billion
- <<Conditions of aid (environmental initiatives)>>
- Reduce domestic flights on short-distance routes with railway alternatives
 - Reduce carbon dioxide emissions on mainland French flights up to 50% by the end of 2024
 - Reduce carbon dioxide emissions per RPK up to 50% by 2030, etc.

United Kingdom

1. Covid Corporate Financing Facility (CCFF) for British Airways (£600 million) and easyJet (£300 million)
2. Partial guarantee of bank syndicated loans to these airlines by UK Export Finance (UKEF) (British Airways: £2 billion over 5 years and easyJet £1.4 billion over 5 years)

2. Assistance and measures by the governments of Japan, the United States and Europe

Assistance and measures by the EU and European governments

○COVID-19 Aviation Health Safety Protocol

(From May 21, 2020 onward *Revised to June 30, 2020)

Formulated by the European Aviation Safety Agency (EASA) in collaboration with the European Centre for Disease Prevention and Control (ECDC)

European roadmap to lift containment measures for COVID-19

Tourism and transport: Commission's guidance on how to safely resume travel and reboot Europe's tourism in 2020 and beyond

COVID-19 Aviation Health Safety Protocol

- ✓ Sets out actions that passengers and workers should take to ensure health and safety and reduce the risk of spreading COVID-19, along with the scientific basis, for each major process of passenger air transport.

2. Assistance and measures by the governments of Japan, the United States and Europe

Assistance and measures by the EU and European governments

○Aviation Industry Charter for COVID-19

- ✓ COVID-19 Aviation Health Safety Protocol implementation monitoring program
- ✓ Monitors the effectiveness of the protocol by having airlines and airport operators sign the charter
- ✓ Airlines pledge to implement protocol recommendations, coordinate between national authorities, collect data to improve effectiveness and efficiency, and provide the data to EASA/ECDC
- ✓ Signed by more than 100 airlines and airport operators

2. Assistance and measures by the governments of Japan, the United States and Europe

Assistance and measures by the Japanese government

○ Support measure package for strengthening the management base of aviation and airports in the COVID-19 era

Purpose: Maintain the flight network and strengthen the management base of aviation/airport-related companies

1. Measures to maintain and secure aviation networks

- ✓ Reduction and exemption of landing fees, etc. for the second half of 2021
(estimated reduction and exemption amount: approx. 5.5 billion yen (\$50 million))
- ✓ Further reduction and exemption of airport charges and aviation fuel tax for 2022
(estimated reduction and exemption amount: approx. 120 billion yen (\$1.1 billion))

2. Measures to meet demand for funds and maintain employment

- ✓ Payment deferrals for landing fees, etc. in the second half of 2021
(expected deferral amount: approx. 48 billion yen (\$436 million))
- ✓ Financing support utilizing crisis response loans, etc.
(airlines: totaling about 500 billion yen (\$4.55 billion))
- ✓ Employment adjustment subsidy
- ✓ Industrial employment stability subsidy (tentative name), etc.

3. Emergency measures for stable and smooth recovery of air transportation

- ✓ Flexible operation of congested airport usage rules
(exemption from application of U/L rules)
- ✓ Eased measures for maintaining crew qualifications in light of reduced crew opportunities, etc.

2. Assistance and measures by the governments of Japan, the United States and Europe

Assistance and measures by the Japanese government

○ **Support measure package for strengthening the management base of aviation and airports in the COVID-19 era**

4. Measures to support the transformation of aviation and airport-related companies into a sustainable business structure in COVID-19 era

(1) Measures to support efforts to improve profitability

- ✓ Efforts to prevent the spread of infections and restore aviation demand
- ✓ Step-by-step measures to resume international routes
- ✓ Deregulation to capture new aviation demand, etc.

(2) Measures to support cost reduction efforts

- ✓ Reduction of fuel consumption by shortening flight routes, etc.
- ✓ Intensive review of safety regulations

5. Measures to support the maintenance and strengthening of the management base of airport-related companies that support the foundation of aviation networks

- ✓ Support by lending to concession airports/airport management companies and deferment of payments, etc.
- ✓ Airport infrastructure development by company-managed airports utilizing the fiscal investment and loan program

2. Assistance and measures by the governments of Japan, the United States and Europe

Assistance and measures by the Japanese government

○ Guidelines for preventing the spread of COVID-19 in the aviation sector

- ✓ Jointly formulated by the Scheduled Airlines Association of Japan and the All Japan Airport Terminal Association, Inc.
- ✓ Emphasizes the need to ensure minimum business continuity, instead of just preventing the spread of infections
- ✓ Measures that airlines and airport operators should take are divided into those for employees and those for users, and specific measures for each are shown while presenting actual examples.

3. Movement toward a new normal

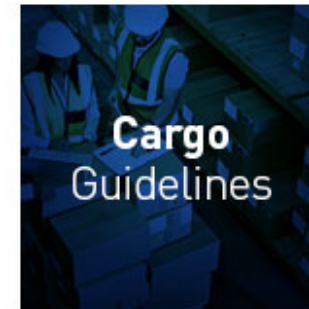
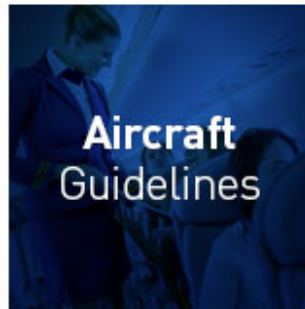
Responses and measures by the International Civil Aviation Organization (ICAO)

**Declaration on the spread of COVID-19 by the ICAO Board
(March 9, 2020)**

**ICAO Council Aviation Recovery Taskforce (CART)
established**

"Take-off" guidelines

Measures to mitigate public health risks



Source:
ICAO
Website

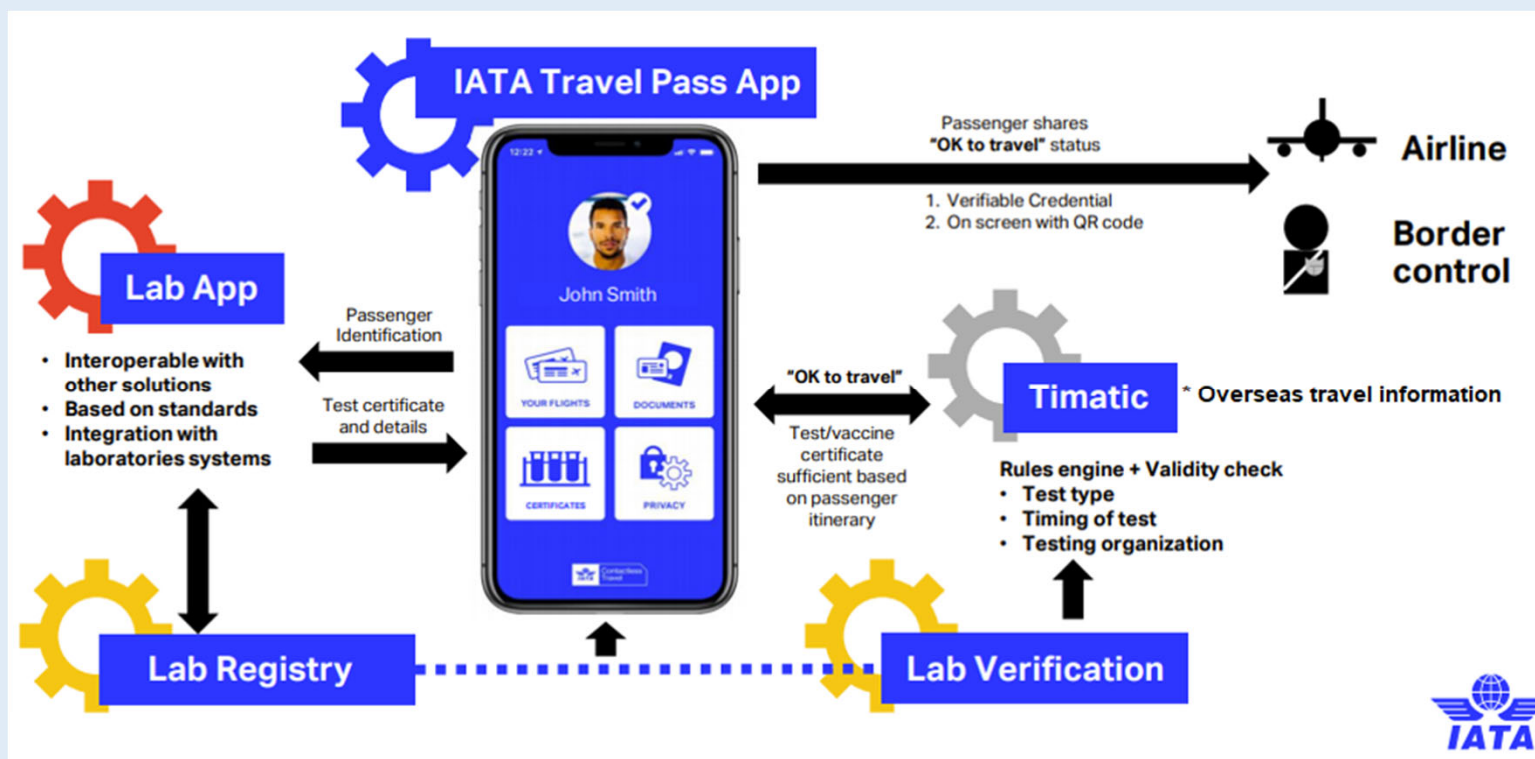
3. Movement toward a new normal

Responses and measures by the International Air Transport Association (IATA)

- Five principles regarding reopening of aviation
- Roadmap for safely reopening aviation
- Interactive map on travel regulations in each country
- Guidance on logistics and distribution of vaccines and pharmaceuticals

○ IATA Travel Pass

Source: IATA Website



3. Movement toward a new normal

Responses and measures by the Airports Council International (ACI)

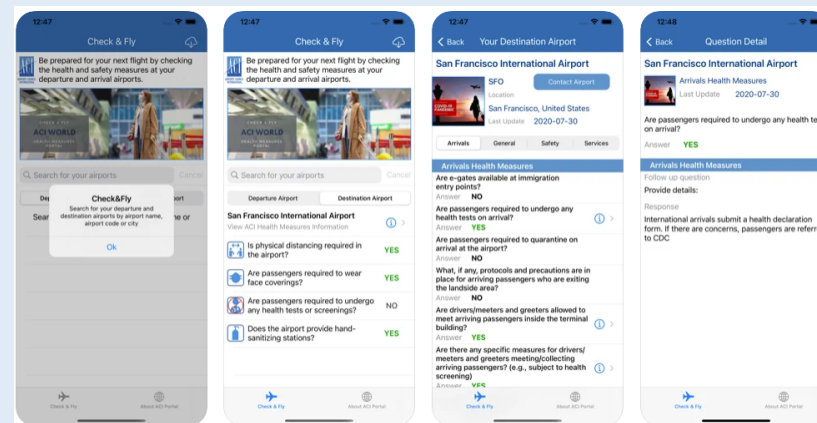
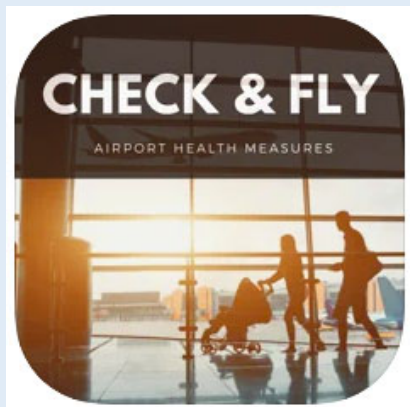
○ New Airport Service Quality (ASQ) items related to COVID-19

<<Newly added questions>>

- Efficiency of safety and health measures
- Clarity of signage and instructions to inform about safety and health measures
- Staffing

○ Airport Health Accreditation Programme

- Guidelines to support the restart and recovery of the aviation industry
- Future vision of airport security for post-COVID-19
- Resolution to support the recovery of the industry adopted at ACI's annual meeting
- "Check & Fly" airport health measures app for passengers



Source: ACI website

3. Movement toward a new normal

Changes in travel and tourism awareness: Will travel decrease?

○International survey by Tripadvisor (US, UK, Australia, Italy, Japan, New Zealand) (January 2021)

- ✓ Planning to travel abroad during 2021: 47%
- ✓ Already booked an international trip: 11%
- ✓ Planning a domestic trip of 1 night or more: 74%
- ✓ If I can get vaccinated, I will go on a trip abroad: 77%

○Skyscanner survey (USA) (January 2021)

- ✓ I'm not sure where I can travel and where I can't: 51%

- ⇒ Demand for "travel" is still strong both in Japan and overseas.
- ⇒ Important to provide accurate information on immigration regulations and a smooth immigration process corresponding to it.

3. Movement toward a new normal

Introduction of new standards and technologies

○ Movement to standardize tests and vaccination certificates

- ✓ ICAO CART Phase III: Establishment of technical working group and strategic working group

○ IATA Travel Pass

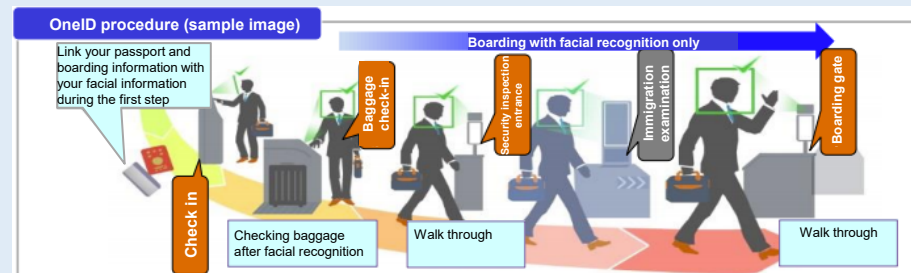
- ✓ Trial started in Q1 of 2021 with the cooperation of Middle East airlines (Emirates, Etihad, Qatar)

Cf. AA and BA promoting the introduction of their own travel health passport with the "VeriFLY" app

○ Utilization of biometric authentication technology

- ✓ One ID
- ✓ Simplified Arrival Process

Immigration control system utilizing biometric authentication technology in the United States
As of the end of January 2021, introduced at 53 airports, 29 land border crossings, and 7 ports



Source: NAA Press Release

4. Summary

(1) Situation surrounding aviation and airports in Japan, the United States and Europe

- ✓ Compared to the United States, which has the world's largest domestic market, and Japan, which has been successful in stimulating domestic demand, Europe, where intra-regional routes equate to cross-country travel, finds itself in a particularly difficult situation. The same can be said about airport management.
 - ✓ In Europe, some airlines are already under the control and supervision of the government, and management in line with the national intentions will be required in the future.
- ⇒ The example of France stands out, but it is expected that this will be an opportunity to further strengthen environmental measures in the aviation field in Europe. European trends have spread to Japan and the United States, and it is possible that the theme of **"eco-friendly, sustainable recovery"** will become more important in the recovery from COVID-19.

4. Summary

(2) Status of assistance and measures by the governments of Japan, the United States and Europe

- ✓ For airlines centered on flag carriers in Europe and the United States, each country is providing large-scale financial support to sustain operations and maintain employment.
 - ✓ At airports, the number of flights departing and arriving has decreased due to a drop in demand, and while profits have declined significantly due to the easing of slot rules, support measures such as reduction and exemption of landing fees are also being taken.
- ⇒ As a result, there are obstacles such as postponement of airport development plans, and further costs are required to maintain safety and increase public health measures, **so further aid will be needed not only to continue management but also to maintain safe operations.**

(3) Movement toward a new normal and the future

- ✓ International organizations and industry groups are working on recovery plans to restore the aviation industry as soon as possible and accelerate growth in a new normal. They are also working on new mechanisms that enhance public health aspects.
- ✓ However, with regard to new immigration control and quarantine based on COVID-19, for example, each country, company, and organization is currently proceeding with its own measures.

4. Summary

(3) Movement toward a new normal and the future

⇒ In the future, under collaboration and international cooperation among stakeholders such as airlines, airport companies, aviation authorities, CIQ authorities, etc., we look forward to initiatives for immigration control, quarantine, and aviation processes **to make separate systems compatible and mutually available** depending on the country, region, organization or purpose **to achieve standardization so that the interests of aviation users will be maximized.**

Thank you for your attention.