Aviation Statistics Workshop

ICAO Statistics Programme
Session 6

Form A and AS

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Form A and AS – Commercial air carriers

System wide traffic and capacity data

What data collects?

This form is to be used by ICAO Member States to report traffic statistics for each of their commercial air carriers that operates scheduled and/or non-scheduled flights. The statistics to be reported on this form should exclude air taxi, commercial business aviation or other on-demand revenue flights.

A separate summary form (Form A-S) is to be used by States on an annual basis to report the total sum of the capacity and traffic figures for all of their commercial air carriers, including the air carriers reported on Form A.

Who reports?

Airlines that performs domestic and/or international services scheduled and/or non-scheduled services

When?

- Form A should be reported on monthly basis

- Form AS should be reported on annual basis

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Form A and AS – Commercial air carriers

Difference between Form A and Form AS

	Form A	Form A-S
Objective	Consolidate in a summary the traffic performed by service type and stage.	
Description	traffic statistics for each of commercial air carriers	total capacity and traffic statistics for all commercial air carriers with principal place of business in the territory of the reporting State.
Filing schedule	Monthly	Annual
Submission Periodicity	within one month of the end of the reporting month to which it refers.	within six months of the end of the annual reporting period.

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Form A – Commercial air carriers

ICAO code	Description	Unit	TOTAL ALL SERVICES (passenger, mail and freight including all-freight) Classified by flight stage		ALL-FREIGHT SERVICES ONLY (included in columns c and d data) Classified by flight stage	
			International	Domestic	International	Domestic
	a	b	c	d	e	f
	SCHEDULED REVENUE FLIGHTS					
1010	1. Aircraft kilometres	000				
1020	2. Aircraft departures	number				
1030	3. Aircraft hours	number				
1040	4. Passengers carried	number			--	--
1050	5. Freight tonnes carried	number				
1060	6. Passenger-kilometres performed	000			--	--
1070	7. Seat-kilometres available	000			--	--
1080	8. Passenger load factor	%			--	--
	9. Tonne-kilometres performed					
1091	a) passengers (incl. baggage)	000			--	--
1092	b) freight (incl. express)	000				
1093	c) mail	000				
1094	d) total (9a to 9c)	000				
1100	10. Tonne-kilometres available	000				
1110	11. Weight load factor	%				
	NON-SCHEDULED REVENUE FLIGHTS					
2010	12. Aircraft kilometres	000				
2020	13. Aircraft departures	number				
2030	14. Aircraft hours	number				
2040	15. Passengers carried	number			--	--
2050	16. Freight tonnes carried	number				
2060	17. Passenger-kilometres performed	000			--	--
2070	18. Seat-kilometres available	000			--	--
	19. Tonne-kilometres performed					
2091	a) passengers (incl. baggage)	000			--	--
2092	b) freight (incl. express)	000				
2093	c) mail	000				
2094	d) total (19a to 19c)	000				
2100	20. Tonne-kilometres available	000				
	NON REVENUE FLIGHTS					
2330	21. Aircraft hours	number				

Air carrier system wide data are collected by ICAO on a monthly basis using Form A.

The air carrier traffic data are classified into international and domestic flight stages for:

- **All services:** i.e. covering passenger services (carrying Passengers freight and mail) and all-freight services; and
- **All-freight services**, i.e. services operated by aircraft dedicated to the carriage of freight

In addition the revenue flights identified above are further subdivided into **scheduled** and **non-scheduled** revenue flights.

**International passengers in a domestic stage should be counted double, once as a domestic passenger and second as international passengers
** the value reported in all freight services (columns E and F) should be less than reported data in columns (C and D)

Non-revenue hours covers aircraft hours flown on test flights, training and all other flights for which no revenue is received

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Form A and AS – Commercial air carriers

Validation of data (fleet)

Data related to fleet	Formulas
Avg stage kilometre (km)	Aircraft kilometres/aircraft departures
Avg speed (km/hr)	Aircraft kilometers /aircraft hours
Avg. Flight time hours (hrs)	Aircraft hours / aircraft departures
Avg. Number of seats	ASK/ aircraft kilometers
Avg payload (tonnes)	ATK/ aircraft kilometers

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Form A and AS – Commercial air carriers

Validation of data (traffic)

Data related to traffic	Formulas
Avg. number of passeger per departure	Passenger carried/ aircraft departures
(Avg. Passenger trip distance (km)	RPK/ passenger carried
(Avg passenger mass incl baggage kg)	(PTK/RPK)*1000
(Avg freight trip distance (km)	FTK / Freight tonne carrier
Avg. Payload per aircraft (tonnes)	ATK/ aircraft kilometers

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Form A and AS – Commercial air carriers

Example of reporting of Form A and Form AS

Form A (left)

INTERNATIONAL CIVIL AVIATION ORGANIZATION
AIR TRANSPORT REPORTING FORM
TRAFFIC - COMMERCIAL AIR CARRIERS

Contact person: Jungwook Chung
Organization: Corporate Planning Department
Tel: 82-2-2656-5252
Fax: 82-2-2656-8006
E-mail: jungwchung@koreanair.com

State: Republic of Korea
Air carrier: KAL
Month (s): August
Year: 2017

ICAO code	Description	Unit	TOTAL ALL SERVICES (passenger, mail and freight including all-freight) Classified by flight stage		ALL-FREIGHT SERVICES ONLY (included in columns c and d data) Classified by flight stage	
			International	Domestic	International	Domestic
			c	d	e	f
	a	b				
	SCHEDULED REVENUE FLIGHTS					
1010	1. Aircraft kilometres	000	36,340	1,887	4,498	0
1020	2. Aircraft departures	number	9,560	4,706	1,177	0
1030	3. Aircraft hours	number	48,770	5,000	6,331	0
1040	4. Passengers carried	number	1,698,020	744,387		
1050	5. Freight tonnes carried	number	118,665	7,536	83,566	0
1060	6. Passenger-kilometres performed	000	6,967,271	275,641		0
1070	7. Seat-kilometres available	000	8,423,678	338,519		0
1080	8. Passenger load factor	%	82.7%	81.4%		
	9. Tonne-kilometres performed					
1091	a) passenger (incl. baggage)	000	627,054	24,808		
1092	b) freight (incl. express)	000	575,099	2,908	372,364	0
1093	c) mail	000	17,988	99	4,370	
1094	d) total (9a to 9c)	000	1,220,142	27,815	376,733	0
1100	10. Tonne-kilometres available	000	1,535,673	38,544	439,077	0
1110	11. Weight load factor	%	79.5%	72.2%	85.8%	0
	NON-SCHEDULED REVENUE FLIGHTS 12. Aircraft kilometres	000	2,089	0	1,564	0
2020	13. Aircraft departures	number	424	0	308	0
2030	14. Aircraft hours	number	2,838	0	2,071	0
2040	15. Passengers carried	number	21,764	0		--
2050	16. Freight tonnes carried	number	22,919	0	22,893	0
2060	17. Passenger-kilometres performed	000	102,681	0		--
2070	18. Seat-kilometres available	000	116,744	0		--
	19. Tonne-kilometres performed					
2091	a) passenger (incl. baggage)	000	9,241	0		--
2092	b) freight and mail	000	122,603	0	122,406	0
2094	c) total (19a + 19b)	000	131,845	0	122,406	0
2100	20. Tonne-kilometres available	000	160,293	0	145,217	0
	NON REVENUE FLIGHTS					
2330	21. Aircraft hours	number				

Remarks (including a description of any unavoidable deviation (s) from reporting instructions):

Form AS (right)

ORGANIZACIÓN DE AVIACIÓN CIVIL INTERNACIONAL
FORMULARIO DE INFORMACIÓN DE TRANSPORTE AÉREO
TRÁFICO DE LOS TRANSPORTISTAS AÉREOS COMERCIALES

Persona contacto: Manuel Inda Vergara
Organización: Junta de Aeronautica Civil
Teléfono: (56) (2) 5190914
Facsímile: (56) (2) 6983148
Correo elect.: minda@mtt.gob.cl

Estado: CHILE
Año: 2023

Código OACI	Descripción	Unidad	TOTAL DE TODOS LOS SERVICIOS (Pasajeros, carga y correo comprendidos los servicios exclusivamente de carga) Clasificados por etapa de vuelo		SERVICIOS EXCLUSIVAMENTE DE CARGA (incluidos en las columnas de datos c y d) Clasificados por etapa de vuelo	
			Internacional	Interior	Internacional	Interior
	a	b	c	d	e	f
	VUELOS DE PAGO REGULARES					
1010	1. Kilómetros recorridos	000	213,720	106,334	72,321	199
1020	2. Salidas de aviones	número	42,691	101,803	6,241	127
1030	3. Horas de vuelo	número	197,216	183,589	33,761	249
1040	4. Pasajeros transportados	número	6,137,341	15,186,047	-.-	-.-
1050	5. Toneladas de carga transportadas	número	293,292	42,764	133,991	399
1060	6. Pasajeros-kilómetros efectuados	000	22,662,423	16,395,075	-.-	-.-
1070	7. Asientos-kilómetros disponibles	000	26,998,091	19,967,318	-.-	-.-
1080	8. Coeficiente de ocupación - pasajeros	%	83.9	82.1	-.-	-.-
	9. Toneladas-kilómetros efectuadas					
1091	a) pasajeros (incluido el equipaje)	000	1,691,326	1,318,498	-.-	-.-
1092	b) carga (incluido el expreso)	000	1,442,719	56,316	782,821	3,556
1093	c) correo	000	33,754	2,352	9,421	25
1094	d) total (9a a 9c)	000	3,167,799	1,377,167	792,242	3,581
1100	10. Toneladas-kilómetros disponibles	000	5,328,907	2,373,523	1,310,073	7,863
1110	11. Coeficiente de utilización en peso	%	59.4	58.0	60.5	45.5
	VUELOS DE PAGO NO REGULARES					
2010	12. Kilómetros recorridos	000				
2020	13. Salidas de aviones	número				
2030	14. Horas de vuelo	número				
2040	15. Pasajeros transportados	número				
2050	16. Toneladas de carga transportadas	número				
2060	17. Pasajeros-kilómetros efectuados	000				
2070	18. Asientos-kilómetros disponibles	000				
	19. Toneladas-kilómetros efectuadas					
2091	a) pasajeros (incluido el equipaje)	000				
2092	b) carga y correo	000				
2094	c) total (19a + 19b)	000				
2100	20. Toneladas-kilómetros disponibles	000				
	VUELOS SIN REMUNERACIÓN					
2330	21. Horas de vuelo	número				

Observaciones (menciónese también toda variación inevitable de las instrucciones):
Incluye a las siguientes líneas aéreas: Latam Airlines Group, Latam Airlines Chile, Latam Cargo, Sky Airline y Aerovías DAP y Jetsmart Spa.

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Form A and AS – Commercial air carriers

INTERNATIONAL CIVIL AVIATION ORGANIZATION
AIR TRANSPORT REPORTING FORM
TRAFFIC - COMMERCIAL AIR CARRIERS

person: _____ State: _____
Organization: _____ Air carrier: _____
Tel: _____
Fax: _____ Month (s) : _____
E-mail: _____ Year: _____

ICAO code	Description	Unit	TOTAL ALL SERVICES (passenger, mail and freight including all-freight) Classified by flight stage		ALL-FREIGHT SERVICES ONLY (included in columns c and d data) Classified by flight stage	
			International	Domestic	International	Domestic
	a	b	c	d	e	f
	SCHEDULED REVENUE FLIGHTS					
1010	1. Aircraft kilometres	000				
1020	2. Aircraft departures	number				
1030	3. Aircraft hours	number				
1040	4. Passengers carried	number			- -	- -
1050	5. Freight tonnes carried	number				
1060	6. Passenger-kilometres performed	000			- -	- -
1070	7. Seat-kilometres available	000			- -	- -
1080	8. Passenger load factor	%			- -	- -
	9. Tonne-kilometres performed					
1091	a) passengers (incl. baggage)	000			- -	- -
1092	b) freight (incl. express)	000				
1093	c) mail	000				
1094	d) total (9a to 9c)	000				
1100	10. Tonne-kilometres available	000				
1110	11. Weight load factor	%				
	NON-SCHEDULED REVENUE FLIGHTS					
2010	12. Aircraft kilometres	000				
2020	13. Aircraft departures	number				
2030	14. Aircraft hours	number				
2040	15. Passengers carried	number			- -	- -
2050	16. Freight tonnes carried	number				
2060	17. Passenger-kilometres performed	000			- -	- -
2070	18. Seat-kilometres available	000			- -	- -
	19. Tonne-kilometres performed					
2091	a) passengers (incl. baggage)	000			- -	- -
2092	b) freight (incl. express)	000				
2093	c) mail	000				
2094	d) total (19a to 19c)	000				
2100	20. Tonne-kilometres available	000				
	NON REVENUE FLIGHTS					
2330	21. Aircraft hours	number				

Remarks (including a description of any unavoidable deviation (s) from reporting instructions):

Verification Rules

- All reporting numbers should be greater or equal to zero.
- Seat-kilometers available must be greater than or equal to Passenger-kilometers performed.
  row 7 >= row 6 ; row 18 >= row 17
- Passenger load factor = (Passenger-kilometers performed/Seat-kilometers available)*100
  row 8 = (row 6 / row 7)*100
- Weight load factor = (Total Tonne-kilometers performed/Tonne-kilometers available)*100
  row 11 = (row 9d / row 10)*100
- Total Tonne-kilometers performed = Passengers + Freight + Mail
  row 9d = row 9a + row 9b + row 9c
  row 19d = row 19a + row 19b + row 19c
- Tonne-kilometer available must be great than or equal to Total Tonne-kilometers performed.
  row 10 >= row 9d ; row 20 >= row 19d
- Passenger load factor (row 8) cannot be 0. But the field can be blank.
- Weight load factor (row 11) cannot be 0.
- Each figure of All-Freight services must be less than or equal to the corresponding figure of Total services.

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Verification exercise– Manual

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Verification exercise– Manual

ICAO code	Description	Unit	International	Domestic	ALL-FREIGHT SERVICES ONLY (included in columns c and d data) Classified by flight stage	
					International	Domestic
	a	b	c	d	e	f
	SCHEDULED REVENUE FLIGHTS					
1010	1. Aircraft kilometres	000	36,340	1,887	4,498	0
1020	2. Aircraft departures	number	9,560	4,706	1,177	0
1030	3. Aircraft hours	number	48,770	5,000	6,331	0
1040	4. Passengers carried	number	1,698,020	744,387		0
1050	5. Freight tonnes carried	number	118,665	7,536	83,566	0
1060	6. Passenger-kilometres performed	000	6,967,271	275,641		0
1070	7. Seat-kilometres available	000	8,423,678	338,519		0
1080	8. Passenger load factor	%	82.7%	81.4%		
	9. Tonne-kilometres performed					
1091	a) passenger (incl. baggage)	000	627,054	24,808		
1092	b) freight (incl. express)	000	575,099	2,908	372,364	0
1093	c) mail	000	17,988	99	4,370	
1094	d) total (9a to 9c)	000	1,220,142	27,815	376,733	0
1100	10. Tonne-kilometres available	000	1,535,673	38,544	439,077	0
1110	11. Weight load factor	%	79.5%	72.2%	85.8%	0
	NON-SCHEDULED REVENUE FLIGHTS					
2010	12. Aircraft kilometres	000	2,089	0	1,564	0
2020	13. Aircraft departures	number	424	0	308	0
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2040	15. Passengers carried	number	21,764	0		--
2050	16. Freight tonnes carried	number	22,919	0	22,893	0
2060	17. Passenger-kilometres performed	000	102,681	0		--
2070	18. Seat-kilometres available	000	116,744	0		--
	19. Tonne-kilometres performed					
2091	a) passenger (incl. baggage)	000	9,241	0		--
2092	b) freight and mail	000	122,603	0	122,406	0
2094	c) total (19a + 19b)	000	131,845	0	122,406	0
2100	20. Tonne-kilometres available	000	160,293	0	145,217	0
	NON REVENUE FLIGHTS					
2330	21. Aircraft hours	number				

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ICAO code	Description	Unit	International c	Domestic d	ALL-FREIGHT SERVICES ONLY (included in columns c and d data) Classified by flight stage International e	Domestic f
	a	b	c	d	e	f
	SCHEDULED REVENUE FLIGHTS					
1010	1. Aircraft kilometres	000	36,340	1,887	4,498	0
1020	2. Aircraft departures	number	9,560	4,706	1,177	0
1030	3. Aircraft hours	number	48,770	5,000	6,331	0
1040	4. Passengers carried	number	1,698,020	744,387		0
1050	5. Freight tonnes carried	number	118,665	7,536	83,566	0
1060	6. Passenger-kilometres performed	000	6,967,271	275,641		0
1070	7. Seat-kilometres available	000	8,423,678	338,519		0
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2091	a) passenger (incl. baggage)	000	9,241	0		--
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2094	c) total (19a + 19b)	000	131,845	0	122,406	0
2100	20. Tonne-kilometres available	000	160,293	0	145,217	0
	NON REVENUE FLIGHTS					
2330	21. Aircraft hours	number				

Fleet related data	Formula	International	Domestic
Avg stage kilometre (km)	Aircraft kilometres/aircraft departures	3,801	401
Avg speed (km/hr)	Aircraft kilometers /aircraft hours	745	377
Avg. Flight time hours (hrs)	Aircraft hours / aircraft departures	5	1
Avg. Number of seats	ASK/ aircraft kilometers	232	179
Avg payload (tonnes)	ATK/ aircraft kilometers	42	20

Traffic related data	Formula	International	Domestic
Avg. number of passeger per departure	Passenger carried/ aircraft departures	47	394
(Avg. Passenger trip distance (km)	RPK/ passenger carried	4,103	370
(Avg passenger mass incl baggage kg)	(PTK/FTK)*1000	90	90
(Avg freight trip distance (km)	FTK / Freight tonne carrier	16	2
Avg. Payload per aircraft (tonnes)	ATK/ aircraft kilometers	42	20

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Open the files in exercise folder

=SUM(A1:A5)
=COUNT(A1:A5)
=AVERAGE(A1:A5)
=MIN(A1:A5)
=MAX(A1:A5)
=IF(A1>33,"P","F")

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Thank You