# Effects of Novel Coronavirus (COVID-19) on Civil Aviation: Economic Impact Analysis

Montréal, Canada 5 June 2020 **Air Transport Bureau** 



#### Executive Summary: Economic Impact in Brief

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### **Executive Summary: Economic Impact in Brief**

Previous two (2) scenarios and six (6) different paths were restructured with new two (2) scenarios and four (4) different paths.

Figures and estimates herein are <u>subject to substantial changes</u>, and will be updated with the situation evolving and more information available.

The latest estimates indicate that the possible COVID-19 impact on world scheduled passenger traffic for the full year 2020, compared to Baseline (business as usual, originally-planned), would be:

- Overall reduction ranging from 39% to 53% of seats offered by airlines
- Overall reduction of 2,300 to 3,080 million passengers
- Approx. USD 302 to 402 billion potential loss of gross operating revenues of airlines

The impacts depend on duration and magnitude of the outbreak and containment measures, the degree of consumer confidence for air travel, and economic conditions, etc.

#### International passenger traffic for 2020, compared to Baseline

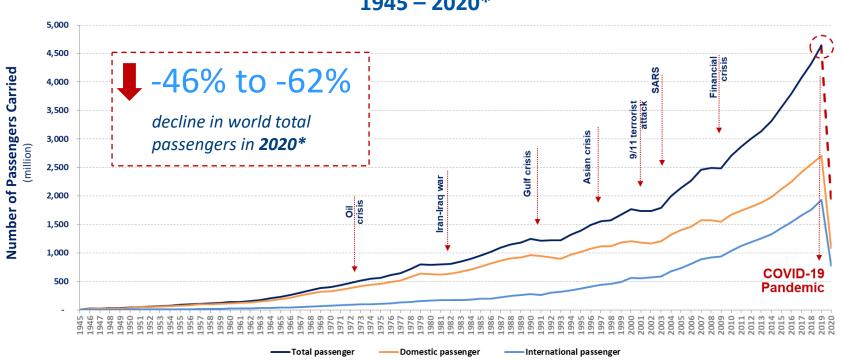
- Overall reduction ranging from 48% to 63% of seats offered by airlines
- Overall reduction of 1,102 to 1,446 million passengers
- Approx. USD 194 to 256 billion potential loss of gross operating revenues of airlines

#### Domestic passenger traffic for 2020, compared to Baseline

- Overall reduction ranging from 33% to 45% of seats offered by airlines
- Overall reduction of 1,199 to 1,635 million passengers
- Approx. USD 107 to 147 billion potential loss of gross operating revenues of airlines

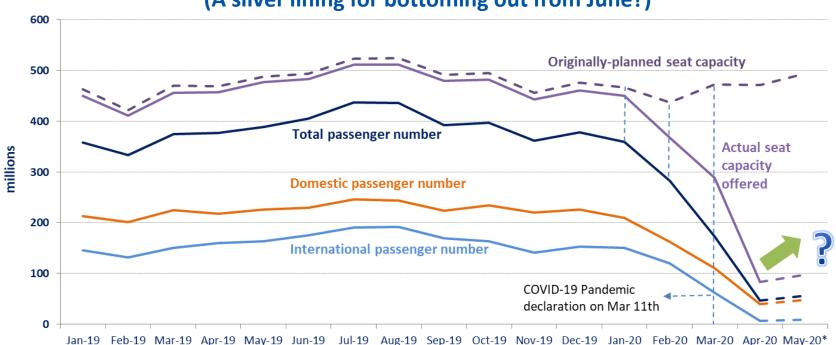
# World passenger traffic collapses with unprecedented decline in history

#### World passenger traffic evolution 1945 – 2020\*

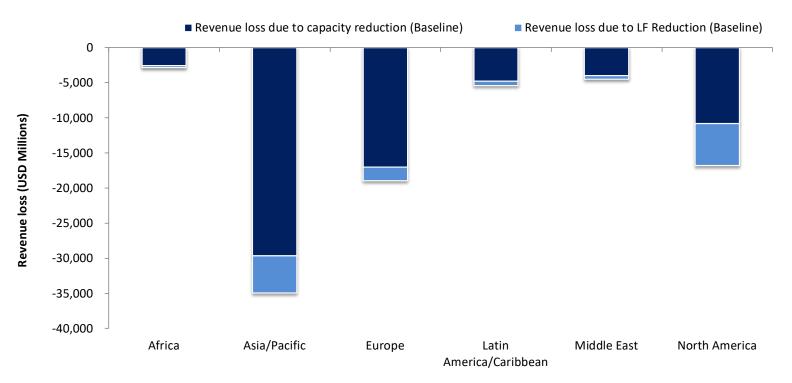


## Drastic capacity cut along with dramatic drop in demand

### Comparison of passenger numbers and capacity (A silver lining for bottoming out from June?)



# Approximately USD 84 billion passenger revenue loss from Jan to Apr 2020

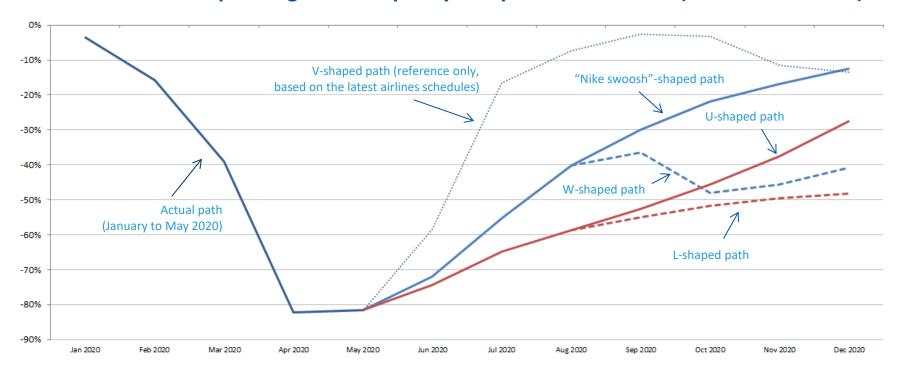


Note: Compared to Baseline (business as usual, originally-planned)

Source: ICAO estimates

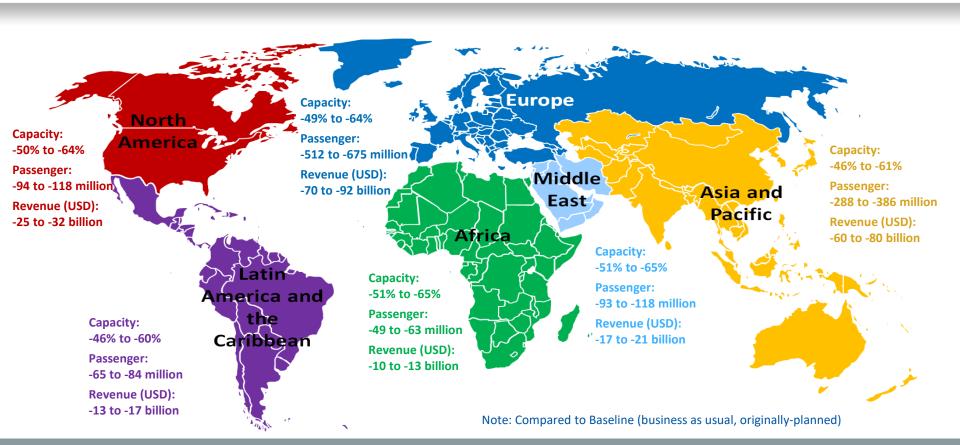
# Due to extreme uncertainty, 4 different paths are considered

#### Scenarios for passenger seat capacity compared to Baseline (business as usual)





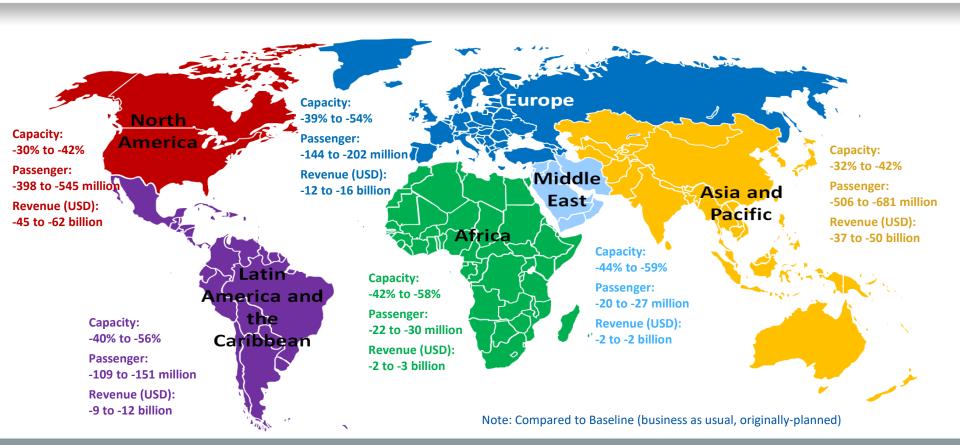
## Estimated impact on international passenger traffic and revenues by region for 2020



Source: ICAO estimates 10



## Estimated impact on domestic passenger traffic and revenues by region for 2020



Source: ICAO estimates 11



# Global impact of COVID-19 on aviation, tourism, trade and economy

- Air passenger traffic: An overall reduction of air passengers (both international and domestic) ranging from 46% to 62% in 2020 compared to 2019 (by ICAO)
- <u>Airports</u>: An estimated loss of over 50% of passenger traffic and 57% or over USD 97 billion airport revenues in 2020 compared to business as usual (by ACI)
- <u>Airlines</u>: A 48% decline of revenue passenger kilometres (RPKs, both international and domestic) in 2020 compared to 2019 (by IATA)
- <u>Tourism</u>: A decline in international tourism receipts of between USD 910 to 1,170 billion in 2020, compared to the USD 1.5 trillion generated in 2019, with 100% of worldwide destinations having travel restrictions (by <u>UNWTO</u>)
- <u>Trade</u>: A fall of global merchandise trade volume by between 13% and 32% in 2020 compared to 2019 (by WTO)
- Global economy: A projected -3% contraction in world GDP in 2020, far worse than during the 2008–09 financial crisis (by IMF)

### **Scenario Building**

- Analysis focuses on simultaneous supply shock and drop in demand
  - in a near-term, i.e. monthly profile from January to December 2020
  - in terms of scheduled passenger traffic globally
- Taking into account the heterogeneity, distinction is made:
  - between international and domestic
  - by six (6) geographical region and/or 50 route groups used in ICAO's long-term traffic forecasts (LTF)
- Analysis is based on forward-looking scenarios, which will be continuously adjusted and updated

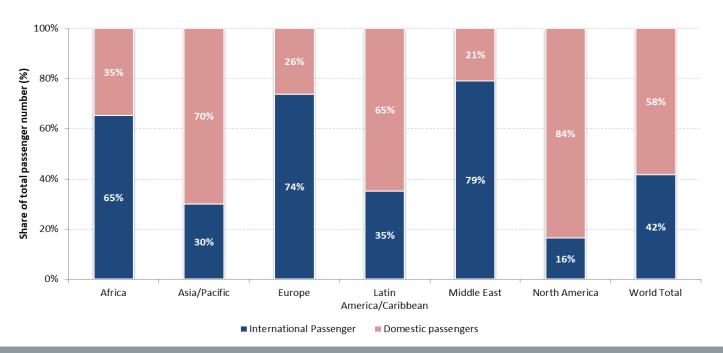
### **Analytical Consideration**

- Geographical disparity of international-domestic passenger traffic mix
- Difference in market size among regions
- Potential difference in resilience and speed of recovery
- Outbreak timing that impacts when traffic would bottom out
- Gap between what is scheduled and actual operations



# International-domestic passenger traffic mix exhibits significant geographical disparity

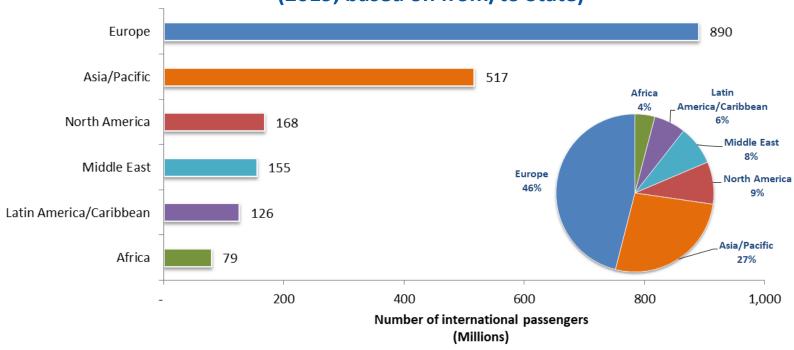
#### Share of international-domestic passenger traffic by region (2019)





### Europe and Asia/Pacific accounted for over 70% of the world international traffic pre-COVID-19

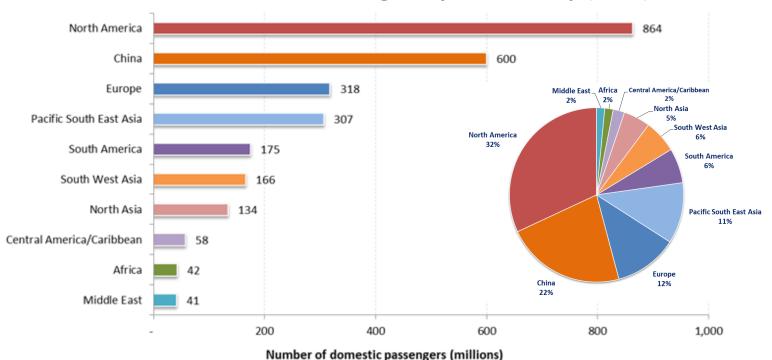
### Number of International Passengers by Region (2019, based on from/to State)





## North America and China account for over half of world domestic passenger traffic

#### **Number of Domestic Passengers by Route Group (2019)**





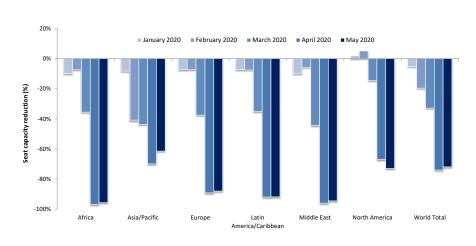
### Domestic passenger traffic may be more resilient than international in some markets

### Asia/Pacific and North America have experienced 20% to 25% less decline in domestic passenger traffic than international

### International seat capacity reduction (compared to baseline)

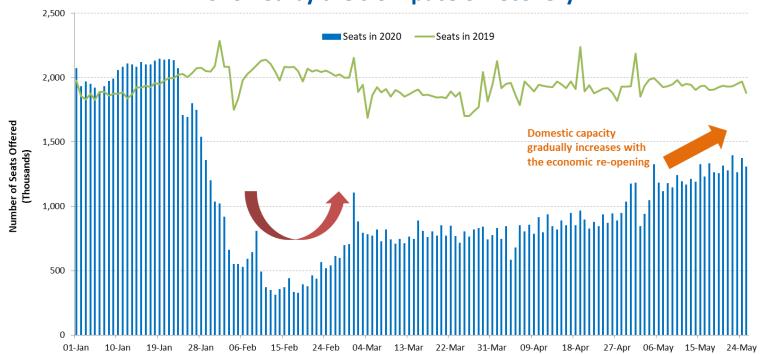
#### 

### Domestic seat capacity reduction (compared to baseline)



### Domestic passenger traffic may recover ahead of international

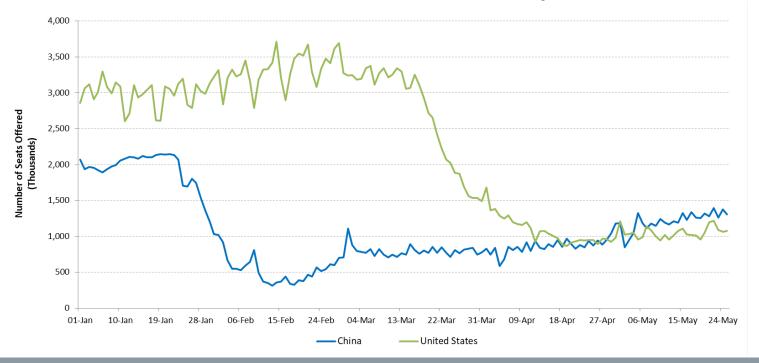
Domestic passenger traffic in China already bottomed out in mid-February, followed by the slow pace of recovery





# The outbreak timing impacts when traffic would bottom out in each region

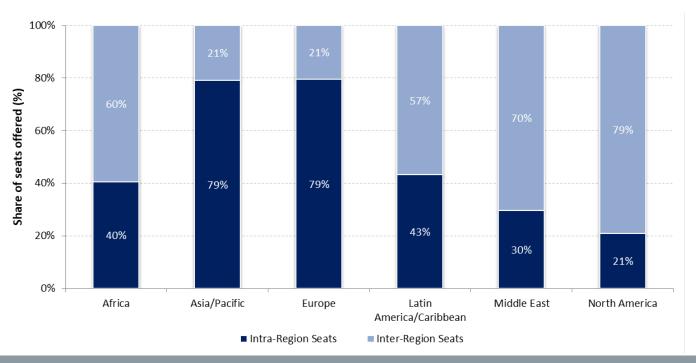
### Capacity evolution of two largest domestic markets China and United States since January 2020





# Regions with higher share of intra-region traffic are expected to recover faster

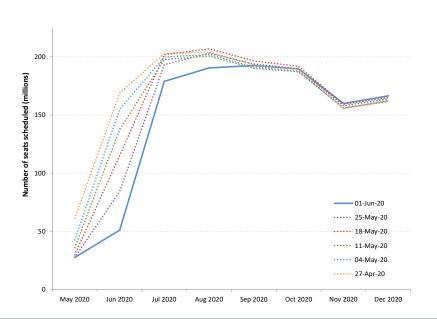
### Almost 80% of international seats offered in Asia/Pacific and Europe were for intra-regional traffic (2019)



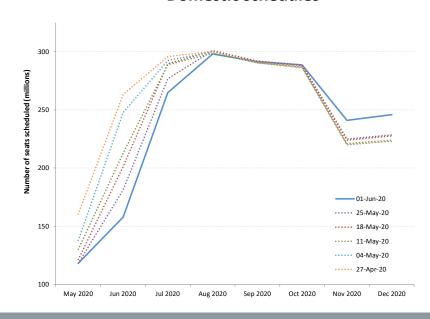
# A gap exists between what is scheduled and actual operations

### Airlines announced/planned resumption of flights in early May, however, over half of which were subsequently withdrawn

#### **International schedules**



#### **Domestic schedules**



### **Shapes of Economic Recession and Recovery**

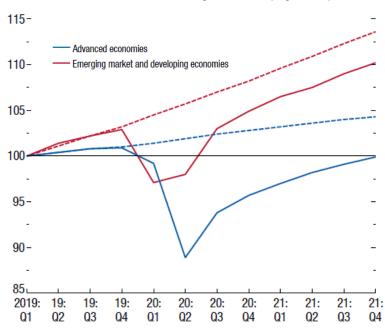
Informal classification to describe different types of recessions:

- V-shaped: normal shape for recession, a brief period of sharp economic decline followed by quick/smooth recovery
- U-shaped: prolonged contraction and muted recovery to trend line growth
- L-shaped (depression): long-term downturn in economic activity, steep drop followed by a flat line with possibility of not returning to trend line growth
- W-shaped: a double-dip recession, "down up down up" pattern before full recovery
- "Nike swoosh"-shaped\*: bounce back sharply but blunt quickly (\* Brookings Institution/WEF)



## What "recession shape" can be assumed given uncertainties surrounding the outlook?

#### **World's GDP Projections (by IMF)**



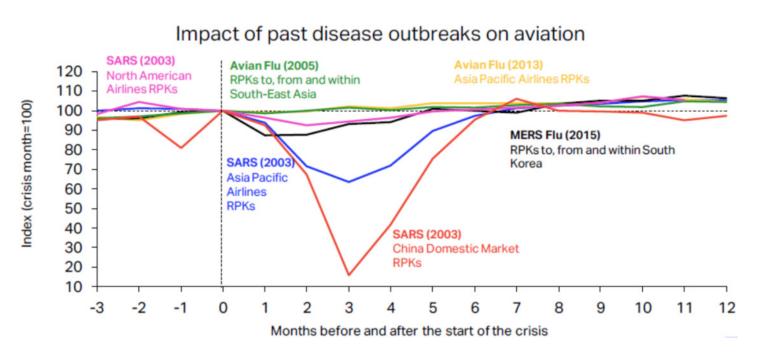
(2019:Q1 = 100; dashed lines indicate estimates from January 2020 World Economic Outlook Update)

https://www.imf.org/en/Publications/WEO/Issues/2020/04/14/weo-april-2020

- How long will the pandemic last and what will be the severity levels?
- How deep and how long will the global recession be?
- How long will lockdowns and travel restrictions continue?
- How fast will consumer confidence in air travel be restored?
- Will there be a structural shift in industry and consumers' behaviors?
- How long can the air transport industry withstand the finical adversity?



## Previous outbreaks/pandemics had a V-shaped impact on air transport in Asia/Pacific



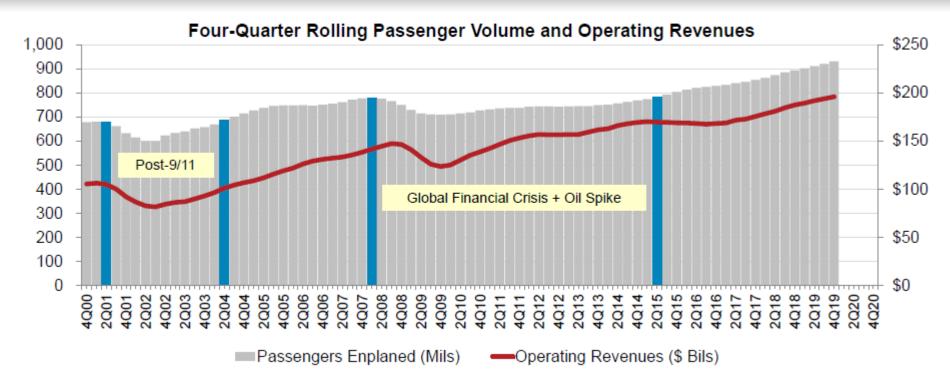
The impact of COVID-19 has already surpassed the 2003 SARS outbreak which had resulted in reduction of annual RPKs by 8% and USD 6 billion revenues for Asia/Pacific airlines. The 6-month recovery path of **SARS** might not apply to today's situation.

Source: IATA Economics using data from IATA Statistics

https://www.iata.org/en/iata-repository/publications/economic-reports/third-impact-assessment/



# 9/11 and global financial crisis had a U/L-shaped impact on air transport in United States



<sup>\*</sup> Passengers enplaned systemwide on U.S. airlines in scheduled and nonscheduled services Source: A4A Passenger Airline Cost Index and Bureau of Transportation Statistics (Form 41 Schedule T1)

https://www.airlines.org/dataset/impact-of-covid19-data-updates/

#### **Indicative Scenarios and Paths Forward**

As overall severity and duration of the COVID-19 pandemic are still uncertain, four (4) different recovery paths under two (2) indicative scenarios are developed:

- Baseline: counterfactual scenario, in which the COVID-19 pandemic does not occur, that is, originally-planned or business as usual
- Scenario 1: two (2) different paths (similar to Nike swoosh- and W-shaped)
- Scenario 2: two (2) different paths (similar to U- and L-shaped)
- Reference: based on latest airline schedules (similar to V-shaped)

- Notwithstanding the elevated uncertainty surrounding the outlook, a scenario analysis could help gauge potential economic implications of the COVID-19 pandemic.
- Scenarios are not forecasts of what is most likely to happen. Given rapidly changing circumstances, they are merely indicative of possible paths or consequential outcomes out of many.
- The exact path (depth, length and shape) will depend upon various factors, inter alia, duration and magnitude of the outbreak and containment measures, availability of government assistance, consumer confidence, and economic conditions.
- With the situation evolving and more information available, scenarios will be adjusted as necessary.

- International and domestic passenger traffic has separate scenarios/paths
- Scenarios/paths are differentiated in terms of supply and demand, i.e.
  - Scale of output or seat capacity change
  - Degree of consumer confidence that can be translated into demand or load factor as a proxy
- Supply and demand are influenced by:
  - Different timing and speed of recovery by region, international/domestic, and intra-/inter-region
  - Global economic contraction
- No consideration is made to social distancing requirements on aircraft, etc.
- Detailed scenario assumptions are summarized in Appendix B

#### • Baseline: originally-planned or business as usual

- Counterfactual hypothesis that are expected to occur in the absence of COVID-19 pandemic
- Supply: airlines' originally-planned schedules supplemented by trend line growth
- Demand: trend line growth of demand from 2019 level

#### Reference: V-shaped

- Information-only scenario that reflects airlines' most recent expectation or a "signal" of airlines' plan to the market (not necessarily realistic)
- Supply: based on latest update of airline schedules filed up to December, which are adjusted weekly by airlines according to the expectation of the evolving situation (quite often managing capacity for a short period due to the uncertainties)
- Demand: quickly returning to Baseline level

#### Scenario 1: Nike swoosh- and W-shaped

#### International

- Path 1: Smooth capacity recovery to 80% of Baseline level by December with pent-up demand
- Path 1a: Capacity to start with smooth recovery but then turn back down due to over-capacity

#### Domestic

- Path 1: Swift capacity rebound to 93% of Baseline by December pushed by pent-up demand
- Path 1a: Capacity to start with smooth recovery but then turn back down due to over-capacity

#### Scenario 2: U- and L-shaped

#### International

- Path 2: Slow progression of capacity recovery to 60%, picking up more demand in 4Q
- Path 2a: Recovery to 40% at diminishing speed due to respite and continuous demand slump

#### Domestic

- Path 2: Gradual capacity recovery to 80%, picking up more demand in 4Q
- Path 2a: Capacity recovery to 60% at diminishing speed due to sluggish demand growth

In the following analysis, international and domestic scenarios having the same path number are linked with each other, although different combination of scenarios/paths would be possible

### **Scenario Analysis**

Previous two (2) scenarios and six (6) different paths were restructured with new two (2) scenarios and four (4) different paths.

Figures and estimates herein are <u>subject to substantial changes</u>, and will be updated with the situation evolving and more information available.

- Three (3) key impact indicators under four (4) paths of two (2) scenarios:
  - Impact on passenger seat capacity (supply, % change)
  - Impact on passenger numbers (demand)
  - Impact on gross passenger operating revenues of airlines
- Comparison to:
  - Baseline scenario
  - 2019 level (year-on-year)
  - Reference scenario
- Break-down by:
  - International and domestic
  - Six (6) geographical regions

Estimated actual results are used for the key impact indicators from January to May 2020.

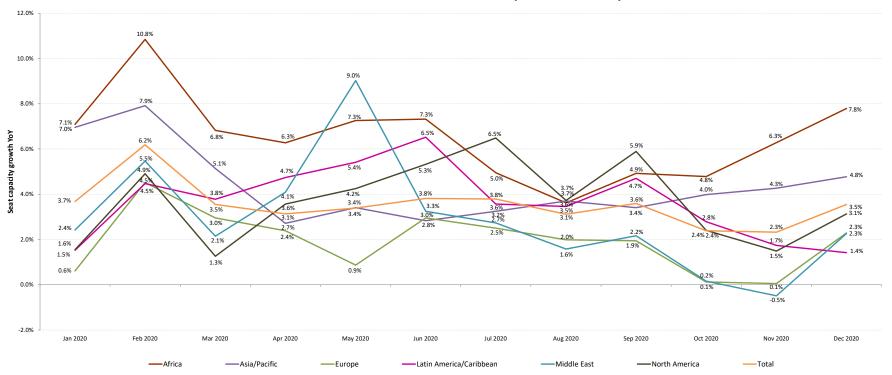
**Appendix C** details the key impact indicators while **Appendix D** presents the estimated actual results by route group.

### Impact on Passenger Seat Capacity (Supply)

- Prior to the outbreak, airlines had planned to increase seat capacity in 2020 by **3.5**% (international by **3.2**% and domestic by **3.7**%), compared to 2019.
- According to the latest estimates, passenger seat capacity could instead drop from the above Baseline by 39% to 53% (international by 48% to 63% and domestic by 33% to 45%).
- This capacity level would be 37% to 51% (international 46% to 62% and domestic 31% to 43%) below the 2019 level.
- Biggest capacity reduction (%) is expected to be in Middle East, followed by Africa and Europe.

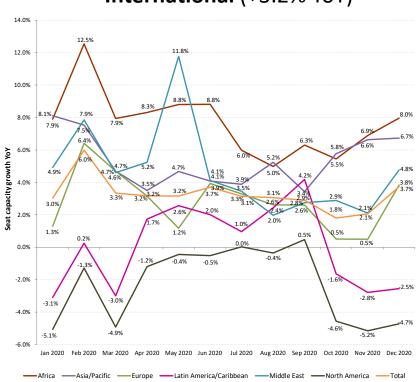


#### International + Domestic (+3.5% YoY)

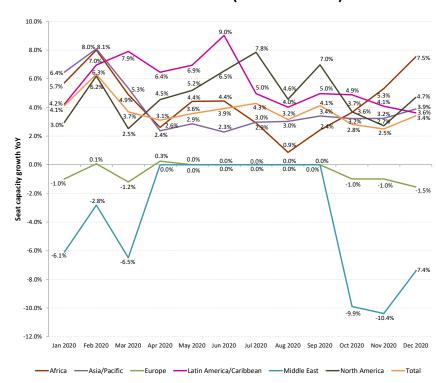


## **Baseline seat capacity compared to 2019**

## **International** (+3.2% YoY)



### Domestic (+3.7% YoY)

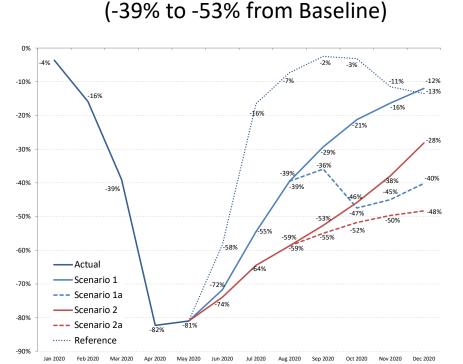




# Scenarios 1 & 2 (World total):

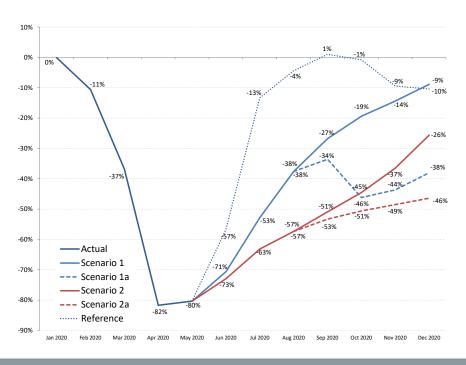
# **Seat capacity change compared to Baseline & 2019**

# International + Domestic



# International + Domestic

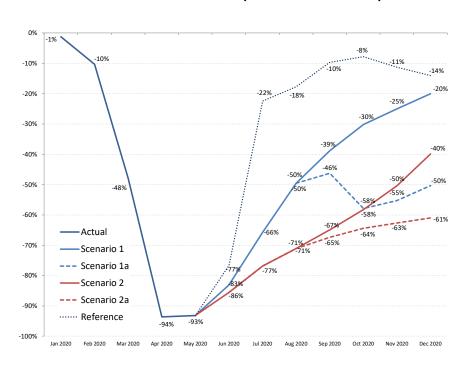
(-37% to -51% YoY from 2019)



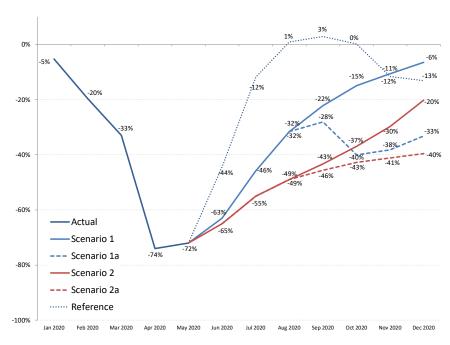


# Scenarios 1 & 2 (World total): Seat capacity change compared to Baseline

### **International** (-48% to -63%)



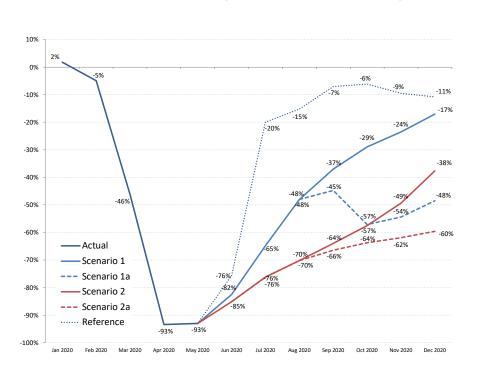
### **Domestic** (-33% to -45%)



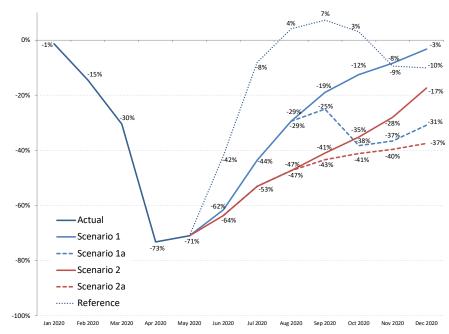


# Scenarios 1 & 2 (World total): Seat capacity change compared to 2019

### **International** (-46% to -62% YoY)



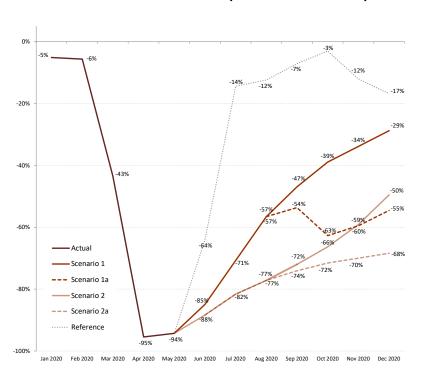
### Domestic (-31% to -43% YoY)



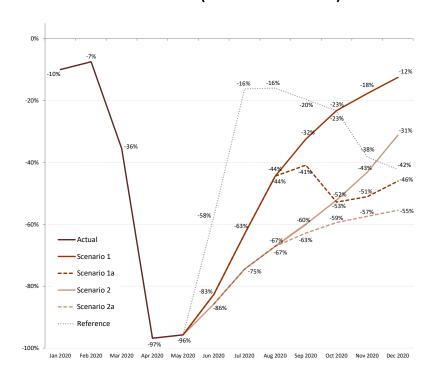


# Scenarios 1 & 2 (Africa): Seat capacity change compared to Baseline

## **International** (-51% to -65%)



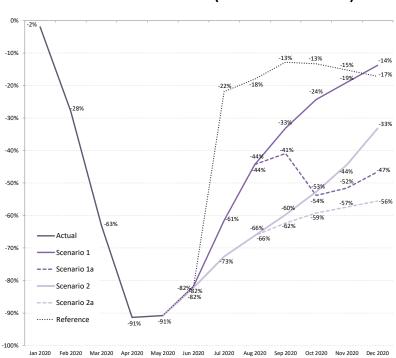
## **Domestic** (-42% to -58%)



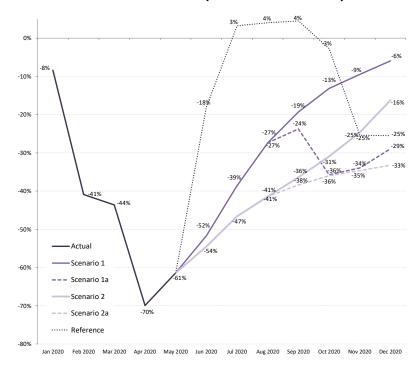


# Scenarios 1 & 2 (Asia/Pacific): Seat capacity change compared to Baseline

## International (-46% to -61%)



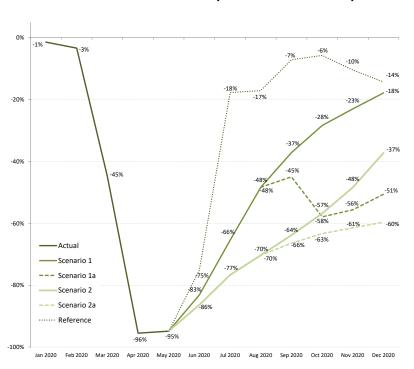
### **Domestic** (-32% to -42%)



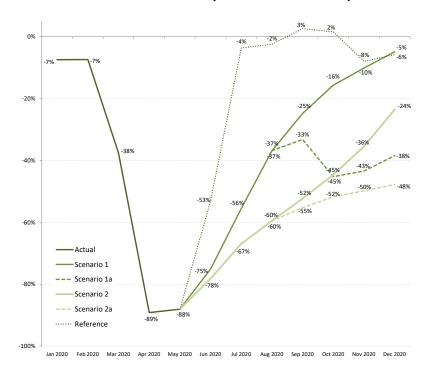


# Scenarios 1 & 2 (Europe): Seat capacity change compared to Baseline

### International (-49% to -64%)



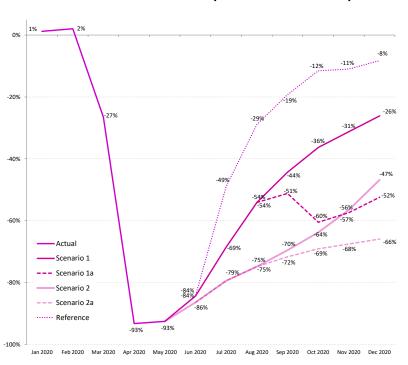
### **Domestic** (-39% to -54%)



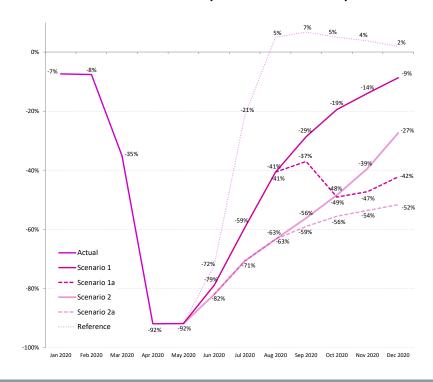


# Scenarios 1 & 2 (Latina America/Caribbean): Seat capacity change compared to Baseline

### **International** (-46% to -60%)



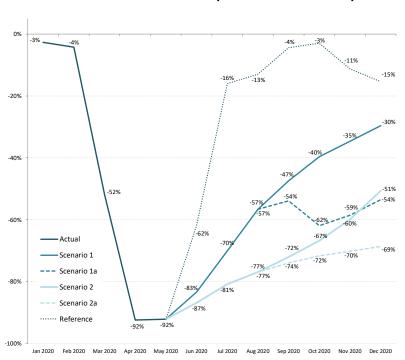
## **Domestic** (-40% to -56%)



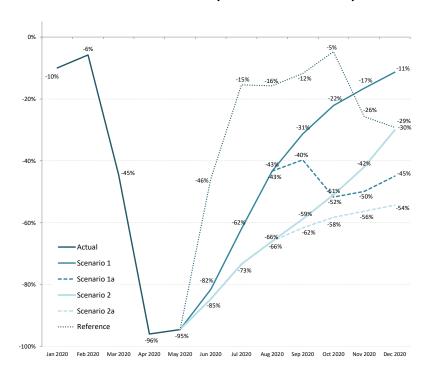


# Scenarios 1 & 2 (Middle East): Seat capacity change compared to Baseline

## International (-51% to -65%)



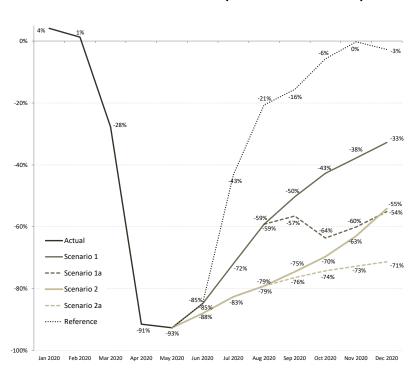
### **Domestic** (-44% to -59%)



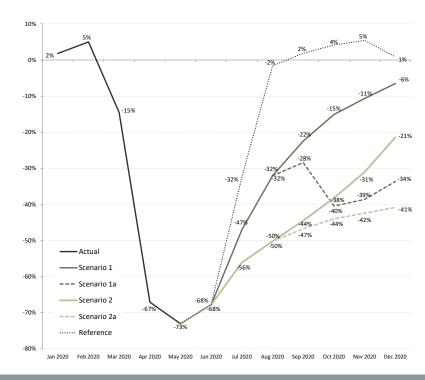


# Scenarios 1 & 2 (North America): Seat capacity change compared to Baseline

### **International** (-50% to -64%)



### **Domestic** (-30% to -42%)

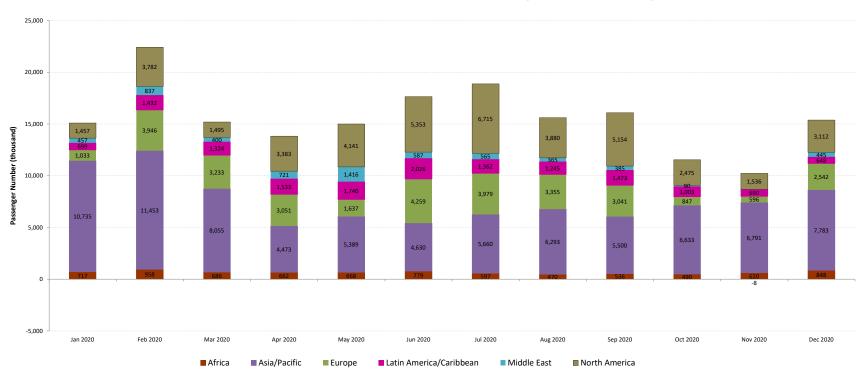


# **Impact on Passenger Numbers (Demand)**

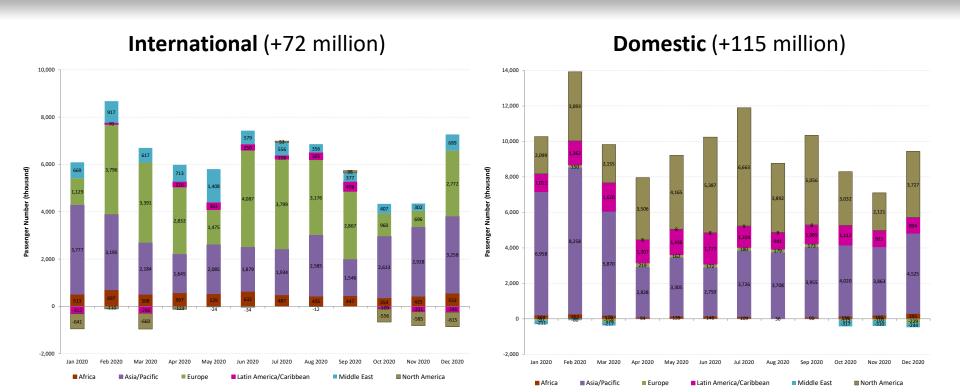
- Given the originally-planned seat capacity, passenger demand could have increased 187 million for 2020 (international 72 million and domestic 115 million), compared to 2019.
- According to the latest estimates, passenger demand could instead drop from the above Baseline by 2,300 to 3,080 million (international by 1,102 to 1,446 million and domestic by 1,199 to 1,635 million).
- This demand level would be **2,114 to 2,894 million** (international by **1,030 to 1,374 million** and domestic by **1,084 to 1,520 million**) below the 2019 level.
- The most substantial demand reduction (in total number) is expected to be in Asia/Pacific, followed by Europe, hitting its summer travel peak season.

# Baseline passenger numbers compared to 2019

## **International + Domestic** (+187 million)



# Baseline passenger numbers compared to 2019



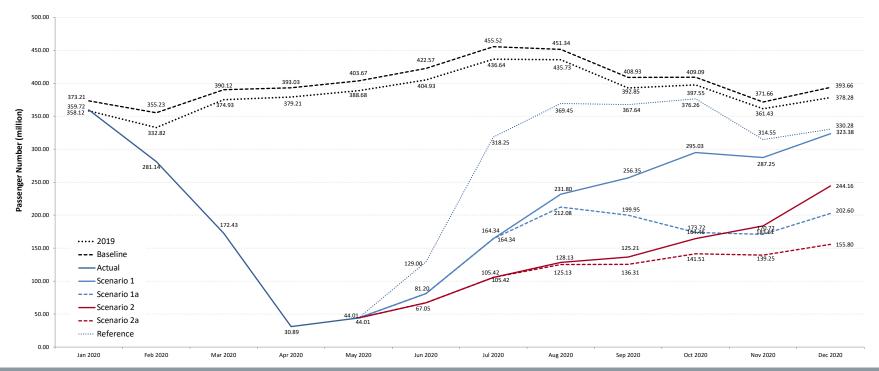
Note: Number of international passengers departing <u>from</u> each country and territory, which are aggregated at the regional level to avoid double counting

# Scenarios 1 & 2 (World total):

# Passenger numbers compared to Baseline & 2019

#### **International + Domestic**

(-2,300 to -3,080 million from Baseline and -2,114 to -2,894 million from 2019)

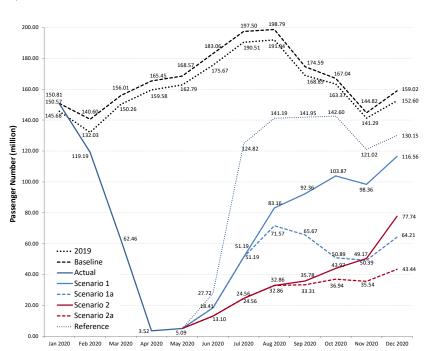


# Scenarios 1 & 2 (World total):

# Passenger numbers compared to Baseline & 2019

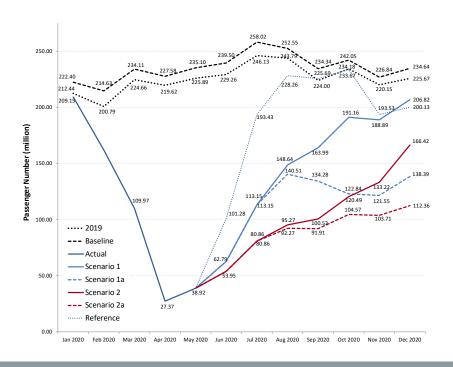
#### International

(-1,102 to -1,446 million from Baseline and -1,030 to -1,374 million from 2019)



#### **Domestic**

(-1,199 to -1,635 million from Baseline and -1,084 to -1,520 million from 2019)

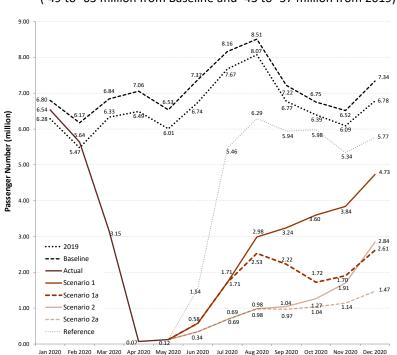


# Scenarios 1 & 2 (Africa):

## Passenger numbers compared to Baseline & 2019

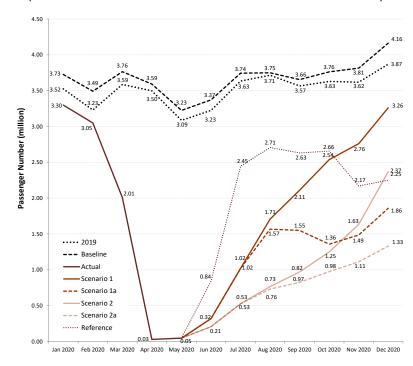
#### **International**

(-49 to -63 million from Baseline and -43 to -57 million from 2019)



#### **Domestic**

(-22 to -30 million from Baseline and -20 to -28 million from 2019)

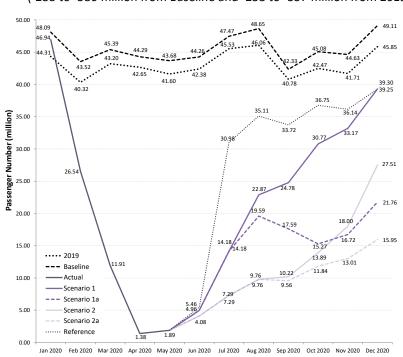


# Scenarios 1 & 2 (Asia/Pacific):

# Passenger numbers compared to Baseline & 2019

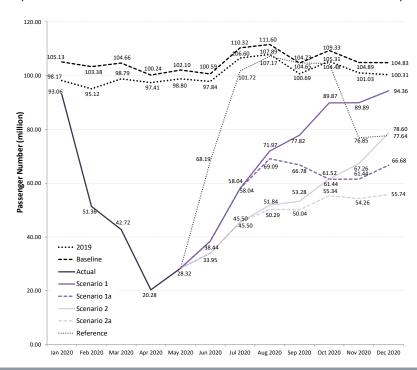
#### **International**

(-288 to -386 million from Baseline and -258 to -357 million from 2019)



#### **Domestic**

(-506 to -681 million from Baseline and -452 to -627 million from 2019)

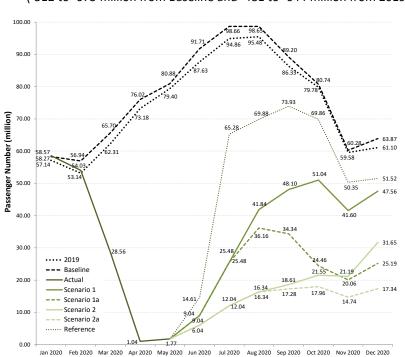


# Scenarios 1 & 2 (Europe):

## Passenger numbers compared to Baseline & 2019

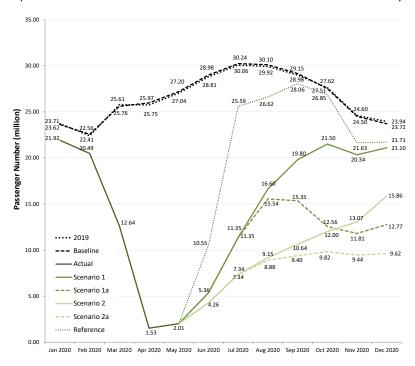
#### **International**

(-512 to -675 million from Baseline and -481 to -644 million from 2019)



#### **Domestic**

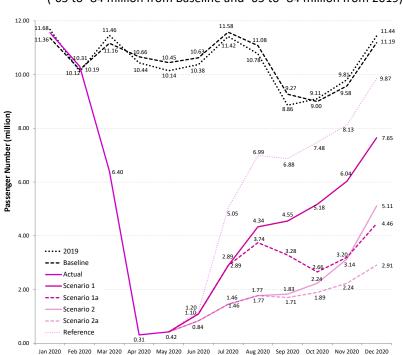
(-144 to -202 million from Baseline and -144 to -201 million from 2019)



# Scenarios 1 & 2 (Latina America/Caribbean): Passenger numbers compared to Baseline & 2019

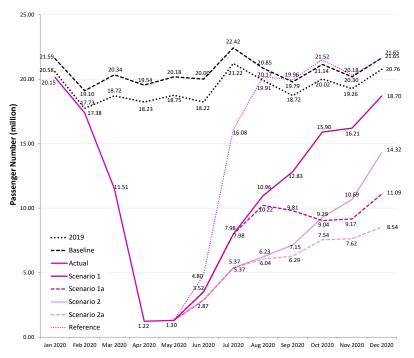
#### **International**

(-65 to -84 million from Baseline and -65 to -84 million from 2019)



#### **Domestic**

(-109 to -151 million from Baseline and -94 to -136 million from 2019)

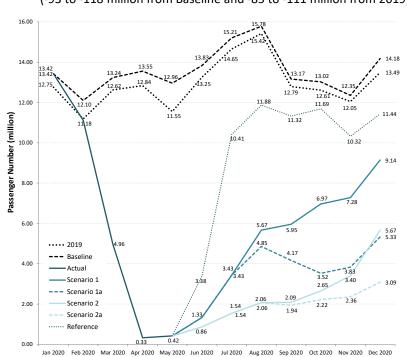


# Scenarios 1 & 2 (Middle East):

# Passenger numbers compared to Baseline & 2019

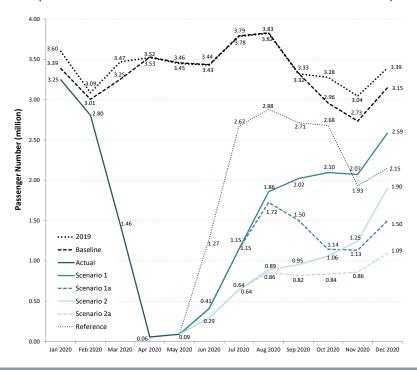
#### **International**

(-93 to -118 million from Baseline and -85 to -111 million from 2019)



#### **Domestic**

(-20 to -27 million from Baseline and -21 to -28 million from 2019)

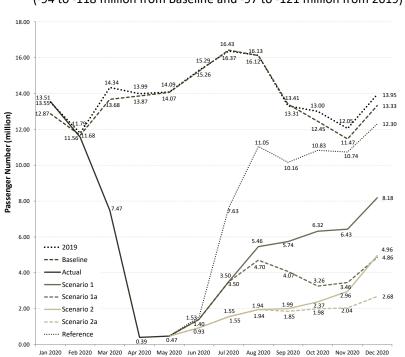


# Scenarios 1 & 2 (North America):

# Passenger numbers compared to Baseline & 2019

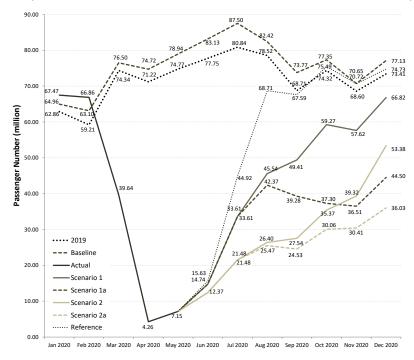
#### **International**

(-94 to -118 million from Baseline and -97 to -121 million from 2019)



#### **Domestic**

(-398 to -545 million from Baseline and -352 to -499 million from 2019)

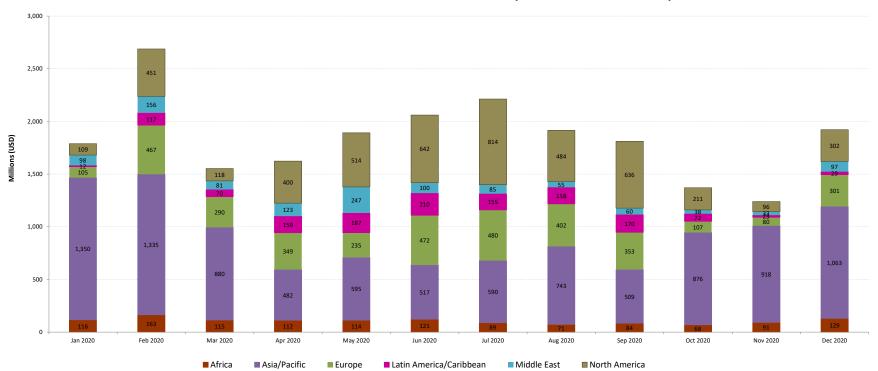


# Impact on Gross Passenger Operating Revenues of Airlines

- With the originally-planned seat capacity and trend line growth of demand, airlines' gross
  passenger operating revenues could have increased USD 22 billion for 2020 (USD 12 billion
  from international and USD 10 billon from domestic), compared to 2019.
- According to the latest estimates, airlines' revenues could instead plummet USD 302 to 402 billion (international USD 194 to 256 billion and domestic USD 107 to 147 billion) below the Baseline, or USD 279 to 380 billion (international USD 183 to 244 billion and domestic USD 97 to 136 billion) below the 2019 level.
- Approximately 60% of revenue loss would be recorded by Asia/Pacific and Europe.

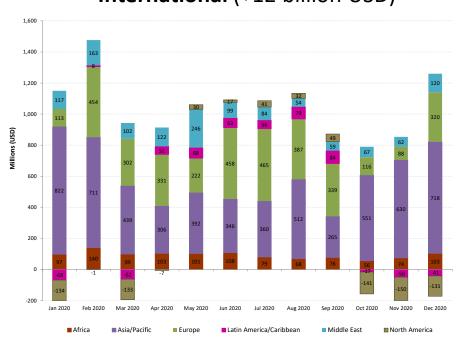
## Baseline passenger revenues compared to 2019

## International + Domestic (+22 billion USD)

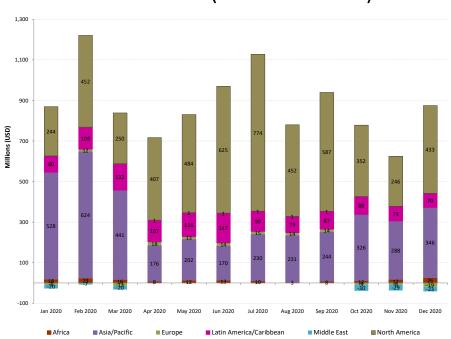




### International (+12 billion USD)



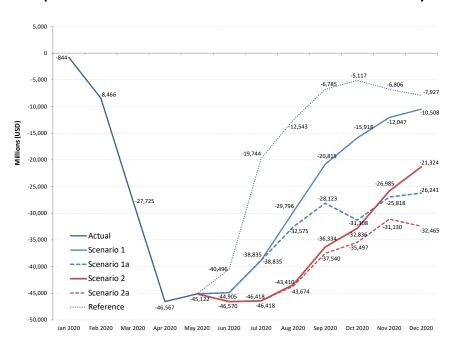
### **Domestic** (+10 billion USD)



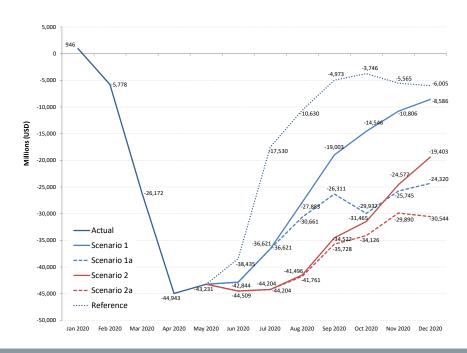
Note: The international revenues are gross passenger operating revenues of all airlines serving international routes <u>from</u> each country and territory, which are aggregated at the regional level (revenues of international routes <u>to</u> each country and territory were removed to avoid double counting).

# Scenarios 1 & 2 (World total): Passenger revenues compared to Baseline & 2019

## International + Domestic (-302 to -402 billion USD from Baseline)



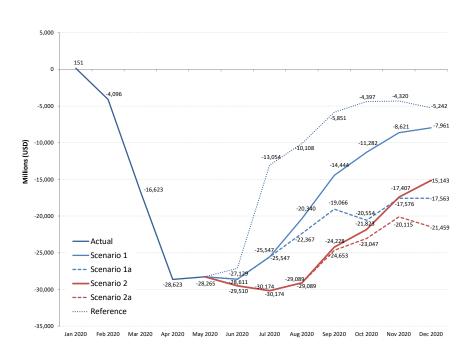
## International + Domestic (-279 to -380 billion USD from 2019)



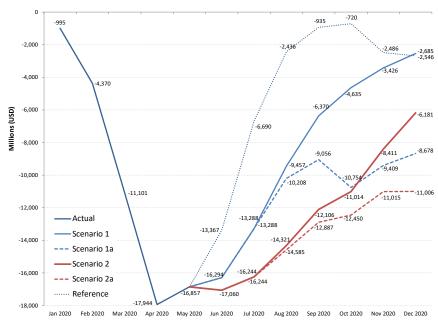


# Scenarios 1 & 2 (World total): Passenger revenues compared to Baseline

### International (-194 to -256 billion USD)



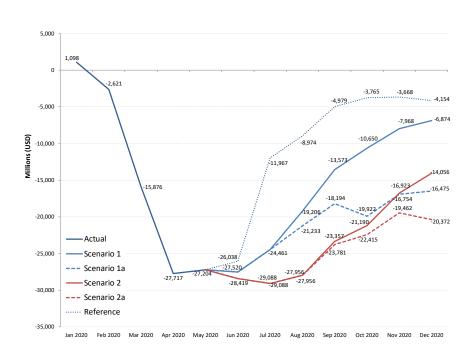
### **Domestic** (-107 to -147 billion USD)



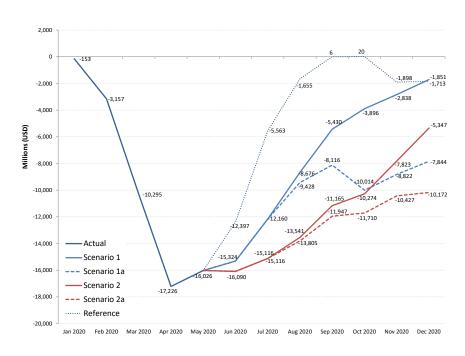


# Scenarios 1 & 2 (World total): Passenger revenues compared to 2019

### International (-183 to -244 billion USD)

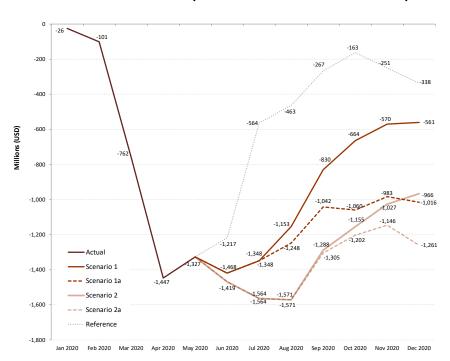


### Domestic (-97 to -136 billion USD)

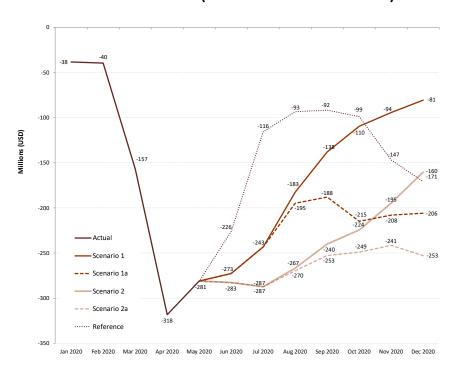


# Scenarios 1 & 2 (Africa): Passenger revenues compared to Baseline

### International (-10 to -13 billion USD)



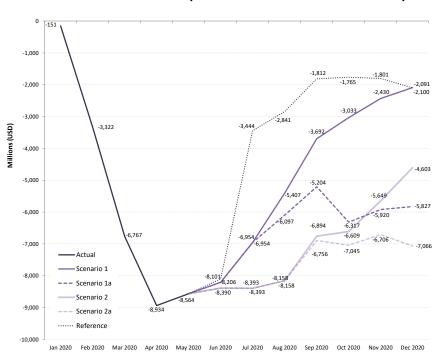
### Domestic (-2 to -3 billion USD)



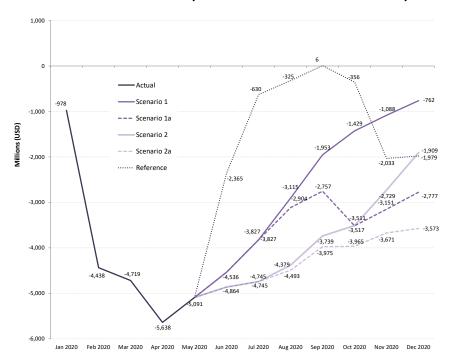


# Scenarios 1 & 2 (Asia/Pacific): Passenger revenues compared to Baseline

### International (-60 to -80 billion USD)

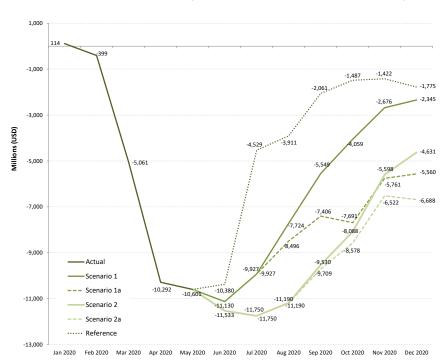


### **Domestic** (-37 to -50 billion USD)

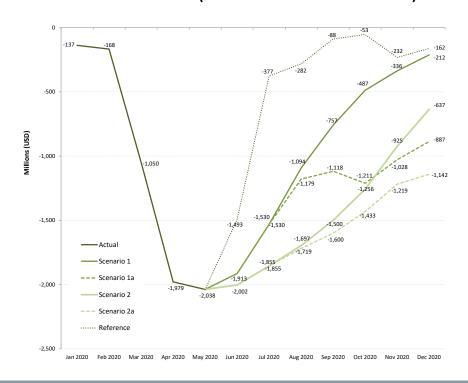


# Scenarios 1 & 2 (Europe): Passenger revenues compared to Baseline

### International (-70 to -92 billion USD)



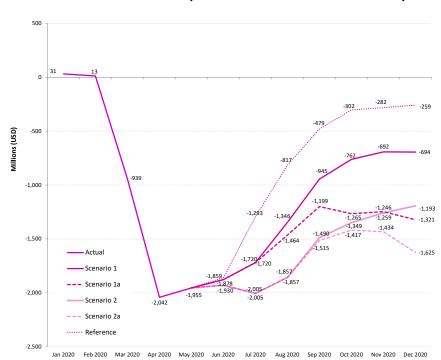
### **Domestic** (-12 to -16 billion USD)



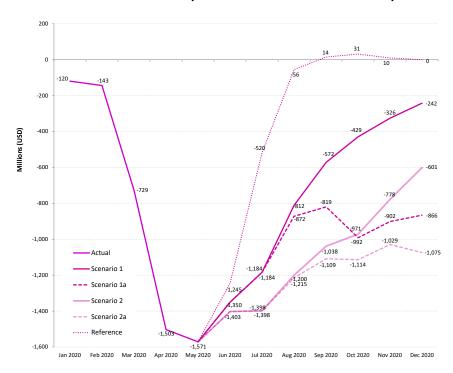


# Scenarios 1 & 2 (Latin America/Caribbean): Passenger revenues compared to Baseline

### International (-13 to -17 billion USD)



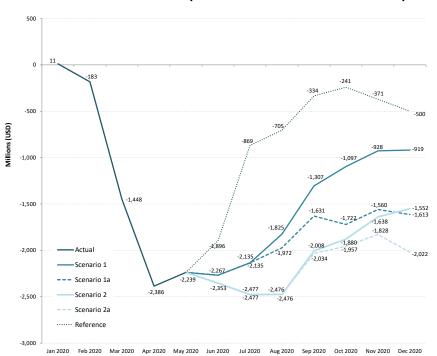
### **Domestic** (-9 to -12 billion USD)



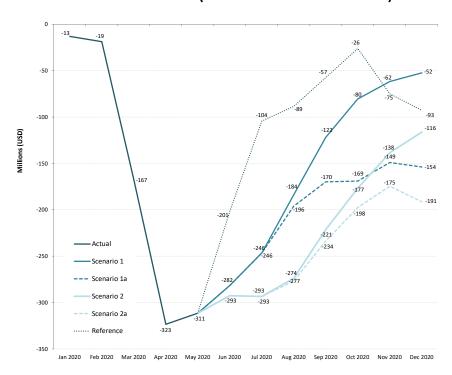


# Scenarios 1 & 2 (Middle East): Passenger revenues compared to Baseline

### International (-17 to -21 billion USD)

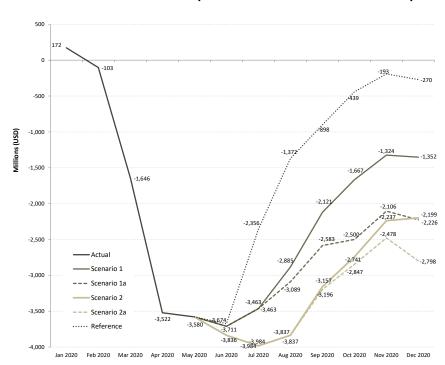


### **Domestic** (-2 to -2 billion USD)

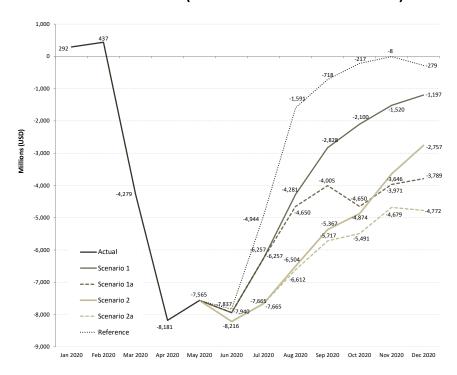


# Scenarios 1 & 2 (North America): Passenger revenues compared to Baseline

### International (-25 to -32 billion USD)



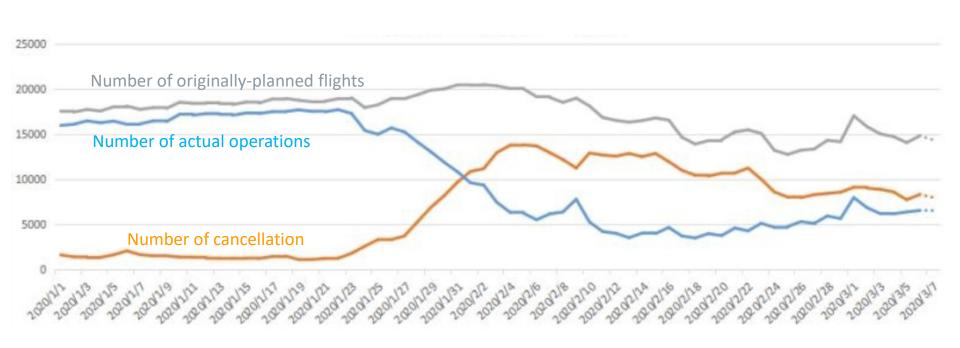
### Domestic (-45 to -62 billion USD)



# **Appendix A: Overview of Early Impact**



# COVID-19 outbreak has impacted air traffic of China starting from late January 2020



Note: The above includes a) international from mainland China, Hong Kong SAR of China, Macao SAR of China, Taiwan, Province of China; b) domestic within mainland China, and c) regional between mainland China and Hong Kong SAR, Macao SAR and Taiwan Province



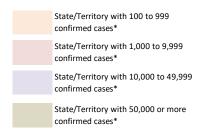
## **UNITING AVIATION**

# A surge of COVID-19 confirmed cases occurred in several States by late February 2020

January 2020	International passenger seat capacity		
Country/Territory		Capacity change from originally- planned	
Russian Federation		-89,778	-1%
Italy		-65,971	-1%
Turkey		-53,262	-1%
China		-45,484	0%
Morocco		-42,684	-2%
United Arab Emirates		-31,464	0%
Iraq		-29,326	-3%
Albania		-22,080	-7%
United Kingdom		-21,888	0%
South Africa		-21,476	-1%
Iran Islamic Republic of		-20,891	-2%
France		-19,537	0%
Poland		-18,154	0%
Romania		-17,493	-1%
Japan		-16,449	0%
United States		-13,067	0%
Indonesia		-12,114	0%
Bulgaria		-10,540	-1%
India		-10,342	0%
Cambodia		-10,158	-1%
Bahamas		-9,588	-2%
Denmark		-8,942	0%
Viet Nam		-8,489	0%
Malta		-7,372	-1%
Lebanon		-7,182	-1%
Bahrain		-7,123	-1%
Uzbekistan		-6,539	-1%
Tunisia		-6,362	-1%
Switzerland		-6,235	0%
Czechia		-5,642	0%

February 2020	nternat	ional passenger sea	t capacity
Country/Territory		Capacity change from originally- planned	
China		-10,532,219	-61%
Hong Kong SAR of China (CN)		-2,363,320	-36%
Republic of Korea		-1,717,147	-19%
Japan		-1,592,429	-15%
Thailand		-1,452,478	-15%
Taiwan, Province of China (CN)		-1,446,686	-23%
Singapore		-807,608	-12%
Viet Nam		-731,936	-16%
Macao SAR of China (CN)		-721,489	-64%
Philippines		-646,104	-18%
United States		-620,296	-3%
Malaysia		-448,172	-8%
Indonesia		-426,102	-10%
Russian Federation		-317,890	-5%
Cambodia		-307,968	-4%
Turkey		-277,868	-21%
Italy		-268,846	-3%
United Arab Emirates		-253,548	-2%
Australia		-241,284	-5%
United Kingdom		-188,864	-1%
Iran Islamic Republic of		-169,782	-18%
France		-157,998	-1%
Myanmar		-147,487	-21%
Germany		-145,561	-1%
India		-116,823	-2%
Morocco		-108,186	-5%
Qatar		-99,338	-2%
Canada		-96,231	-1%
Lao People's Democratic Republi		-71,910	-21%
Finland		-71,413	-4%

In February 2020, international passenger capacity **reduced by 10%**, mainly related to traffic from/to States experiencing an early outbreak and States deeply interconnected to China.



<sup>\*:</sup> Coronavirus Disease 2019 (COVID-19) Situation Report by WHO (29 February 2020)

# COVID-19 Pandemic was declared and accelerating in March 2020

#### **March 2020 International Passenger Capacity**

Country/Territory	Capacity change from originally-planned		Country/Territory	Capacity change fror originally-planned	n
China	-14,841,792 -	82%	Philippines	-1,669,456	-45%
Italy	-6,860,837 -	60%	Indonesia	-1,466,518	-34%
Republic of Korea	-6,536,917 -	70%	Netherlands	-1,292,472	-17%
Japan	-5,837,894 -	51%	Canada	-1,218,383	-16%
Germany	-5,771,162 -3	31%	Austria	-1,200,864	-30%
Hong Kong SAR of China (CN)	-5,352,855 -	77%	Russian Federation	-1,177,704	-19%
United Kingdom	-4,965,296 -:	22%	Australia	-1,119,345	-25%
United States	-4,950,969 -:	19%	Portugal	-1,118,941	-26%
Thailand	-4,587,421 -4	46%	Belgium	-1,060,572	-31%
Taiwan, Province of China (CN)	-4,074,431 -	62%	Qatar	-1,041,439	-21%
Spain	-3,792,140 -2	26%	Denmark	-980,211	-28%
United Arab Emirates	-3,400,833 -:	26%	Israel	-972,061	-44%
Singapore	-3,297,434	45%	Poland	-967,520	-24%
France	-3,216,482 -	25%	Macao SAR of China (CN)	-954,453	-80%
Turkey	-2,879,271 -:	35%	Egypt	-818,043	-28%
Viet Nam	-2,599,336 -	55%	Morocco	-762,145	-31%
Malaysia	-2,500,355	42%	Sweden	-761,425	-24%
India	-2,077,578 -:	29%	Ireland	-733,678	-21%
Saudi Arabia	-1,747,385 -:	31%	Greece	-635,039	-34%
Switzerland	-1,691,017 -:	28%	Czechia	-610,048	-37%

In March 2020, global international passenger capacity **reduced by 48%**, with significant reduction not only in States experiencing an early outbreak but also worldwide.

State/Territory with 100 to 999 confirmed cases*
State/Territory with 1,000 to 9,999 confirmed cases*
State/Territory with 10,000 to 49,999 confirmed cases*
State/Territory with 50,000 or more confirmed cases*

<sup>\*:</sup> Coronavirus Disease 2019 (COVID-19) Situation Report by WHO (31 March 2020)

# The world reached 3 million confirmed COVID-19 cases in April 2020

#### **April 2020 International Passenger Capacity**

Country/Territory	Capacity change fror originally-planned	n	Country/Territory	Capacity change from originally-planned	m
United States	-22,976,621	-88%	Malaysia	-4,959,606	-85%
United Kingdom	-22,345,210	-90%	Portugal	-4,913,803	-95%
Germany	-19,374,444	-92%	Saudi Arabia	-4,193,572	-77%
Spain	-18,041,897	-94%	Australia	-4,115,805	-92%
China	-16,683,876	-95%	Mexico	-4,104,882	-78%
France	-13,480,021	-91%	Austria	-3,812,866	-91%
Italy	-12,464,502	-94%	Qatar	-3,760,492	-80%
United Arab Emirates	-11,009,896	-89%	Indonesia	-3,723,583	-87%
Japan	-9,501,833	-88%	Viet Nam	-3,681,731	-89%
Turkey	-8,798,224	-94%	Ireland	-3,595,318	-92%
Thailand	-8,441,105	-94%	Poland	-3,449,632	-79%
Republic of Korea	-7,960,525	-86%	Denmark	-3,417,729	-93%
Hong Kong SAR of China (CN)	-7,122,206	-93%	Belgium	-3,323,135	-87%
Netherlands	-6,960,693	-89%	Greece	-3,078,774	-94%
Singapore	-6,596,279	-93%	Philippines	-2,993,741	-86%
Canada	-6,288,656	-90%	Sweden	-2,941,579	-89%
India	-6,286,458	-89%	Norway	-2,476,519	-90%
Switzerland	-5,990,424	-93%	Egypt	-2,248,437	-78%
Russian Federation	-5,747,918	-87%	Brazil	-2,214,850	-92%
Taiwan, Province of China (CN)	-5,400,277	-85%	Israel	-2,196,238	-91%

In April 2020, global international passenger capacity so far experienced by unprecedented 94% reduction (estimated)

State/Territory with 100 to 999 confirmed cases\*

State/Territory with 1,000 to 9,999 confirmed cases\*

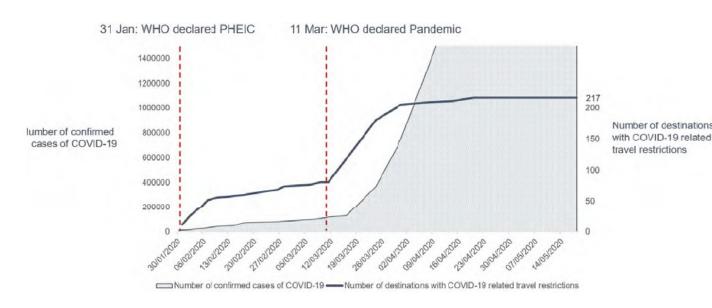
State/Territory with 10,000 to 49,999 confirmed cases\*

State/Territory with 50,000 or more confirmed cases\*

<sup>\*:</sup> Coronavirus Disease 2019 (COVID-19) Situation Report by WHO (30 April 2020)

# Drastic reduction in passenger traffic amplified by travel restrictions

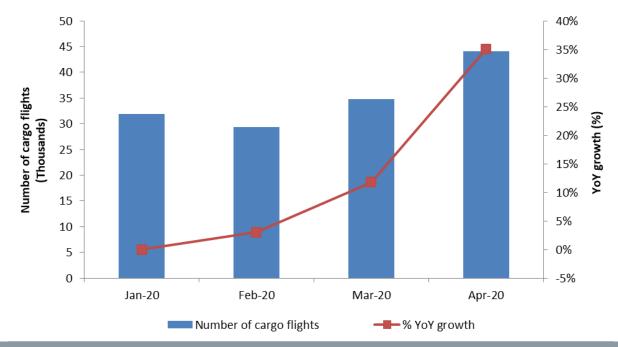
### Number of confirmed cases and destinations with COVID-19-related travel restrictions



As of 18 May 2020, 100% of all world destinations have travel restrictions. About 185 (85%) destinations have completely or partially closed their borders, while 11 destinations (5%) have suspended completely or partially international flights.

https://www.unwto.org/news/covid-19-response-travel-restrictions

### In contrast to the fall in passenger traffic, cargo flights surged with the increased cargo-only operations using passenger aircraft



### **Appendix B: Scenario Assumptions in Detail**

### **Assumptions underlying Scenarios**

(International and	Baseline (Originally-planned, business as usual)						
domestic)	Seat capacity	Passenger load factor					
January 2020							
February 2020	Airlines' winter schedules filed with OAG as of 6 January 2020						
March 2020							
April 2020							
May 2020		Forecasted 2020 load factor by region/route group, based on ICAO long-term					
June 2020	Maximum number of seats taken from airlines' summer schedules filed with OAG	traffic forecasts (LTF), which was adjusted monthly by difference between 2019					
July 2020	during the period from 6 January 2020 to 20 April 2020	actual monthly results (ICAO, IATA) and 2019 LTF forecasted load factor					
August 2020		actual monthly results (ICAO, IATA) and 2019 LTF forecasted load factor					
September 2020							
October 2020	Using 2010 winter schedule as the base and applying the growth rate of						
November 2020	Using 2019 winter schedule as the base, and applying the growth rate of 2019/2018						
December 2020	5012\2010						

(International and	Scenarios 1/1a, 2/2a and Reference						
domestic)	Seat capacity	Passenger load factor					
January 2020							
February 2020		Actual actimated regults by region /route group					
March 2020	Actual capacity based on ICAO ADS-B data	Actual estimated results by region/route group					
April 2020	Actual capacity based of ICAO ADS-B data						
May 2020		45 percentage points (international) and 34 percentage points (domestic) lower than Baseline with adjustment of GDP impact by region/route group					
June 2020	Scenarios 1/1a & 2/2a: Application of monthly "base percentage" which						
July 2020	incorporates impacts of intra-/inter-regional share difference (2019), or most						
August 2020	recent airlines' schedules filed with OAG, whichever is smaller	Application of "base percentage" which incorporates GDP impact by					
September 2020	Reference: Most recent airlines' schedules filed with OAG						
October 2020	Scenarios 1/1a & 2/2a: Application of monthly "base percentage" which	region/route group					
November 2020	incorporates impacts of intra-/inter-regional share difference (2019)						
December 2020	Reference: Most recent airlines' schedules filed with OAG						

#### "Base percentages" used for scenarios

#### International (world average)

Seat capacity	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Reference	-77%	-22%	-18%	-10%	-8%	-11%	-14%
Scenario 1	-83%	-66%	-50%	-39%	-30%	-25%	-20%
Scenario 1a	-83%	-66%	-50%	-46%	-58%	-55%	-50%
Scenario 2	-86%	-77%	-71%	-65%	-58%	-50%	-40%
Scenario 2a	-86%	-77%	-71%	-67%	-64%	-63%	-61%

Load factor	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Reference	-30%	-16%	-12%	-8%	-6%	-5%	-4%
Scenario 1	-34%	-21%	-15%	-11%	-9%	-8%	-7%
Scenario 1a	-34%	-21%	-25%	-25%	-22%	-19%	-15%
Scenario 2	-42%	-40%	-37%	-34%	-30%	-24%	-15%
Scenario 2a	-42%	-40%	-37%	-34%	-31%	-28%	-25%

#### **Domestic (world average)**

Seat capacity	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Reference	-44%	-12%	1%	3%	0%	-12%	-13%
Scenario 1	-63%	-46%	-32%	-22%	-15%	-11%	-6%
Scenario 1a	-63%	-46%	-32%	-28%	-40%	-38%	-33%
Scenario 2	-65%	-55%	-49%	-43%	-37%	-30%	-20%
Scenario 2a	-65%	-55%	-49%	-46%	-43%	-41%	-40%

Load factor	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Reference	-20%	-13%	-9%	-5%	-3%	-3%	-2%
Scenario 1	-25%	-16%	-12%	-8%	-6%	-6%	-5%
Scenario 1a	-25%	-16%	-16%	-17%	-13%	-11%	-10%
Scenario 2	-30%	-26%	-22%	-20%	-18%	-14%	-9%
Scenario 2a	-30%	-26%	-24%	-23%	-21%	-19%	-17%

- Base percentages of seat capacity already incorporate short-/long-haul (intra-/inter-region) impacts and will be applied to Baseline level of seat capacity
- Base percentages of load factor already incorporate economic (GDP) factors and will be added to 2019 load factor %

- Seat capacity (Baseline): OAG airlines schedule data; Route Online; and airline websites
- Seat capacity (actual): ICAO ADS-B operational data
- Load factor: ICAO long-term traffic forecasts (LTF); ICAO statistical reporting forms; IATA economics data; and airline news release
- Historical passenger traffic: ICO Annual Report of the Council; and ICAO statistical reporting forms
- **Yield:** ICAO revenue-cost analysis of airlines (RCA); and ICAO-ICM Marketing Information Data Transfer (MIDT passenger origin-destination)
- Macroeconomic factors: Income elasticity of demand estimated for ICAO LTF; and IMF economic outlook data

Note 1: A list of route group is shown in **Appendix D**.

Note 2: Average air fares (i.e. passenger yield multiplied by average trip distance) for each region/route group are used to estimate gross passenger operating revenues.

### **Appendix C: Summary of Key Impact Indicators**

Figures and estimates herein are <u>subject to substantial changes</u>, and will be updated with the situation evolving and more information available.

#### **Baseline & Reference (World total)**

#### **Baseline**

Compared to 2019 (year-on-year)	Baseline (Originally-planned or business as usual)							
Region	Seat Capacity (%)	Passenger number	Passenger revenue					
Region	Seat Capacity (70)	(million)	(USD, billion)					
Africa	6.4%	8.03	1.27					
Asia/Pacific	4.3%	83.39	9.86					
Europe	1.9%	31.52	3.64					
Latin America/Caribbean	3.6%	15.18	1.36					
Middle East	2.9%	6.26	1.17					
North America	3.7%	42.48	4.78					
Total	3.5% 186.86 22.08							

Compared to 2019 (year-on-year)	Baseline (Originally-planned or business as usual)						
Month	Seat Capacity (%)	Passenger number	Passenger revenue				
WOITH	Seat Capacity (70)	(million)	(USD, billion)				
January 2020	3.7%	15.10	1.79				
February 2020	6.2%	22.41	2.69				
March 2020	3.5%	15.19	1.55				
April 2020	3.1%	13.82	1.62				
May 2020	3.4%	14.99	1.89				
June 2020	3.8%	17.63	2.06				
July 2020	3.8%	18.88	2.21				
August 2020	3.1%	15.61	1.91				
September 2020	3.6%	16.09	1.81				
October 2020	2.4%	11.54	1.37				
November 2020	2.3%	10.22	1.24				
December 2020	3.5%	15.38	1.92				
Total	3.5%	186.86	22.08				

#### Reference

2	Reference (compared to Baseline)			Reference (compared to 2019)			
Region	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	
Africa	-33.2%	-53.35	-8.70	-28.9%	-45.32	-7.43	
Asia/Pacific	-27.6%	-625.62	-78.15	-24.4%	-542.23	-68.29	
Europe	-31.5%	-481.06	-59.86	-30.1%	-449.54	-56.22	
Latin America/Caribbean	-28.5%	-122.27	-16.02	-25.9%	-107.10	-14.66	
Middle East	-31.2%	-78.04	-12.64	-29.2%	-71.78	-11.47	
North America	-22.5%	-374.07	-52.77	-19.7%	-331.58	-47.99	
Total	-27.8%	-1,734.42	-228.14	-25.3%	-1,547.56	-206.06	

	Reference (compared to Baseline)			Reference (compared to 2019)		
Month	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
January 2020	-3.6%	-13.49	-0.84	-0.1%	1.61	0.95
February 2020	-15.9%	-74.10	-8.47	-10.6%	-51.69	-5.78
March 2020	-39.0%	-217.69	-27.72	-36.9%	-202.50	-26.17
April 2020	-82.3%	-362.14	-46.57	-81.7%	-348.31	-44.94
May 2020	-81.0%	-359.66	-45.12	-80.3%	-344.67	-43.23
June 2020	-58.3%	-293.57	-40.50	-56.7%	-275.93	-38.44
July 2020	-16.5%	-137.27	-19.74	-13.3%	-118.40	-17.53
August 2020	-7.3%	-81.89	-12.54	-4.4%	-66.28	-10.63
September 2020	-2.5%	-41.30	-6.79	1.0%	-25.21	-4.97
October 2020	-3.1%	-32.83	-5.12	-0.8%	-21.29	-3.75
November 2020	-11.5%	-57.11	-6.81	-9.4%	-46.88	-5.57
December 2020	-13.5%	-63.38	-7.93	-10.4%	-48.00	-6.01
Total	-27.8%	-1,734.42	-228.14	-25.3%	-1,547.56	-206.06

### ICAO UNITING AVIATION

# Estimated results: Scenario 1 (World total)

Compared to Baseline (business as usual)		Scenario 1 Path 1			Scenario 1 Path 1a		
Region	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	
Africa	-47.9%	-70.98	-12.16	-55.5%	-82.94	-14.14	
Asia/Pacific	-36.3%	-793.38	-96.92	-43.3%	-951.82	-116.81	
Europe	-46.0%	-656.81	-81.35	-54.0%	-778.05	-96.45	
Latin America/Caribbean	-42.1%	-174.51	-21.91	-50.2%	-210.18	-26.04	
Middle East	-49.5%	-112.81	-18.58	-56.1%	-129.75	-21.34	
North America	-33.3%	-492.00	-70.62	-40.2%	-582.50	-82.92	
Total	-39.5%	-2,300.49	-301.55	-46.8%	-2,735.24	-357.70	

Compared to 2019 (year-on-year)		Scenario 1 Path 1			Scenario 1 Path 1a		
Region	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	
Africa	-44.5%	-62.95	-10.89	-52.7%	-74.91	-12.87	
Asia/Pacific	-33.5%	-709.99	-87.06	-40.8%	-868.43	-106.95	
Europe	-45.0%	-625.29	-77.71	-53.1%	-746.53	-92.81	
Latin America/Caribbean	-40.0%	-159.33	-20.55	-48.4%	-195.01	-24.68	
Middle East	-48.0%	-106.55	-17.41	-54.8%	-123.49	-20.17	
North America	-30.9%	-449.51	-65.85	-38.0%	-540.01	-78.14	
Total	-37.3%	-2,113.62	-279.47	-44.9%	-2,548.38	-335.62	

Compared to Baseline (business as usual)		Scenario 1 Path 1			Scenario 1 Path 1a	
Month	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
January 2020	-3.6%	-13.49	-0.84	-3.6%	-13.49	-0.84
February 2020	-15.9%	-74.10	-8.47	-15.9%	-74.10	-8.47
March 2020	-39.0%	-217.69	-27.72	-39.0%	-217.69	-27.72
April 2020	-82.3%	-362.14	-46.57	-82.3%	-362.14	-46.57
May 2020	-81.0%	-359.66	-45.12	-81.0%	-359.66	-45.12
June 2020	-71.8%	-341.37	-44.90	-71.8%	-341.37	-44.90
July 2020	-54.5%	-291.18	-38.83	-54.5%	-291.18	-38.83
August 2020	-39.5%	-219.54	-29.80	-39.5%	-239.26	-32.57
September 2020	-29.3%	-152.58	-20.81	-35.9%	-208.99	-28.12
October 2020	-21.3%	-114.06	-15.92	-47.4%	-235.37	-31.31
November 2020	-16.3%	-84.40	-12.05	-45.0%	-200.94	-26.99
December 2020	-12.0%	-70.28	-10.51	-40.1%	-191.06	-26.24
Total	-39.5%	-2,300.49	-301.55	-46.8%	-2,735.24	-357.70

Compared to 2019 (year-on-year)	Scenario 1 Path 1			Scenario 1 Path 1a		
Month	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
January 2020	-0.1%	1.61	0.95	-0.1%	1.61	0.95
February 2020	-10.6%	-51.69	-5.78	-10.6%	-51.69	-5.78
March 2020	-36.9%	-202.50	-26.17	-36.9%	-202.50	-26.17
April 2020	-81.7%	-348.31	-44.94	-81.7%	-348.31	-44.94
May 2020	-80.3%	-344.67	-43.23	-80.3%	-344.67	-43.23
June 2020	-70.7%	-323.74	-42.84	-70.7%	-323.74	-42.84
July 2020	-52.8%	-272.30	-36.62	-52.8%	-272.30	-36.62
August 2020	-37.6%	-203.93	-27.88	-37.6%	-223.65	-30.66
September 2020	-26.8%	-136.50	-19.00	-33.6%	-192.90	-26.31
October 2020	-19.4%	-102.52	-14.55	-46.2%	-223.83	-29.94
November 2020	-14.4%	-74.18	-10.81	-43.7%	-190.72	-25.75
December 2020	-8.9%	-54.90	-8.59	-38.0%	-175.68	-24.32
Total	-37.3%	-2,113.62	-279.47	-44.9%	-2,548.38	-335.62

### **Estimated results:** Scenario 2 (World total)

Compared to Baseline (business as usual)		Scenario 2 Path 2			Scenario 2 Path 2a	
Region	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
Africa	-59.4%	-88.79	-15.19	-62.9%	-93.03	-15.85
Asia/Pacific	-44.7%	-1,001.11	-123.04	-47.9%	-1,067.19	-130.54
Europe	-57.8%	-837.75	-103.80	-61.2%	-876.99	-108.55
Latin America/Caribbean	-53.3%	-220.07	-27.43	-57.1%	-235.26	-29.09
Middle East	-60.6%	-139.52	-22.97	-63.7%	-145.29	-23.89
North America	-42.7%	-623.47	-89.00	-45.8%	-662.71	-94.10
Total	-49.4%	-2,910.70	-381.43	-52.7%	-3,080.48	-402.02

Compared to 2019 (year-on-year)		Scenario 2 Path 2			Scenario 2 Path 2a		
Region	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	
Africa	-56.8%	-80.76	-13.92	-60.5%	-85.00	-14.58	
Asia/Pacific	-42.3%	-917.72	-113.18	-45.6%	-983.80	-120.68	
Europe	-57.0%	-806.23	-100.16	-60.5%	-845.47	-104.91	
Latin America/Caribbean	-51.6%	-204.89	-26.07	-55.5%	-220.08	-27.73	
Middle East	-59.5%	-133.26	-21.80	-62.6%	-139.03	-22.71	
North America	-40.6%	-580.99	-84.22	-43.8%	-620.23	-89.33	
Total	-47.6%	-2,723.84	-359.35	-51.0%	-2,893.61	-379.94	

Compared to Baseline (business as usual)		Scenario 2 Path 2			Scenario 2 Path 2a	
Month	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
January 2020	-3.6%	-13.49	-0.84	-3.6%	-13.49	-0.84
February 2020	-15.9%	-74.10	-8.47	-15.9%	-74.10	-8.47
March 2020	-39.0%	-217.69	-27.72	-39.0%	-217.69	-27.72
April 2020	-82.3%	-362.14	-46.57	-82.3%	-362.14	-46.57
May 2020	-81.0%	-359.66	-45.12	-81.0%	-359.66	-45.12
June 2020	-73.9%	-355.52	-46.57	-73.9%	-355.52	-46.57
July 2020	-64.5%	-350.10	-46.42	-64.5%	-350.10	-46.42
August 2020	-58.7%	-323.21	-43.41	-58.7%	-326.21	-43.67
September 2020	-52.6%	-272.62	-36.33	-55.0%	-283.72	-37.54
October 2020	-45.8%	-244.63	-32.84	-51.8%	-267.58	-35.50
November 2020	-37.9%	-188.05	-25.82	-49.7%	-232.41	-31.13
December 2020	-28.2%	-149.49	-21.32	-48.3%	-237.86	-32.47
Total	-49.4%	-2,910.70	-381.43	-52.7%	-3,080.48	-402.02

Compared to 2019 (year-on-year)		Scenario 2 Path 2			Scenario 2 Path 2a		
Month	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	
January 2020	-0.1%	1.61	0.95	-0.1%	1.61	0.95	
February 2020	-10.6%	-51.69	-5.78	-10.6%	-51.69	-5.78	
March 2020	-36.9%	-202.50	-26.17	-36.9%	-202.50	-26.17	
April 2020	-81.7%	-348.31	-44.94	-81.7%	-348.31	-44.94	
May 2020	-80.3%	-344.67	-43.23	-80.3%	-344.67	-43.23	
June 2020	-72.9%	-337.89	-44.51	-72.9%	-337.89	-44.51	
July 2020	-63.2%	-331.22	-44.20	-63.2%	-331.22	-44.20	
August 2020	-57.4%	-307.60	-41.50	-57.4%	-310.60	-41.76	
September 2020	-50.9%	-256.53	-34.52	-53.3%	-267.63	-35.73	
October 2020	-44.5%	-233.09	-31.46	-50.6%	-256.04	-34.13	
November 2020	-36.5%	-177.82	-24.58	-48.5%	-222.19	-29.89	
December 2020	-25.6%	-134.11	-19.40	-46.4%	-222.48	-30.54	
Total	-47.6%	-2,723.84	-359.35	-51.0%	-2,893.61	-379.94	

#### **Baseline & Reference (International)**

#### Baseline

Compared to 2019 (year-on-year)	Baseline (Originally-planned or business as usual)					
Region	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)			
Africa	7.5%	6.15	1.10			
Asia/Pacific	5.4%	29.63	6.05			
Europe	2.8%	30.98	3.60			
Latin America/Caribbean	0.0%	0.52	0.17			
Middle East	4.6%	7.59	1.30			
North America	-2.2% -3.21 -0.53					
Total	3.2%	71.66	11.69			

Compared to 2019 (year-on-year)	Baseline (Originally-planned or business as usual)					
Month	Seat Capacity (%)	Passenger number	Passenger revenue			
Wionen	Scat capacity (70)	(million)	(USD, billion)			
January 2020	3.0%	5.13	0.95			
February 2020	6.0%	8.56	1.47			
March 2020	3.3%	5.74	0.75			
April 2020	3.2%	5.86	0.91			
May 2020	3.2%	5.78	1.06			
June 2020	3.7%	7.39	1.09			
July 2020	3.1%	6.99	1.09			
August 2020	3.1%	6.84	1.13			
September 2020	2.9%	5.74	0.87			
October 2020	1.8%	3.67	0.63			
November 2020	2.1%	3.53	0.65			
December 2020	3.7%	6.41	1.09			
Total	3.2%	71.66	11.69			

#### Reference

2	Reference (compared to Baseline)			Reference (compared to 2019)		
Region	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
Africa	-30.9%	-33.42	-6.93	-25.6%	-27.28	-5.82
Asia/Pacific	-37.4%	-240.42	-49.60	-34.0%	-210.79	-43.55
Europe	-33.7%	-381.52	-51.80	-31.9%	-350.55	-48.21
Latin America/Caribbean	-35.2%	-51.54	-10.18	-35.2%	-51.02	-10.01
Middle East	-30.5%	-62.13	-11.16	-27.3%	-54.54	-9.87
North America	-33.3%	-66.93	-17.88	-34.8%	-70.14	-18.41
Total	-34.4%	-835.97	-147.56	-32.3%	-764.31	-135.87

	Reference (compared to Baseline)			Reference (compared to 2019)		
Month	Seat Capacity (%)	Passenger number	Passenger revenue	Seat Capacity (%)	Passenger number	Passenger revenue
IVIOIILII	Seat Capacity (%)	(million)	(USD, billion)	Seat Capacity (%)	(million)	(USD, billion)
January 2020	-1.2%	-0.24	0.15	1.8%	4.89	1.10
February 2020	-10.3%	-21.40	-4.10	-5.0%	-12.84	-2.62
March 2020	-48.0%	-93.55	-16.62	-46.2%	-87.81	-15.88
April 2020	-93.6%	-161.93	-28.62	-93.4%	-156.06	-27.72
May 2020	-93.2%	-163.48	-28.27	-93.0%	-157.71	-27.20
June 2020	-76.6%	-155.34	-27.13	-75.7%	-147.95	-26.04
July 2020	-22.4%	-72.68	-13.05	-20.0%	-65.69	-11.97
August 2020	-17.7%	-57.59	-10.11	-15.2%	-50.75	-8.97
September 2020	-9.7%	-32.64	-5.85	-7.1%	-26.90	-4.98
October 2020	-7.8%	-24.44	-4.40	-6.2%	-20.78	-3.77
November 2020	-11.3%	-23.80	-4.32	-9.5%	-20.27	-3.67
December 2020	-14.1%	-28.86	-5.24	-10.8%	-22.45	-4.15
Total	-34.4%	-835.97	-147.56	-32.3%	-764.31	-135.87

### ICAO UNITING AVIATION

# **Estimated results: Scenario 1 (International)**

Compared to Baseline (business as usual)		Scenario 1 Path 1			Scenario 1 Path 1a		
Region	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	
Africa	-51.0%	-49.06	-10.21	-57.7%	-56.46	-11.78	
Asia/Pacific	-45.6%	-287.80	-59.55	-54.3%	-347.75	-72.26	
Europe	-48.6%	-512.31	-69.65	-56.4%	-602.24	-82.21	
Latin America/Caribbean	-45.9%	-65.39	-12.93	-52.5%	-75.80	-14.99	
Middle East	-50.7%	-92.79	-16.72	-57.0%	-106.10	-19.14	
North America	-50.5%	-94.16	-25.20	-56.0%	-105.94	-28.36	
Total	-48.0%	-1,101.51	-194.26	-55.6%	-1,294.31	-228.74	

Compared to 2019 (year-on-year)	Scenario 1 Path 1			Scenario 1 Path 1a		
Region	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
Africa	-47.3%	-42.91	-9.11	-54.5%	-50.32	-10.68
Asia/Pacific	-42.7%	-258.17	-53.50	-51.8%	-318.12	-66.21
Europe	-47.1%	-481.33	-66.05	-55.2%	-571.26	-78.61
Latin America/Caribbean	-45.9%	-64.86	-12.76	-52.5%	-75.28	-14.82
Middle East	-48.5%	-85.20	-15.43	-55.0%	-98.51	-17.85
North America	-51.6%	-97.37	-25.73	-57.0%	-109.15	-28.89
Total	-46.3%	-1,029.85	-182.57	-54.2%	-1,222.65	-217.05

Compared to Baseline (business as usual)	Scenario 1 Path 1			Scenario 1 Path 1a		
Month	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
January 2020	-1.2%	-0.24	0.15	-1.2%	-0.24	0.15
February 2020	-10.3%	-21.40	-4.10	-10.3%	-21.40	-4.10
March 2020	-48.0%	-93.55	-16.62	-48.0%	-93.55	-16.62
April 2020	-93.6%	-161.93	-28.62	-93.6%	-161.93	-28.62
May 2020	-93.2%	-163.48	-28.27	-93.2%	-163.48	-28.27
June 2020	-83.1%	-164.66	-28.61	-83.1%	-164.66	-28.61
July 2020	-65.8%	-146.31	-25.55	-65.8%	-146.31	-25.55
August 2020	-49.6%	-115.62	-20.34	-49.6%	-127.21	-22.37
September 2020	-38.8%	-82.23	-14.44	-46.3%	-108.92	-19.07
October 2020	-30.2%	-63.17	-11.28	-57.9%	-116.15	-20.55
November 2020	-25.1%	-46.46	-8.62	-55.3%	-95.65	-17.58
December 2020	-20.0%	-42.46	-7.96	-50.3%	-94.81	-17.56
Total	-48.0%	-1,101.51	-194.26	-55.6%	-1,294.31	-228.74

Compared to 2019 (year-on-year)		Scenario 1 Path 1			Scenario 1 Path 1a	
Month	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
January 2020	1.8%	4.89	1.10	1.8%	4.89	1.10
February 2020	-5.0%	-12.84	-2.62	-5.0%	-12.84	-2.62
March 2020	-46.2%	-87.81	-15.88	-46.2%	-87.81	-15.88
April 2020	-93.4%	-156.06	-27.72	-93.4%	-156.06	-27.72
May 2020	-93.0%	-157.71	-27.20	-93.0%	-157.71	-27.20
June 2020	-82.5%	-157.26	-27.52	-82.5%	-157.26	-27.52
July 2020	-64.7%	-139.32	-24.46	-64.7%	-139.32	-24.46
August 2020	-48.0%	-108.78	-19.21	-48.0%	-120.37	-21.23
September 2020	-37.0%	-76.49	-13.57	-44.7%	-103.18	-18.19
October 2020	-28.9%	-59.50	-10.65	-57.1%	-112.48	-19.92
November 2020	-23.5%	-42.93	-7.97	-54.4%	-92.12	-16.92
December 2020	-17.0%	-36.05	-6.87	-48.5%	-88.39	-16.48
Total	-46.3%	-1,029.85	-182.57	-54.2%	-1,222.65	-217.05

### **Estimated results: Scenario 2 (International)**

Compared to Baseline (business as usual)	Scenario 2 Path 2			Scenario 2 Path 2a		
Region	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
Africa	-62.3%	-60.88	-12.70	-65.4%	-63.11	-13.18
Asia/Pacific	-56.8%	-367.08	-76.30	-60.6%	-386.34	-80.39
Europe	-60.4%	-649.52	-88.56	-63.7%	-675.21	-92.21
Latin America/Caribbean	-56.4%	-80.76	-15.98	-59.5%	-84.32	-16.68
Middle East	-61.9%	-114.30	-20.63	-64.8%	-118.49	-21.39
North America	-61.2%	-114.48	-30.67	-63.8%	-118.21	-31.66
Total	-59.4%	-1,387.01	-244.83	-62.8%	-1,445.67	-255.50

Compared to 2019 (year-on-year)	Scenario 2 Path 2			Scenario 2 Path 2a		
Region	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
Africa	-59.5%	-54.73	-11.60	-62.8%	-56.96	-12.08
Asia/Pacific	-54.5%	-337.45	-70.24	-58.5%	-356.71	-74.34
Europe	-59.3%	-618.54	-84.96	-62.7%	-644.23	-88.61
Latin America/Caribbean	-56.4%	-80.23	-15.80	-59.5%	-83.80	-16.51
Middle East	-60.1%	-106.71	-19.33	-63.2%	-110.90	-20.10
North America	-62.1%	-117.69	-31.20	-64.6%	-121.42	-32.18
Total	-58.1%	-1,315.35	-233.14	-61.6%	-1,374.01	-243.81

Compared to Baseline (business as usual)	Scenario 2 Path 2			Scenario 2 Path 2a		
Month	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
January 2020	-1.2%	-0.24	0.15	-1.2%	-0.24	0.15
February 2020	-10.3%	-21.40	-4.10	-10.3%	-21.40	-4.10
March 2020	-48.0%	-93.55	-16.62	-48.0%	-93.55	-16.62
April 2020	-93.6%	-161.93	-28.62	-93.6%	-161.93	-28.62
May 2020	-93.2%	-163.48	-28.27	-93.2%	-163.48	-28.27
June 2020	-85.6%	-169.97	-29.51	-85.6%	-169.97	-29.51
July 2020	-76.9%	-172.94	-30.17	-76.9%	-172.94	-30.17
August 2020	-71.1%	-165.92	-29.09	-71.1%	-165.92	-29.09
September 2020	-64.9%	-138.81	-24.23	-67.4%	-141.28	-24.65
October 2020	-58.2%	-123.07	-21.82	-64.4%	-130.10	-23.05
November 2020	-50.4%	-94.43	-17.41	-62.7%	-109.28	-20.12
December 2020	-39.9%	-81.27	-15.14	-61.0%	-115.58	-21.46
Total	-59.4%	-1,387.01	-244.83	-62.8%	-1,445.67	-255.50

Compared to 2019 (year-on-year)	Scenario 2 Path 2			Scenario 2 Path 2a		
Month	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
January 2020	1.8%	4.89	1.10	1.8%	4.89	1.10
February 2020	-5.0%	-12.84	-2.62	-5.0%	-12.84	-2.62
March 2020	-46.2%	-87.81	-15.88	-46.2%	-87.81	-15.88
April 2020	-93.4%	-156.06	-27.72	-93.4%	-156.06	-27.72
May 2020	-93.0%	-157.71	-27.20	-93.0%	-157.71	-27.20
June 2020	-85.1%	-162.57	-28.42	-85.1%	-162.57	-28.42
July 2020	-76.1%	-165.95	-29.09	-76.1%	-165.95	-29.09
August 2020	-70.2%	-159.08	-27.96	-70.2%	-159.08	-27.96
September 2020	-63.9%	-133.07	-23.36	-66.4%	-135.54	-23.78
October 2020	-57.5%	-119.40	-21.19	-63.7%	-126.43	-22.42
November 2020	-49.4%	-90.89	-16.75	-61.9%	-105.75	-19.46
December 2020	-37.6%	-74.86	-14.06	-59.6%	-109.16	-20.37
Total	-58.1%	-1,315.35	-233.14	-61.6%	-1,374.01	-243.81

#### **Baseline & Reference (Domestic)**

#### Baseline

Compared to 2019 (year-on-year)	Baseline (Originally-planned or business as usual)						
Region	Seat Capacity (%)	Passenger number	Passenger revenue				
region	Seat Capacity (%)	(million)	(USD, billion)				
Africa	4.4%	1.89	0.17				
Asia/Pacific	3.9%	53.76	3.80				
Europe	-0.4%	0.54	0.04				
Latin America/Caribbean	5.6%	14.65	1.19				
Middle East	-3.5%	-1.33	-0.12				
North America	4.9% 45.69 5.31						
Total	3.7%	115.20	10.39				

Compared to 2019 (year-on-year)	Baseline (Originally-planned or business as usual)					
Month	Seat Capacity (%)	Passenger number	Passenger revenue			
Widitii	Seat Capacity (70)	(million)	(USD, billion)			
January 2020	4.1%	9.96	0.84			
February 2020	6.3%	13.84	1.21			
March 2020	3.7%	9.45	0.81			
April 2020	3.1%	7.96	0.72			
May 2020	3.6%	9.22	0.83			
June 2020	3.9%	10.24	0.97			
July 2020	4.3%	11.89	1.13			
August 2020	3.2%	8.76	0.78			
September 2020	4.1%	10.35	0.94			
October 2020	2.8%	7.87	0.74			
November 2020	2.5%	6.69	0.59			
December 2020	3.4%	8.97	0.83			
Total	3.7%	115.20	10.39			

#### Reference

?	Reference (compared to Baseline)		Reference (compared to 2019)			
Dogion	Cook Consoity (0/)	Passenger number	Passenger revenue	Cook Consoits (0/)	Passenger number	Passenger revenue
Region	Seat Capacity (%)	(million)	(USD, billion)	Seat Capacity (%)	(million)	(USD, billion)
Africa	-37.6%	-19.93	-1.78	-34.8%	-18.05	-1.61
Asia/Pacific	-23.2%	-385.20	-28.55	-20.2%	-331.44	-24.74
Europe	-25.1%	-99.54	-8.06	-25.4%	-99.00	-8.02
Latin America/Caribbean	-25.1%	-70.73	-5.83	-20.9%	-56.08	-4.64
Middle East	-33.8%	-15.91	-1.48	-36.1%	-17.24	-1.60
North America	-20.5%	-307.14	-34.89	-16.6%	-261.44	-29.58
Total	-23.1%	-898.45	-80.59	-20.3%	-783.25	-70.20

	(c	Reference ompared to Baselin	e)		Reference (compared to 2019)	
Month	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
January 2020	-5.2%	-13.25	-1.00	-1.3%	-3.29	-0.15
February 2020	-19.6%	-52.69	-4.37	-14.5%	-38.85	-3.16
March 2020	-32.9%	-124.14	-11.10	-30.4%	-114.69	-10.30
April 2020	-74.0%	-200.21	-17.94	-73.2%	-192.25	-17.23
May 2020	-72.0%	-196.18	-16.86	-71.0%	-186.97	-16.03
June 2020	-44.3%	-138.22	-13.37	-42.1%	-127.98	-12.40
July 2020	-11.9%	-64.59	-6.69	-8.1%	-52.70	-5.56
August 2020	0.9%	-24.30	-2.44	4.1%	-15.53	-1.66
September 2020	2.9%	-8.66	-0.93	7.2%	1.69	0.01
October 2020	0.2%	-8.38	-0.72	3.0%	-0.51	0.02
November 2020	-11.6%	-33.31 -2.49		-9.4%	-26.62	-1.90
December 2020	-13.1%	-34.51	-2.68	-10.1%	-25.55	-1.85
Total	-23.1%	-898.45	-80.59	-20.3%	-783.25	-70.20

# Estimated results: Scenario 1 (Domestic)

Compared to Baseline (business as usual)		Scenario 1 Path 1			Scenario 1 Path 1a	
Region	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
Africa	-42.2%	-21.92	-1.95	-51.6%	-26.47	-2.36
Asia/Pacific	-32.1% -505.59		-37.36	-38.4%	-604.06	-44.54
Europe	-38.7%	-144.49	-11.70	-47.2%	-175.81	-14.24
Latin America/Caribbean	-40.1%	-109.12	-8.98	-49.0%	-134.38	-11.05
Middle East	-44.5%	-20.02	-1.86	-52.4%	-23.65	-2.20
North America	-30.1%	-397.84	-45.42	-37.3%	-476.55	-54.56
Total	-33.3%	-1,198.98	-107.28	-40.4%	-1,440.93	-128.95

Compared to 2019 (year-on-year)		Scenario 1 Path 1		Scenario 1 Path 1a					
Region	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)			
Africa	-39.7%	-20.04	-1.79	-49.4%	-24.59	-2.19			
Asia/Pacific	-29.5%	-451.82	-33.56	-36.0%	-550.30	-40.74			
Europe	-39.0%	-143.96	-11.66	-47.4%	-175.27	-14.19			
Latin America/Caribbean	-36.8%	-94.47	-7.79	-46.1%	-119.73	-9.86			
Middle East	-46.4%	-21.35	-1.99	-54.1%	-24.98	-2.32			
North America	-26.7%	-352.15	-40.11	-34.2%	-430.86	-49.25			
Total	-30.8%	-1,083.78	-96.90	-38.2%	-1,325.72	-118.57			

Compared to Baseline (business as usual)		Scenario 1 Path 1			Scenario 1 Path 1a	
Month	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
January 2020	-5.2%	-13.25	-1.00	-5.2%	-13.25	-1.00
February 2020	-19.6%	-52.69	-4.37	-19.6%	-52.69	-4.37
March 2020	-32.9%	-124.14	-11.10	-32.9%	-124.14	-11.10
April 2020	-74.0%	-200.21	-17.94	-74.0%	-200.21	-17.94
May 2020	-72.0%	-196.18	-16.86	-72.0%	-196.18	-16.86
June 2020	-63.0%	-176.71	-16.29	-63.0%	-176.71	-16.29
July 2020	-45.9%	-144.87	-13.29	-45.9%	-144.87	-13.29
August 2020	-31.6%	-103.91	-9.46	-31.6%	-112.04	-10.21
September 2020	-22.2%	-70.35	-6.37	-28.1%	-100.07	-9.06
October 2020	-14.9%	-50.89	-4.64	-40.0%	-119.21	-10.75
November 2020	-10.6%	-37.94	-3.43	-38.2%	-105.29	-9.41
December 2020	-6.5%	-27.82 -2.5		-33.2%	-96.25	-8.68
Total	-33.3% -1,198.98 -107.28		-107.28	-40.4%	-1,440.93	-128.95

Compared to 2019 year-on-year)		Scenario 1 Path 1		Scenario 1 Path 1a					
Month	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)		Passenger revenue (USD, billion)			
anuary 2020	-1.3%	-3.29	-0.15	-1.3%	-3.29	-0.15			
ebruary 2020	-14.5%	-38.85	-3.16	-14.5%	-38.85	-3.16			
March 2020	-30.4%	-114.69	-10.30	-30.4%	-114.69	-10.30			
April 2020	-73.2%	-192.25	-17.23	-73.2%	-192.25	-17.23			
May 2020	-71.0%	-186.97	-16.03	-71.0%	-186.97	-16.03			
une 2020	-61.6%	-166.47	-15.32	-61.6%	-166.47	-15.32			
uly 2020	-43.5%	-132.98	-12.16	-43.5%	-132.98	-12.16			
August 2020	-29.5%	-95.15	-8.68	-29.5%	-103.28	-9.43			
September 2020	-19.0%	-60.01	-5.43	-25.1%	-89.72	-8.12			
October 2020	-12.5%	-43.02	-3.90	-38.3%	-111.34	-10.01			
November 2020	-8.3%	-31.25	-2.84	-36.6%	-98.60	-8.82			
December 2020	-3.3%	-18.85	-1.71	-30.9%	-87.29	-7.84			
otal	-30.8%	-1,083.78	-96.90	-38.2%	-1,325.72	-118.57			

# **Estimated results: Scenario 2 (Domestic)**

Compared to Baseline (business as usual)		Scenario 2 Path 2			Scenario 2 Path 2a	
Region	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
Africa	-54.0%	-27.91 -2.49		-58.4%	-29.92	-2.67
Asia/Pacific	-39.3%	-634.03	-46.74	-42.2%	-680.85	-50.15
Europe	-50.4%	-188.23	-15.24	-54.3%	-201.78	-16.34
Latin America/Caribbean	-51.7%	-139.31	-11.46	-55.8%	-150.94	-12.41
Middle East	-55.6%	-25.22	-2.35	-59.3%	-26.80	-2.49
North America	-39.2% -508.99 -58.3		-58.32	-42.4%	-544.51	-62.45
Total	-42.1%	-1,523.69	-136.60	-45.4%	-1,634.80	-146.51

Compared to 2019 (year-on-year)		Scenario 2 Path 2			Scenario 2 Path 2a	
Region	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
Africa	-52.0%	-26.03	-2.32	-56.6%	-28.04	-2.50
Asia/Pacific	-37.0%	37.0% -580.26		-39.9%	-627.09	-46.35
Europe	-50.6%	-187.69	-15.20	-54.5%	-201.25	-16.30
Latin America/Caribbean	-49.0%	-124.66	-10.27	-53.3%	-136.29	-11.22
Middle East	-57.2%	-26.55	-2.47	-60.8%	-28.13	-2.62
North America	-36.3% -463.30 -5		-53.02	-39.6%	-498.81	-57.14
Total	-40.0%	-1,408.49	-126.22	-43.3%	-1,519.60	-136.13

Compared to Baseline (business as usual)		Scenario 2 Path 2			Scenario 2 Path 2a	
Month	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
January 2020	-5.2%	-13.25	-1.00	-5.2%	-13.25	-1.00
February 2020	-19.6%	-52.69	-4.37	-19.6%	-52.69	-4.37
March 2020	-32.9%	-124.14	-11.10	-32.9%	-124.14	-11.10
April 2020	-74.0%	-200.21	-17.94	-74.0%	-200.21	-17.94
May 2020	-72.0%	-196.18	-16.86	-72.0%	-196.18	-16.86
June 2020	-65.0%	-185.55	-17.06	-65.0%	-185.55	-17.06
July 2020	-55.0%	-177.16	-16.24	-55.0%	-177.16	-16.24
August 2020	-49.0%	-157.29	-14.32	-49.0%	-160.29	-14.59
September 2020	-43.3%	-133.81	-12.11	-45.6%	-142.44	-12.89
October 2020	-37.0%	-121.56	-11.01	-42.7%	-137.48	-12.45
November 2020	-29.7%	-93.62	-8.41	-41.1%	-123.13	-11.02
December 2020	-20.1%	-68.22 -6.18		-39.6%	-122.28	-11.01
Total	-42.1%	-1,523.69	-136.60	-45.4%	-1,634.80	-146.51

Compared to 2019 (year-on-year)		Scenario 2 Path 2			Scenario 2 Path 2a	
Month	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
January 2020	-1.3%	-3.29	-0.15	-1.3%	-3.29	-0.15
February 2020	-14.5%	-38.85	-3.16	-14.5%	-38.85	-3.16
March 2020	-30.4%	-114.69	-10.30	-30.4%	-114.69	-10.30
April 2020	-73.2%	-192.25	-17.23	-73.2%	-192.25	-17.23
May 2020	-71.0%	-186.97	-16.03	-71.0%	-186.97	-16.03
June 2020	-63.6%	-175.31	-16.09	-63.6% -175.31		-16.09
July 2020	-53.1%	-165.27	-15.12	-53.1%	-165.27	-15.12
August 2020	-47.4%	-148.52	-13.54	-47.4%	-151.52	-13.81
September 2020	-41.0%	-123.47	-11.17	-43.4%	-132.09	-11.95
October 2020	-35.2%	-113.69	-10.27	-41.1%	-129.61	-11.71
November 2020	-28.0%	-86.93	-7.82	-39.7%	-116.44	-10.43
December 2020	-17.4%	-59.25	-5.35	-37.5%	-113.31	-10.17
Total	-40.0%	-1,408.49	-126.22	-43.3%	-1,519.60	-136.13

### **Appendix D: Estimated Results at Route Group Level**

The estimates will be updated with the situation evolving and more information available.



# Estimated results by route group for Jan-Apr 2020 (compared to Baseline)

Route Group	DOM/INT		Seat ca	pacity		Sche	duled passe	nger (thous	and)	Gro	oss revenue	(USD, millio	on)
houte Group	DOIVITINI	Jan 2020	Feb 2020	Mar 2020	Apr 2020	Jan 2020	Feb 2020	Mar 2020	Apr 2020	Jan 2020	Feb 2020	Mar 2020	Apr 2020
Africa	Domestic	-10.0%	-7.4%	-35.5%	-96.8%	-429	-442	-1,756	-3,565	-38	-40	-157	-318
Africa - Asia/Pacific	International	4.4%	-19.3%	-46.2%	-94.7%	16	-119	-247	-388	9	-66	-136	-215
Africa - Middle East	International	-5.9%	-6.5%	-56.1%	-96.0%	-87	-188	-1,622	-2,583	-19	-41	-355	-566
Africa - North America	International	-8.6%	-2.8%	-25.9%	-87.2%	-17	-9	-89	-192	-12	-7	-65	-141
Africa & Middle East - Central America/Caribbean	International					0	0	0	0	0	0	0	0
Africa & Middle East - South America	International	1.8%	4.7%	-22.9%	-83.8%	4	-9	-55	-121	1	-4	-23	-50
Central America/Caribbean	Domestic	-2.8%	-3.0%	-20.9%	-84.0%	-120	-181	-1,671	-4,518	-9	-14	-125	-339
Central America/Caribbean - Europe	International	-0.9%	0.5%	-19.3%	-94.6%	21	7	-540	-1,430	7	2	-184	-489
Central America/Caribbean - North America	International	4.7%	4.4%	-20.5%	-91.3%	446	293	-3,552	-7,890	70	46	-557	-1,238
Central America/Caribbean - South America	International	5.1%	9.8%	-26.2%	-96.6%	71	101	-485	-1,234	13	18	-89	-225
China	Domestic	-10.5%	-75.5%	-60.3%	-55.7%	-8,888	-47,212	-37,413	-31,549	-782	-4,155	-3,292	-2,776
China - Europe	International	1.8%	-52.1%	-74.1%	-93.1%	59	-931	-1,553	-2,059	18	-282	-471	-625
China - Middle East	International	5.2%	-56.5%	-76.6%	-91.8%	36	-336	-495	-589	9	-82	-121	-144
China - North America	International	2.9%	-45.0%	-66.4%	-92.4%	47	-682	-1,106	-1,556	19	-274	-444	-625
China & South West Asia - North Asia	International	-0.9%	-43.7%	-84.3%	-89.6%	-113	-3,494	-6,026	-5,967	-20	-621	-1,072	-1,061
China & South West Asia - Pacific South East Asia	International	-2.2%	-47.5%	-72.1%	-91.0%	-354	-5,747	-8,323	-9,438	-77	-1,244	-1,801	-2,043
Europe	Domestic	-7.4%	-7.4%	-37.5%	-89.2%	-1,693	-2,071	-12,968	-24,436	-137	-168	-1,050	-1,979
Europe - Middle East	International	0.8%	-0.5%	-43.9%	-89.8%	298	-30	-4,279	-7,638	55	-5	-787	-1,406



# Estimated results by route group for Jan-Apr 2020 (compared to Baseline)

Route Group	DOM/INT		Seat ca	pacity		Sche	duled passer	nger (thous	and)	Gro	oss revenue	(USD, millio	on)
Route Group	DOWNIN	Jan 2020	Feb 2020	Mar 2020	Apr 2020	Jan 2020	Feb 2020	Mar 2020	Apr 2020	Jan 2020	Feb 2020	Mar 2020	Apr 2020
Europe - North Africa	International	-0.1%	0.9%	-41.0%	-97.8%	50	-14	-1,846	-4,136	7	-2	-272	-610
Europe - North America	International	5.0%	4.6%	-34.5%	-91.3%	431	233	-3,111	-7,438	135	73	-976	-2,335
Europe - North Asia	International	4.9%	4.5%	-42.1%	-89.7%	57	-13	-546	-1,105	27	-6	-256	-518
Europe - Pacific South East Asia	International	-3.3%	-0.6%	-14.4%	-91.6%	-37	-107	-576	-1,441	-18	-54	-288	-720
Europe - South America	International	-5.6%	-5.5%	-37.2%	-95.6%	-49	-72	-697	-1,374	-18	-26	-249	-491
Europe - South West Asia	International	1.1%	2.2%	-36.8%	-90.0%	44	-66	-988	-1,838	12	-18	-266	-496
Europe - Sub Saharan Africa	International	2.4%	2.6%	-26.9%	-90.4%	92	37	-765	-1,635	39	16	-324	-692
Intra Africa	International	-10.4%	-10.7%	-44.4%	-95.5%	-288	-387	-1,391	-2,498	-38	-51	-182	-326
Intra Central America/Caribbean	International	4.5%	3.6%	-27.5%	-89.8%	67	35	-595	-1,334	6	3	-50	-111
Intra China & South West Asia	International	-10.3%	-60.8%	-79.0%	-88.8%	-538	-3,072	-4,091	-4,652	-69	-391	-521	-592
Intra Europe	International	-2.3%	-3.7%	-46.5%	-96.4%	-180	-2,431	-29,696	-59,930	-18	-247	-3,023	-6,101
Intra Middle East	International	-6.1%	-6.0%	-68.2%	-94.8%	-73	-229	-2,734	-3,784	-8	-26	-313	-433
Intra North America	International	3.3%	2.7%	-23.6%	-93.4%	111	6	-1,295	-2,826	15	1	-173	-377
Intra North Asia	International	-2.2%	-2.7%	-78.8%	-96.4%	-34	-227	-1,094	-1,693	-2	-12	-59	-91
Intra Pacific South East Asia	International	-1.3%	-5.5%	-45.6%	-94.9%	-151	-1,657	-5,038	-7,938	-23	-247	-750	-1,182
Intra South America	International	-9.5%	-7.3%	-39.9%	-96.9%	-195	-149	-934	-1,699	-34	-26	-162	-295
Latin America/Caribbean - China	International	5.0%				0	0	0	0	0	0	0	0
Latin America/Caribbean - North Asia & Pacific South East Asia	International	2.9%	0.2%	-17.9%	-78.9%	2	-8	-30	-69	1	-6	-20	-46



# Estimated results by route group for Jan-Apr 2020 (compared to Baseline)

Route Group	DOM/INT		Seat ca	pacity		Sched	duled passer	nger (thous	and)	Gro	ss revenue	(USD, millio	on)
koute droup	DOWNIN	Jan 2020	Feb 2020	Mar 2020	Apr 2020	Jan 2020	Feb 2020	Mar 2020	Apr 2020	Jan 2020	Feb 2020	Mar 2020	Apr 2020
Middle East	Domestic	-10.0%	-5.8%	-44.5%	-96.0%	-141	-200	-1,795	-3,473	-13	-19	-167	-323
Middle East - North America	International	2.0%	2.6%	-27.4%	-90.2%	42	18	-339	-756	20	9	-161	-360
Middle East - North Asia & Pacific South East Asia	International	-1.5%	-2.3%	-36.1%	-82.1%	-22	-338	-1,360	-2,329	-6	-90	-364	-624
Middle East - South West Asia	International	-3.1%	-1.6%	-44.1%	-96.6%	-132	-639	-2,951	-4,909	-21	-101	-466	-775
North America	Domestic	1.8%	5.0%	-14.5%	-67.1%	2,518	3,762	-36,859	-70,468	292	437	-4,279	-8,181
North America - North Asia	International	5.0%	5.1%	-25.1%	-85.1%	68	-92	-618	-1,346	21	-29	-195	-425
North America - Pacific South East Asia	International	4.1%	5.9%	-17.8%	-88.7%	31	-47	-295	-657	25	-38	-235	-524
North America - South America	International	4.9%	5.0%	-27.6%	-94.0%	79	55	-618	-1,285	31	22	-243	-506
North America - South West Asia	International	3.6%	4.8%	-28.3%	-92.0%	7	-14	-94	-185	5	-10	-69	-137
North Asia	Domestic	0.3%	-2.5%	-19.2%	-54.9%	142	-1,017	-6,805	-9,273	7	-51	-340	-464
North Asia - Pacific South East Asia	International	-0.2%	-7.6%	-63.6%	-89.1%	-47	-1,080	-3,478	-3,981	-12	-279	-899	-1,028
Pacific South East Asia	Domestic	-7.4%	-8.2%	-30.6%	-88.2%	-1,629	-2,778	-11,969	-25,526	-100	-170	-733	-1,564
South America	Domestic	-8.9%	-9.2%	-39.9%	-94.8%	-1,320	-1,539	-7,153	-13,796	-111	-130	-604	-1,164
South West Asia	Domestic	-10.0%	-4.3%	-30.9%	-98.8%	-1,690	-1,012	-5,753	-13,606	-104	-62	-353	-834
Domestic		-5.2%	-19.6%	-32.9%	-74.0%	-13,250	-52,692	-124,143	-200,210	-995	-4,370	-11,101	-17,944
International		-1.2%	-10.3%	-48.0%	-93.6%	-241	-21,405	-93,550	-161,925	151	-4,096	-16,623	-28,623
Total		-3.6%	-15.9%	-39.0%	-82.3%	-13,491	-74,097	-217,693	-362,135	-844	-8,466	-27,725	-46,567



# Estimated results by route group for Jan-Apr 2020 (compared to Jan-Apr 2019)

Route Group	DOM/INT		Seat ca	apacity		Sche	duled passe	nger (thous	and)	Gro	ss revenue	(USD, millio	on)
noute Group	DOWNIN	Jan 2020	Feb 2020	Mar 2020	Apr 2020	Jan 2020	Feb 2020	Mar 2020	Apr 2020	Jan 2020	Feb 2020	Mar 2020	Apr 2020
Africa	Domestic	-4.9%	0.0%	-32.4%	-96.7%	-224	-181	-1,578	-3,470	-20	-16	-141	-310
Africa - Asia/Pacific	International	18.1%	-1.2%	-37.9%	-94.0%	67	-48	-192	-342	37	-27	-106	-189
Africa - Middle East	International	7.2%	9.6%	-50.1%	-95.6%	248	162	-1,306	-2,330	54	36	-286	-510
Africa - North America	International	7.6%	22.2%	-13.0%	-86.0%	16	28	-57	-174	12	20	-42	-128
Africa & Middle East - Central America/Caribbean	International		-100.0%			0	0	0	0	0	0	0	0
Africa & Middle East - South America	International	-5.7%	1.9%	-26.8%	-81.8%	-7	-12	-62	-107	-3	-5	-26	-45
Central America/Caribbean	Domestic	9.2%	11.7%	-12.0%	-82.8%	441	438	-1,160	-4,166	33	33	-87	-312
Central America/Caribbean - Europe	International	-1.7%	2.6%	-21.0%	-94.4%	12	38	-568	-1,367	4	13	-194	-467
Central America/Caribbean - North America	International	0.0%	3.9%	-24.4%	-91.5%	95	294	-3,971	-7,970	15	46	-623	-1,251
Central America/Caribbean - South America	International	3.6%	8.4%	-28.4%	-96.4%	52	86	-522	-1,174	10	16	-95	-214
China	Domestic	-3.7%	-73.4%	-58.0%	-55.7%	-4,934	-42,553	-34,289	-31,366	-434	-3,745	-3,017	-2,760
China - Europe	International	4.0%	-49.0%	-73.1%	-93.1%	101	-823	-1,481	-2,057	31	-250	-449	-624
China - Middle East	International	6.4%	-56.4%	-77.1%	-91.8%	45	-333	-505	-590	11	-81	-124	-145
China - North America	International	-5.7%	-48.2%	-70.1%	-92.8%	-92	-763	-1,282	-1,636	-37	-306	-515	-657
China & South West Asia - North Asia	International	21.7%	-31.8%	-81.5%	-89.1%	1,237	-2,331	-4,988	-5,652	220	-415	-887	-1,005
China & South West Asia - Pacific South East Asia	International	6.7%	-45.6%	-71.3%	-91.0%	657	-5,339	-7,990	-9,352	142	-1,155	-1,729	-2,024
Europe	Domestic	-8.4%	-7.3%	-38.3%	-89.1%	-1,790	-1,921	-13,125	-24,217	-145	-156	-1,063	-1,962
Europe - Middle East	International	4.9%	6.1%	-42.6%	-89.6%	598	405	-4,090	-7,502	110	75	-753	-1,380



# Estimated results by route group for Jan-Apr 2020 (compared to Jan-Apr 2019)

Route Group	DOM/INT		Seat ca	pacity		Sche	duled passer	nger (thous	and)	Gro	ss revenue	(USD, millio	on)
Route Group	DOWNIN	Jan 2020	Feb 2020	Mar 2020	Apr 2020	Jan 2020	Feb 2020	Mar 2020	Apr 2020	Jan 2020	Feb 2020	Mar 2020	Apr 2020
Europe - North Africa	International	-0.9%	5.6%	-42.3%	-97.7%	55	152	-1,892	-3,844	8	22	-279	-567
Europe - North America	International	-0.6%	4.1%	-36.2%	-91.3%	119	209	-3,280	-7,478	37	66	-1,029	-2,347
Europe - North Asia	International	4.3%	6.4%	-41.9%	-89.4%	53	4	-539	-1,063	25	2	-253	-499
Europe - Pacific South East Asia	International	5.5%	6.7%	-19.2%	-91.3%	120	12	-671	-1,387	60	6	-335	-693
Europe - South America	International	-2.7%	0.0%	-36.9%	-95.4%	-3	2	-686	-1,323	-1	1	-245	-473
Europe - South West Asia	International	-8.3%	-3.9%	-43.0%	-89.9%	-143	-173	-1,188	-1,812	-39	-47	-320	-489
Europe - Sub Saharan Africa	International	0.6%	5.2%	-27.5%	-90.4%	62	79	-779	-1,637	26	33	-330	-693
Intra Africa	International	1.5%	5.3%	-36.4%	-95.0%	29	-23	-1,054	-2,237	4	-3	-138	-292
Intra Central America/Caribbean	International	1.1%	3.9%	-30.3%	-90.0%	22	44	-647	-1,363	2	4	-54	-114
Intra China & South West Asia	International	-2.0%	-57.0%	-76.9%	-87.4%	-105	-2,648	-3,640	-4,101	-13	-337	-463	-522
Intra Europe	International	-0.6%	3.4%	-43.0%	-96.3%	946	934	-26,168	-57,411	96	95	-2,664	-5,845
Intra Middle East	International	-2.4%	-0.4%	-66.7%	-94.5%	91	-23	-2,559	-3,560	10	-3	-293	-407
Intra North America	International	-4.0%	-1.1%	-29.5%	-93.6%	-76	-74	-1,527	-2,899	-10	-10	-204	-387
Intra North Asia	International	-32.5%	-31.0%	-85.0%	-96.6%	-617	-712	-1,627	-1,777	-33	-38	-87	-95
Intra Pacific South East Asia	International	7.1%	2.0%	-42.7%	-94.7%	540	-1,081	-4,605	-7,607	80	-161	-686	-1,133
Intra South America	International	-9.5%	-3.7%	-37.3%	-96.5%	-183	-74	-851	-1,518	-32	-13	-148	-264
Latin America/Caribbean - China	International	-66.0%	-100.0%	-100.0%	-100.0%	-6	-8	-8	-10	-4	-6	-6	-8
Latin America/Caribbean - North Asia & Pacific South East Asia	International	2.9%	0.7%	-19.3%	-77.2%	2	-8	-31	-63	2	-5	-21	-42



# Estimated results by route group for Jan-Apr 2020 (compared to Jan-Apr 2019)

Route Group	DOM/INT		Seat ca	pacity		Sche	duled passe	nger (thous	and)	Gro	oss revenue	(USD, millio	on)
route droup	DOMININ	Jan 2020	Feb 2020	Mar 2020	Apr 2020	Jan 2020	Feb 2020	Mar 2020	Apr 2020	Jan 2020	Feb 2020	Mar 2020	Apr 2020
Middle East	Domestic	-15.5%	-8.5%	-48.1%	-96.0%	-352	-280	-2,012	-3,465	-33	-26	-187	-323
Middle East - North America	International	4.8%	6.6%	-27.6%	-90.0%	63	44	-340	-738	30	21	-162	-351
Middle East - North Asia & Pacific South East Asia	International	-0.5%	2.8%	-36.0%	-81.4%	13	-214	-1,346	-2,225	3	-57	-361	-596
Middle East - South West Asia	International	2.9%	9.5%	-39.7%	-96.3%	184	-153	-2,570	-4,450	29	-24	-406	-703
North America	Domestic	4.8%	11.5%	-12.4%	-65.6%	4,617	7,654	-34,704	-66,962	536	889	-4,029	-7,774
North America - North Asia	International	3.5%	5.0%	-26.7%	-84.8%	51	-90	-642	-1,319	16	-28	-203	-416
North America - Pacific South East Asia	International	6.5%	13.0%	-18.2%	-88.8%	52	-3	-296	-663	41	-2	-236	-529
North America - South America	International	-8.0%	-2.8%	-34.1%	-94.1%	-115	-39	-744	-1,299	-45	-15	-293	-512
North America - South West Asia	International	20.4%	24.4%	-14.9%	-88.7%	35	14	-63	-130	26	11	-47	-96
North Asia	Domestic	3.1%	2.3%	-18.5%	-54.5%	511	-452	-6,595	-9,094	26	-23	-330	-455
North Asia - Pacific South East Asia	International	15.9%	8.6%	-59.9%	-88.9%	674	-376	-3,036	-3,900	174	-97	-784	-1,007
Pacific South East Asia	Domestic	-1.2%	0.5%	-26.2%	-87.5%	76	-603	-10,317	-23,909	5	-37	-632	-1,465
South America	Domestic	-7.2%	-5.1%	-35.7%	-94.5%	-869	-796	-6,044	-12,841	-73	-67	-510	-1,084
South West Asia	Domestic	-5.5%	0.5%	-27.4%	-98.7%	-760	-154	-4,870	-12,757	-47	-9	-298	-782
Domestic		-1.3%	-14.5%	-30.4%	-73.2%	-3,286	-38,848	-114,693	-192,248	-153	-3,157	-10,295	-17,226
International		1.8%	-5.0%	-46.2%	-93.4%	4,893	-12,841	-87,807	-156,064	1,098	-2,621	-15,876	-27,717
Total		-0.1%	-10.6%	-36.9%	-81.7%	1,607	-51,689	-202,500	-348,312	946	-5,778	-26,172	-44,943

### **Appendix E: Airline Financial Analysis**

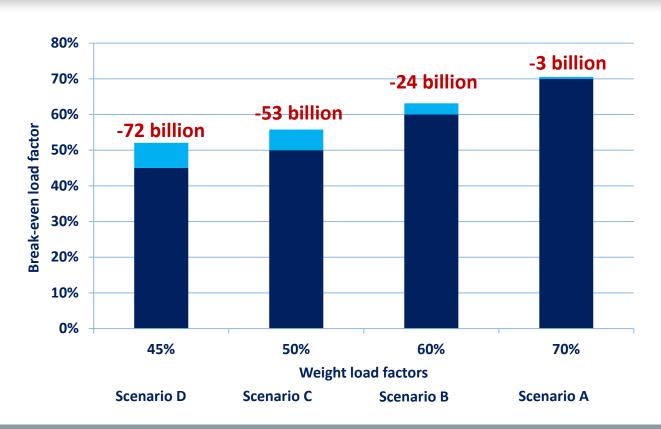
Figures and estimates herein are <u>subject to substantial changes</u>, and will be updated with the situation evolving and more information available.

#### **Break-even weight load factor**

Scenarios are based on the assumption that air traffic, measured in Revenue Tonnes-Kilometres (RTKs, both international and domestic), will **decrease by 50% in 2020** compared to 2019

	Scenario A Weight load factor = 70%	Scenario B Weight load factor = 60%	Scenario C Weight load factor = 50%	Scenario D Weight load factor = 45%
	Load factor remains high, rebound of demand in Q3 and Q4 with severe capacity cuts	Load factor moderate- high and rebound during Q4, with capacity cuts in all regions	Low load factor and moderate return of normal capacity in Q3 and Q4	Low load factors (social distancing) and airlines increase capacity in Q2 2020
Total capacity reduction	-51%	-42%	-31%	-23%
Fuel costs (USD, billion) Oil price: 49% decrease compared to 2019 levels	46	54	65	72
Break-even weight load factor (excluding depreciation and amortization costs)	70.5%	63.1%	55.8%	52.1%

### Airlines close to break even as load factor increases



Operating loss
Excluding
depreciation and

amortizations costs

Difference between load factor and breakeven load factors in each scenario

### **Appendix F: Summary of Analysis by Other Organizations**

### ACI: Airport would lose USD 97.4 billion revenues in 2020

	Passenger number - domestic for	both interntional and full year 2020	Airport revenue - both aeronautical and non- aeronautical for full year 2020			
Region	million and % change from baseline	n 2020 "business as usual" scenario	_	e from 2020 "business as ine scenario		
Africa	-114	-47.3%	-2.2	-51.2%		
Asia/Pacific	-1,797	-52.9%	-29.4	-58.9%		
Europe	-1,416	-57.1%	-37.1	-62.6%		
Latin America/Caribbean	-289	-44.2%	-5.3	-50.5%		
Middle East	-201	-46.9%	-7.0	-53.0%		
North America	-859	-41.1%	-16.4	-47.3%		
Total	-4,676	-50.4%	-97.4	-56.7%		

https://aci.aero/wp-content/uploads/2020/05/200505-Third-Economic-Impact-Bulletin-FINAL.pdf

# IATA: Airlines would lose USD 314 billion revenues under "3-month lock-down + recession" scenario

### The analytical difference between ICAO and IATA estimates:

- Regional break-down: by all traffic from States in each region (ICAO) vs. region of airline registration (IATA)
- Baseline: originally-planned i.e. 2020 business as usual scenario (ICAO) vs. 2019 level with 2020 airline schedules (IATA)

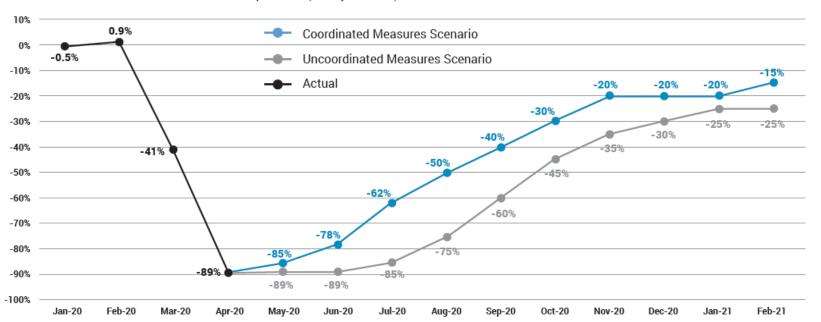
Region of airline registration	Revenue Passenger Kilometres (RPKs) - both interntional and domestic for full year 2020  year-on-year % change from 2019 level	Gross passenger revenue - both interntional and domestic for full year 2020  USD billion, compared to 2019 level			
Africa	-51%	-6			
Asia/Pacific	-50%	-113			
Europe	-55%	-89			
Latin America/Caribbean	-49%	-18			
Middle East	-51%	-24			
North America	-36%	-64			
Total	-48%	-314			

https://www.iata.org/en/iata-repository/publications/economic-reports/covid-fourth-impact-assessment/



# **EUOCONTROL:** A loss of € 110 billion for airlines, airports and ANSPs in Europe in 2020

#### EUROCONTROL Draft Traffic Scenarios - 24 April 2020 (base year 2019)

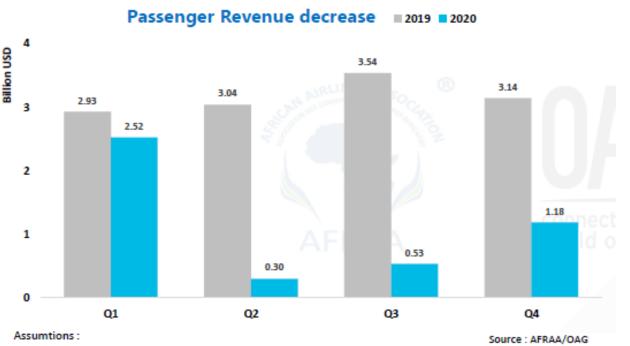


The Coordinated Measures Scenario envisages a loss of 45% of flights (5 million) in 2020, while the Uncoordinated Measures Scenario would result in the loss of 57% of flights (6.2 million).

https://www.eurocontrol.int/covid19#traffic-scenarios



## AFRAA: African Airlines would lose USD 8.1 billion passenger revenues in 2020



AFRAA's estimates (USD 8.1 billion loss) is greater than IATA's estimates (USD 6 billion loss). Both estimates are for airlines registered in Africa.

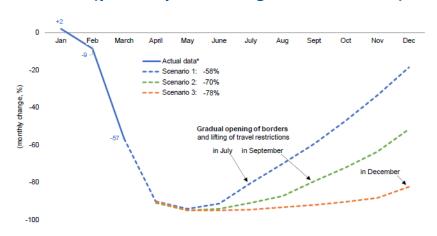
- 40% traffic recovery on Q3 2020
- 70% traffic recovery on Q4 2020

http://afraa.org/wp-content/uploads/2020/06/CoVID-19-Impact-assessment.pdf



## UNWTO: A loss of USD 910 to 1,170 billion in international tourism receipts in 2020

# Three scenarios dependent upon re-opening of borders International Tourism Arrivals (year-on-year % change from 2019 level)



https://webunwto.s3.eu-west-1.amazonaws.com/s3fs-public/2020-05/Barometer%20-%20May%202020%20-%20Short.pdf



### WTTC: A loss of 100 million jobs in travel and tourism sector in 2020

#### 2020 forecasts – COVID-19 impact on travel and tourism sector

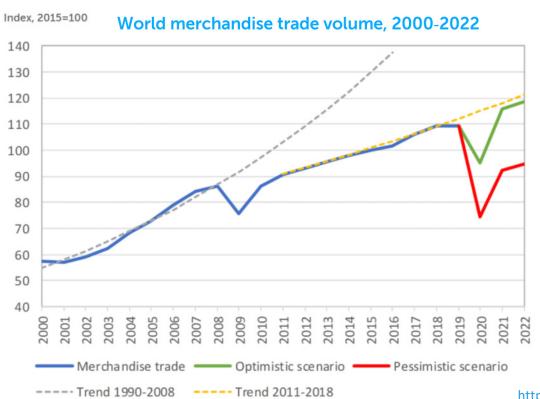
Region	Potential Total Job Losses (million)	Total GDP Loss (USD billion*)
Africa	-7.6	-52.8
Asia/Pacific	-63.4	-1,041.0
Europe	-13.0	-708.5
Latin America/Caribbean	-5.9	-110.2
Middle East	-2.6	-96.2
North America	-8.2	-680.7
Total	-100.8	-2689.4

<sup>\*</sup> based on 2019 prices and exchange rates

https://wttc.org/About/News-Media/Press-Releases

#### UNITING AVIATION

#### WTO: Global trade falling by 13 to 32% in 2020



- World merchandise trade is set
   to plummet by between 13 and
   32% in 2020 due to the COVID 19 pandemic.
- A 2021 recovery in trade is expected, but dependent on the duration of the outbreak and the effectiveness of the policy responses.
- Nearly all regions will suffer double-digit declines in trade volumes in 2020, with exports from North America and Asia hit hardest.

https://www.wto.org/english/news\_e/pres20\_e/pr855\_e.htm



# IMF: Global economy is projected to contract sharply by -3% in 2020

### The Projections assume that the pandemic fades in the second half of 2020 and containment efforts can be gradually unwound

(real GDP, annual percent change)	2019	2020	2021
World Output	2.9	-3.0	5.8
Advanced Economies	1.7	-6.1	4.5
United States	2.3	-5.9	4.7
Euro Area	1.2	-7.5	4.7
Germany	0.6	-7.0	5.2
France	1.3	-7.2	4.5
Italy	0.3	-9.1	4.8
Spain	2.0	-8.0	4.3
Japan	0.7	-5.2	3.0
United Kingdom	1.4	-6.5	4.0
Canada	1.6	-6.2	4.2
Other Advanced Economies	1.7	-4.6	4.5

https://www.imf.org/en/Publications/WEO/Issues/2020/04/14/weo-april-2020

(real GDP, annual percent change)	2019	2020	2021
<b>Emerging Markets and Developing Economies</b>	3.7	-1.0	6.6
Emerging and Developing Asia	5.5	1.0	8.5
China	6.1	1.2	9.2
India	4.2	1.9	7.4
ASEAN-5	4.8	-0.6	7.8
Emerging and Developing Europe	2.1	-5.2	4.2
Russia	1.3	-5.5	3.5
Latin America and the Caribbean	0.1	-5.2	3.4
Brazil	1.1	-5.3	2.9
Mexico	-0.1	-6.6	3.0
Middle East and Central Asia	1.2	-2.8	4.0
Saudi Arabia	0.3	-2.3	2.9
Sub-Saharan Africa	3.1	-1.6	4.1
Nigeria	2.2	-3.4	2.4
South Africa	0.2	-5.8	4.0
Low-Income Developing Countries	5.1	0.4	5.6

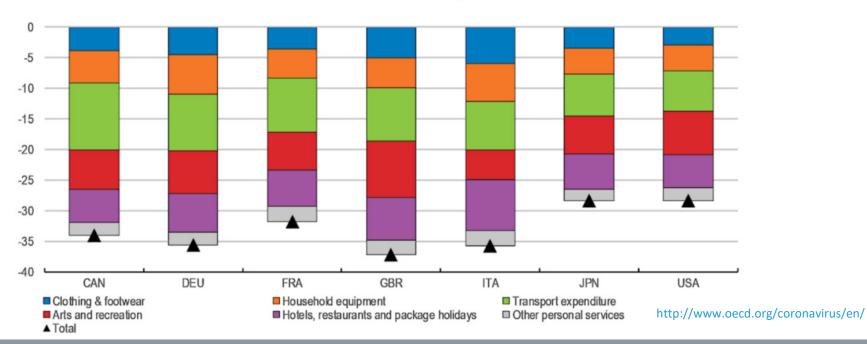


#### **UNITING AVIATION**

### **OECD:** Sharp decrease in consumers' expenditures for air travel due to containment measures

### The potential initial impact of partial or complete shutdowns on private consumption in the G7 economies

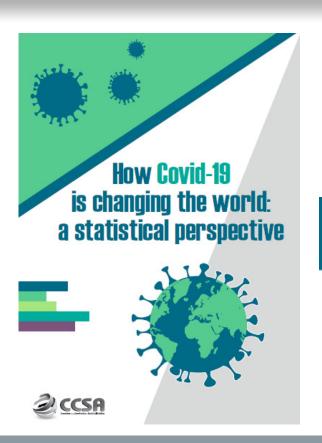
Per cent of total consumers' expenditure





#### **UNITING AVIATION**

# CCSA: Compilation of economic, social, regional and statistical impacts



The new report will be published by the Committee for the Coordination of Statistical Activities (CCSA) under the auspice of the UN-DESA

#### **ECONOMIC**



#### Aviation industry facing deepest crisis ever in history

The aviation industry bears the weight of the consequences of the COVID-19 outbreak heavier than other industries as its "raison d'être" is the transport of people and goods all across the globe for travel, tourism, business and trade.

https://unstats.un.org/unsd/ccsa/documents/covid19-report-ccsa.pdf

#### **Contact: Economic Development ECD@icao.int**





https://www.icao.int/co vid/Pages/default.aspx

http://www.capsca.org/ CoronaVirusRefs.html

https://www.icao.int/sustainability/Pages/Air-Traffic-Monitor.aspx