

**Table 1. World total revenue traffic — international and domestic**  
(scheduled services, 2010–2019)

Year	Passengers		Passenger-km		Freight tonnes		Freight tonne-km		Mail tonne-km		Revenue tonne-km	
	(millions)	Annual increase %	(millions)	Annual increase %	(millions)	Annual increase %	(millions)	Annual increase %	(millions)	Annual increase %	(millions)	Annual increase %
2010	2 708	8.7	4 930 250	8.0	48.0	19.2	188 448	19.8	4 653	5.1	650 411	11.7
2011	2 873	6.1	5 254 557	6.6	49.0	2.2	189 013	0.3	4 797	3.1	682 686	5.0
2012	3 007	4.6	5 535 641	5.3	48.4	-1.4	187 042	-1.0	4 978	3.8	706 500	3.5
2013	3 141	4.5	5 839 696	5.5	49.5	2.3	187 786	0.4	5 354	7.5	736 486	4.2
2014	3 320	5.7	6 188 735	6.0	51.1	3.3	196 528	4.7	5 823	8.8	779 667	5.9
2015	3 560	7.2	6 652 791	7.5	51.3	0.5	199 051	1.3	6 276	7.8	827 299	6.1
2016	3 798	6.7	7 144 498	7.4	53.2	3.7	206 175	3.6	6 403	2.0	878 141	6.1
2017	4 066	7.1	7 716 542	8.0	57.0	7.1	225 167	9.2	7 139	11.5	952 960	8.5
2018	4 331	6.5	8 278 782	7.3	58.8	3.2	231 750	2.9	7 070	-1.0	1 011 515	6.1
2019	4 486	3.6	8 685 667	4.9	57.6	-2.1	225 001	-2.9	6 778	-4.1	1 042 878	3.1

Source.— ICAO Air Transport Reporting Form A and A-S plus ICAO estimates.

**Table 2. World revenue traffic — international**  
(scheduled services, 2010–2019)

Year	Passengers		Passenger-km		Freight tonnes		Freight tonne-km		Mail tonne-km		Revenue tonne-km	
	(millions)	Annual increase %	(millions)	Annual increase %	(millions)	Annual increase %	(millions)	Annual increase %	(millions)	Annual increase %	(millions)	Annual increase %
2010	1 040	10.6	3 035 975	8.5	30.6	29.2	162 418	21.8	3 221	6.4	452 563	13.5
2011	1 129	8.5	3 267 310	7.6	31.5	2.8	163 084	0.4	3 291	2.2	475 780	5.1
2012	1 196	6.0	3 467 695	6.1	31.0	-1.6	160 798	-1.4	3 415	3.8	492 021	3.4
2013	1 258	5.2	3 665 539	5.7	31.6	2.2	161 288	0.3	3 716	8.8	511 932	4.0
2014	1 339	6.4	3 893 301	6.2	32.8	3.6	169 242	4.9	4 081	9.8	543 087	6.1
2015	1 443	7.7	4 183 411	7.5	33.1	0.8	171 563	1.4	4 365	7.0	574 235	5.7
2016	1 552	7.6	4 504 556	7.7	34.2	3.5	177 484	3.5	4 642	6.4	608 862	6.0
2017	1 659	6.9	4 883 279	8.4	37.4	9.4	195 433	10.1	5 174	11.4	665 066	9.2
2018	1 773	6.9	5 230 145	7.1	38.7	3.4	201 462	3.1	5 129	-0.9	704 025	5.9
2019	1 850	4.3	5 478 491	4.7	37.5	-3.0	194 370	-3.5	4 956	-3.4	721 475	2.5

Source.— ICAO Air Transport Reporting Form A and A-S plus ICAO estimates.

Presentation of 2019 Air Transport Statistical Results

**Table 3. Trends in load factors — international and domestic**  
(scheduled services, 2010–2019)

Year	Passenger- km (millions)	Seat-km available (millions)	Passenger load factor %	Freight tonne-km (millions)	Mail tonne-km (millions)	Revenue tonne-km (millions)	Total tonne-km available (millions)	Weight load factor %
2010	4 930 250	6 307 072	78	188 448	4 653	650 411	973 339	67
2011	5 254 557	6 736 041	78	189 013	4 797	682 686	1 032 200	66
2012	5 535 641	7 019 380	79	187 042	4 978	706 500	1 063 241	66
2013	5 839 696	7 347 189	79	187 786	5 354	736 486	1 102 151	67
2014	6 188 735	7 763 235	80	196 528	5 823	779 667	1 164 726	67
2015	6 652 791	8 291 255	80	199 051	6 276	827 299	1 231 818	67
2016	7 144 498	8 898 862	80	206 175	6 403	878 141	1 313 813	67
2017	7 716 542	9 470 759	81	225 167	7 139	952 960	1 388 918	69
2018	8 278 782	10 124 456	82	231 750	7 070	1 011 515	1 456 382	69
2019	8 685 667	10 540 946	82	225 001	6 778	1 042 878	1 530 087	68

Source.— ICAO Air Transport Reporting Form A and A-S plus ICAO estimates.

Table 4. Regional distribution of scheduled traffic — 2019

By ICAO statistical region	Aircraft kilometres (millions)	Aircraft departures (thousands)	Passengers carried (thousands)	Passenger-kilometres (millions)	Passenger load factor (%)	Freight tonne-km (millions)	Revenue tonne-km (millions)	Tonne-kilometres available (millions)	Weight load factor (%)
<b>Total (international and domestic) services</b>									
Europe	13 763	9 131	1 171 858	2 325 774	85	53 691	278 258	378 944	73
Percentage of world traffic	24.5	23.8	26.1	26.8		23.9	26.7	24.8	
Africa	1 487	1 195	100 474	185 885	72	4 372	22 576	40 281	56
Percentage of world traffic	2.6	3.1	2.2	2.1		1.9	2.2	2.6	
Middle East	3 763	1 418	227 848	786 348	76	31 016	105 480	177 749	59
Percentage of world traffic	6.7	3.7	5.1	9.1		13.8	10.1	11.6	
Asia and Pacific	18 765	12 400	1 660 547	3 017 647	82	84 746	365 156	518 123	70
Percentage of world traffic	33.4	32.4	37.0	34.7		37.7	35.0	33.9	
North America	15 172	11 315	1 020 089	1 930 812	85	44 893	223 830	344 754	65
Percentage of world traffic	27.0	29.5	22.7	22.2		20.0	21.5	22.5	
Latin America and Caribbean	3 249	2 840	305 396	439 202	82	6 283	47 577	70 236	68
Percentage of world traffic	5.8	7.4	6.8	5.1		2.8	4.6	4.6	
<b>Total</b>	<b>56 199</b>	<b>38 299</b>	<b>4 486 211</b>	<b>8 685 667</b>	<b>82</b>	<b>225 001</b>	<b>1 042 878</b>	<b>1 530 087</b>	<b>68</b>
<b>International services</b>									
Europe	11 536	6 234	887 548	2 028 060	85	52 155	248 588	337 499	74
Percentage of world traffic	37.5	48.8	48.0	37.0		26.8	34.5	31.8	
Africa	1 154	556	56 765	155 262	72	4 315	19 497	35 713	55
Percentage of world traffic	3.7	4.3	3.1	2.8		2.2	2.7	3.4	
Middle East	3 501	1 083	189 348	754 872	76	30 958	102 549	172 779	59
Percentage of world traffic	11.4	8.5	10.2	13.8		15.9	14.2	16.3	
Asia and Pacific	9 016	2 908	481 705	1 652 729	81	74 314	233 870	332 110	70
Percentage of world traffic	29.3	22.8	26.0	30.2		38.2	32.4	31.3	
North America	3 985	1 375	161 004	659 669	84	27 127	89 262	141 174	63
Percentage of world traffic	12.9	10.8	8.7	12.0		14.0	12.4	13.3	
Latin America and Caribbean	1 594	624	73 761	227 899	82	5 500	27 709	41 473	67
Percentage of world traffic	5.2	4.9	4.0	4.2		2.8	3.8	3.9	
<b>Total</b>	<b>30 785</b>	<b>12 779</b>	<b>1 850 131</b>	<b>5 478 491</b>	<b>82</b>	<b>194 370</b>	<b>721 475</b>	<b>1 060 749</b>	<b>68</b>

Note.— The sum of the individual regions may not match the totals due to rounding.

Source.— ICAO Air Transport Reporting Form A and A-S plus ICAO estimates.

Table 5. Revenue tonne-kilometres and passenger-kilometres on scheduled services<sup>1,2</sup>  
(countries and groups of countries whose airlines performed more than 100 million total tonne-kilometres in 2019<sup>3</sup>)

Country or group of countries	REVENUE TONNE-KILOMETRES (millions) (passengers, freight and mail)								REVENUE PASSENGER-KILOMETRES (millions)							
	Total services (international and domestic)				International services				Total services (international and domestic)				International services			
	Rank number in 2019	2019	2018	Increase or decrease (%)	Rank number in 2019	2019	2018	Increase or decrease (%)	Rank number in 2019	2019	2018	Increase or decrease (%)	Rank number in 2019	2019	2018	Increase or decrease (%)
United States	1	198 235	192 409	3	1	70 271	69 027	2	1	1 698 805	1 627 879	4	1	487 362	467 838	4
China <sup>4</sup>	2	129 195	120 538	7	3	46 261	43 400	7	2	1 169 680	1 070 347	9	4	317 787	281 490	13
Hong Kong SAR <sup>5</sup>		27 458	28 323	-3		27 458	28 323	-3		159 668	158 404	1		159 668	158 404	1
Macao SAR <sup>6</sup>		638	563	13		638	563	13		6 119	5 314	15		6 119	5 314	15
United Arab Emirates	3	54 836	57 156	-4	2	54 836	57 156	-4	3	412 276	424 604	-3	2	412 276	424 604	-3
United Kingdom	4	38 059	39 308	-3	4	37 266	38 506	-3	4	344 592	356 465	-3	3	335 479	347 274	-3
Germany	5	32 388	31 852	2	5	31 493	30 972	2	6	250 462	242 054	3	5	241 877	233 645	4
Russian Federation	6	31 782	27 631	15	15	17 468	15 876	10	5	276 600	229 060	21	14	128 179	107 097	20
Republic of Korea	7	28 941	28 698	1	7	27 694	27 481	1	13	189 826	178 239	7	7	177 224	166 232	7
Qatar	8	28 537	26 594	7	6	28 537	26 594	7	14	172 589	152 223	13	8	172 589	152 223	13
Turkey	9	27 519	25 859	6	8	24 387	22 481	8	12	202 174	194 991	4	10	169 128	159 345	6
Japan	10	27 340	26 497	3	12	19 000	18 349	4	11	204 188	197 830	3	17	105 074	102 440	3
France	11	25 983	25 041	4	11	20 498	19 760	4	10	210 880	201 955	4	11	162 944	155 258	5
Canada	12	25 596	25 146	2	13	18 991	18 592	2	8	232 007	226 643	2	9	172 306	167 879	3
Singapore	13	22 758	22 149	3	9	22 758	22 149	3	16	155 409	144 643	7	12	155 409	144 643	7
India	14	21 751	22 413	-3	20	8 781	9 949	-12	9	220 200	221 194	0	20	81 304	88 931	-9
Ireland	15	21 641	20 606	5	10	21 628	20 376	6	7	232 491	224 623	4	6	232 343	222 317	5
Netherlands	16	18 813	18 767	0	14	18 802	18 650	1	20	130 696	127 739	2	13	130 582	126 571	3
Australia	17	17 545	17 396	1	18	10 730	10 620	1	15	161 600	159 061	2	18	91 148	88 990	2
Thailand	18	16 920	16 043	5	16	14 554	13 524	8	17	146 292	132 748	10	15	122 647	107 932	14
Spain	19	15 128	13 695	10	17	12 692	11 508	10	18	145 472	131 166	11	16	121 039	109 170	11
Brazil	20	13 197	13 732	-4	31	5 100	5 361	-5	19	135 078	134 841	0	31	42 658	41 959	2
Malaysia	21	12 673	12 385	2	19	9 706	10 285	-6	21	116 121	113 966	2	19	86 315	92 867	-7
Mexico	22	11 981	11 070	8	28	6 085	5 678	7	22	109 056	100 042	9	26	51 368	47 063	9
Indonesia	23	10 372	12 564	-17	38	3 643	4 271	-15	23	101 949	123 534	-17	34	32 807	38 495	-15
Scandinavia <sup>7</sup>	24	9 283	8 897	4	21	8 260	7 818	6	24	82 737	78 726	5	21	73 041	68 572	7
Philippines	25	8 343	7 688	9	25	6 488	5 880	10	25	76 954	69 226	11	25	59 141	52 743	12
Switzerland	26	8 058	7 931	2	22	8 043	7 915	2	29	63 015	59 775	5	23	62 862	59 617	5
Saudi Arabia	27	8 003	8 000	0	26	6 406	6 446	-1	26	76 422	75 925	1	24	59 614	59 490	0
Viet Nam	28	7 710	6 509	18	32	4 648	3 813	22	27	73 958	63 592	16	30	42 839	36 224	18
Luxembourg	29	7 444	7 572	-2	23	7 444	7 572	-2	85	2 562	2 491	3	82	2 562	2 491	3
Ethiopia	30	6 986	6 350	10	24	6 901	6 274	10	32	45 289	42 559	6	29	44 436	41 804	6
Italy	31	6 481	6 133	6	29	5 803	5 409	7	30	52 030	47 736	9	28	45 212	40 504	12
Hungary	32	6 304	4 387	44	27	6 304	4 380	44	28	64 987	45 225	44	22	64 987	45 157	44
Colombia	33	5 373	4 947	9	36	4 002	3 634	10	35	39 098	36 063	8	40	25 202	23 426	8
Austria <sup>8</sup>	34	5 332	2 455	117	30	5 318	2 440	118	31	49 993	20 697	142	27	49 851	20 548	143
Chile	35	4 952	4 613	7	39	3 344	3 169	6	34	40 483	36 807	10	42	23 568	21 601	9
New Zealand	36	4 823	4 804	0	35	4 247	4 235	0	37	38 452	36 748	5	35	32 500	30 938	5
Portugal	37	4 611	4 160	11	34	4 317	3 888	11	33	44 784	40 718	10	32	41 748	37 916	10
Finland	38	4 543	4 108	11	33	4 434	4 002	11	36	38 539	34 855	11	33	37 278	33 626	11
Belgium	39	3 971	3 770	5	37	3 971	3 770	5	44	26 367	25 127	5	38	26 367	25 126	5
South Africa	40	3 919	4 063	-4	48	1 875	2 111	-11	38	35 330	35 368	0	50	15 180	16 041	-5
Israel	41	3 297	3 405	-3	40	3 272	3 369	-3	45	23 864	23 918	0	41	23 605	23 535	0
Argentina	42	3 167	3 022	5	51	1 617	1 621	0	39	32 071	29 925	7	51	15 036	14 666	3
Panama	43	3 158	3 234	-2	41	3 148	3 223	-2	40	30 632	31 692	-3	36	30 531	31 588	-3
Oman	44	3 146	2 854	10	42	3 073	2 779	11	41	28 870	25 938	11	37	28 138	25 170	12
Peru	45	3 115	3 020	3	44	2 160	2 160	0	42	27 820	27 076	3	45	18 442	18 612	-1
Egypt	46	3 106	2 992	4	43	3 006	2 887	4	43	26 454	25 755	3	39	25 448	24 713	3
Iran (Islamic Republic of)	47	2 341	2 277	3	57	1 130	1 028	10	46	23 566	22 315	6	57	10 133	8 983	13
Poland	48	2 160	1 808	19	45	2 116	1 767	20	48	19 025	15 972	19	44	18 526	15 503	19
Morocco	49	2 145	1 906	13	46	2 070	1 841	12	47	20 432	18 081	13	43	19 677	17 440	13
Kuwait	50	1 995	1 807	10	47	1 995	1 807	10	50	17 468	15 506	13	46	17 468	15 506	13
Pakistan	51	1 920	1 864	3	50	1 686	1 663	1	49	18 733	17 815	5	47	16 380	15 780	4
Sri Lanka	52	1 794	1 897	-5	49	1 794	1 897	-5	52	15 509	16 180	-4	49	15 509	16 180	-4
Kenya	53	1 576	1 474	7	53	1 489	1 396	7	56	12 480	11 811	6	55	11 636	11 060	5
Ukraine	54	1 538	1 497	3	52	1 494	1 454	3	51	16 038	15 584	3	48	15 544	15 098	3
Greece	55	1 505	1 367	10	56	1 270	1 147	11	53	14 957	14 141	6	54	12 520	11 857	6
Iceland	56	1 469	2 552	-42	54	1 462	2 543	-43	54	13 677	24 229	-44	52	13 604	24 148	-44
Bahrain	57	1 367	1 362	0	55	1 367	1 362	0	55	13 149	11 641	13	53	13 149	11 641	13
Kazakhstan	58	1 201	1 148	5	63	758	767	-1	57	12 393	11 918	4	61	7 744	7 875	-2
Bangladesh	59	1 115	1 013	10	58	1 063	963	10	59	10 451	9 772	7	58	9 909	9 256	7
Uzbekistan	60	1 030	855	21	59	993	821	21	58	10 590	8 408	26	56	10 185	8 045	27
Jordan	61	952	955	0	60	950	953	0	61	8 716	8 517	2	60	8 700	8 503	2
Mauritius	62	859	915	-6	61	848	905	-6	64	7 123	7 517	-5	62	7 007	7 403	-5
Czechia	63	813	1 459	-44	62	813	1 458	-44	60	8 735	15 978	-45	59	8 735	15 970	-45
Algeria	64	764	740	3	68	638	611	4	62	8 187	7 879	4	63	6 797	6 471	5
Fiji	65	718	698	3	64	712	693	3	66	6 083	5 909	3	66	6 024	5 856	3
Romania	66	707	608	16	65	654	574	14	63	7 330	6 338	16	64	6 768	5 969	13
Lebanon	67	652	623	5	66	652	623	5	67	5 895	5 508	7	67	5 895	5 508	7
Tunisia	68	645	635	2	67	640	629	2	65	6 409	6 319	1	65	6 348	6 253	2
Brunei Darussalam	69	550	484	14	69	550	484	14	71	4 734	3 920	21	70	4 734	3 920	21
El Salvador	70	540	570	-5	70	540	570	-5	69	5 210	5 162	1	69	5 210	5 162	1
Latvia	71	510	416	23	71	510	416	23	68	5 498	4 482	23	68	5 491	4 480	23
Ecuador	72	507	625	-19	76	370	475	-22	70	4 961	5 996	-17	74	3 503	4 448	-21
Angola	73	472	466	1	72	447	435	3	73	4 465	4 292	4	71	4 189	3 949	6
Azerbaijan	74	454	411	10	73	414	373	11	72	4 503	4 033	12	72	4 087	3 626	13
Trinidad And Tobago	75	395	386	3	74	386	378	2	76	3 478	3 444	1	76	3 391	3 366	1
Belarus	76	386	325	19	75	386	325	19	74	3 813	3 217	19	73	3 813	3 217	19
Iraq	77	351	564	-38	78	328	517	-37	75	3 506	5 479	-36	77	3 277	5 003	-34
Costa Rica	78</															

Country or group of countries	REVENUE TONNE-KILOMETRES (millions) (passengers, freight and mail)								REVENUE PASSENGER-KILOMETRES (millions)							
	Total services (international and domestic)				International services				Total services (international and domestic)				International services			
	Rank number in 2019	2019	2018	Increase or decrease (%)	Rank number in 2019	2019	2018	Increase or decrease (%)	Rank number in 2019	2019	2018	Increase or decrease (%)	Rank number in 2019	2019	2018	Increase or decrease (%)
Bolivia (Plurinational State of)	79	327	327	0	87	186	181	3	80	3 061	3 131	-2	87	1 676	1 701	-1
Malta	80	317	362	-13	79	317	362	-13	78	3 142	3 581	-12	78	3 142	3 581	-12
Sudan	81	311	217	43	81	299	177	68	79	3 098	2 127	46	80	2 987	1 766	69
Nigeria	82	302	265	14	104	79	31	157	83	2 798	2 457	14	105	576	114	408
Rwanda	83	300	276	9	80	300	275	9	81	3 001	2 759	9	79	2 997	2 754	9
Serbia	84	297	282	5	82	297	282	5	82	2 821	2 622	8	81	2 821	2 622	8
Turkmenistan	85	291	311	-6	84	229	242	-5	84	2 734	3 255	-16	85	2 124	2 498	-15
Cambodia	86	239	228	5	83	233	223	4	86	2 384	2 275	5	83	2 320	2 227	4
Nepal	87	222	372	-40	86	189	301	-37	87	2 204	3 661	-40	86	1 874	2 941	-36
Papua New Guinea	88	207	193	7	93	129	124	4	90	1 766	1 623	9	94	1 016	963	6
Republic of Moldova	89	205	213	-4	85	205	213	-4	88	2 155	2 171	-1	84	2 155	2 171	-1
Myanmar	90	199	176	13	100	86	83	3	89	2 072	1 720	20	99	876	792	11
Libya	91	166	175	-5	91	140	139	1	91	1 648	1 740	-5	91	1 390	1 383	1
Kyrgyzstan	92	162	236	-31	88	149	221	-33	92	1 618	2 354	-31	88	1 481	2 198	-33
Croatia	93	156	154	2	90	140	137	2	94	1 547	1 521	2	92	1 385	1 354	2
Mongolia	94	151	136	11	92	140	124	13	93	1 583	1 405	13	89	1 466	1 290	14
Tajikistan	95	143	117	22	89	142	116	23	95	1 401	1 338	5	90	1 399	1 326	6
Madagascar	96	133	103	29	95	112	84	34	96	1 174	879	34	95	970	688	41
Suriname	97	127	140	-9	94	127	140	-9	102	958	1 064	-10	97	958	1 064	-10
Afghanistan	98	124	150	-17	105	74	101	-26	99	1 040	1 198	-13	106	576	808	-29
Georgia	99	108	109	0	96	108	109	-1	97	1 077	1 040	4	93	1 073	1 039	3
Venezuela (Bolivarian Republic of)	100	108	137	-22	106	72	74	-3	98	1 075	1 373	-22	103	716	739	-3
<b>Total for above countries (102)<sup>8</sup></b>		<b>1 022 778</b>	<b>990 076</b>	<b>3</b>		<b>701 971</b>	<b>683 197</b>	<b>3</b>		<b>8 569 833</b>	<b>8 161 510</b>	<b>5</b>		<b>5 368 546</b>	<b>5 118 909</b>	<b>5</b>
<b>Rest of the World</b>		<b>20 100</b>	<b>21 439</b>			<b>19 504</b>	<b>20 828</b>			<b>115 834</b>	<b>117 272</b>			<b>109 945</b>	<b>111 236</b>	
<b>World total</b>		<b>1 042 878</b>	<b>1 011 515</b>	<b>3</b>		<b>721 475</b>	<b>704 025</b>	<b>2</b>		<b>8 685 667</b>	<b>8 278 782</b>	<b>5</b>		<b>5 478 491</b>	<b>5 230 145</b>	<b>5</b>

1. The revenue tonne-kilometres (RTK) in all tables of this Appendix are based on the actual passenger weights reported and used by Member States.
2. Previous year traffic figures have been restated based on actual reporting from Member States.
3. Some 2019 data are estimates, thus the ranking and the rate of increase or decrease may change when final data become available.
4. For statistical purposes, the data for China excludes the traffic for the Hong Kong and Macao Special Administrative Regions (Hong Kong SAR and Macao SAR) of China.
5. Traffic for the Hong Kong Special Administrative Region (SAR) of China.
6. Traffic for the Macao Special Administrative Region (SAR) of China.
7. Three States – Denmark, Norway and Sweden.
8. Includes the States listed in note 7.
9. Traffic includes operations of Easyjet Europe, as reported by the State.

Data coverage — 96.5% official statistics reported by Member States, 3.5% other sources and ICAO estimation methodology.  
Source. — ICAO Air Transport Reporting Form A and A-S plus ICAO estimates.

**Table 6. Freight tonne-kilometres performed on scheduled services**  
(countries and groups of countries whose airlines performed more than 25 million freight tonne-kilometres in 2019<sup>1</sup>)

Country or group of countries	FREIGHT TONNE-KILOMETRES (millions)							
	Total services (international and domestic)				International services			
	Rank number in 2019	2019	2018	Increase or decrease (%)	Rank number in 2019	2019	2018	Increase or decrease (%)
United States	1	42 498	42 985	-1	1	25 367	25 865	-2
China <sup>2</sup>	2	25 395	25 256	1	2	17 904	18 136	-1
<i>Hong Kong SAR</i> <sup>3</sup>		11 739	12 677	-7		11 739	12 677	-7
<i>Macao SAR</i> <sup>4</sup>		26	32	-18		26	32	-18
United Arab Emirates	3	14 762	15 963	-8	3	14 762	15 963	-8
Qatar	4	12 740	12 667	1	4	12 740	12 667	1
Republic of Korea	5	10 664	11 519	-7	5	10 623	11 466	-7
Japan	6	8 919	9 421	-5	6	8 071	8 486	-5
Germany	7	7 764	7 970	-3	7	7 727	7 932	-3
Luxembourg	8	7 188	7 323	-2	8	7 188	7 323	-2
Turkey	9	6 816	5 949	15	9	6 784	5 916	15
Russian Federation	10	6 621	6 811	-3	12	5 805	6 130	-5
Singapore	11	6 412	6 947	-8	10	6 412	6 947	-8
United Kingdom	12	5 851	6 198	-6	11	5 851	6 198	-6
Netherlands	13	5 656	5 887	-4	13	5 656	5 887	-4
France	14	4 523	4 444	2	14	3 976	3 972	0
Ethiopia	15	2 450	2 089	17	15	2 450	2 089	17
Canada	16	2 395	2 482	-3	18	1 760	1 804	-2
Thailand	17	2 234	2 666	-16	16	2 212	2 637	-16
India	18	1 938	2 704	-28	27	1 138	1 893	-40
Australia	19	1 931	2 028	-5	17	1 795	1 899	-5
Switzerland	20	1 641	1 841	-11	19	1 640	1 841	-11
Colombia	21	1 548	1 350	15	20	1 479	1 273	16
Brazil	22	1 521	1 846	-18	29	1 048	1 309	-20
Malaysia	23	1 379	1 359	1	23	1 315	1 298	1
Belgium	24	1 353	1 285	5	21	1 353	1 285	5
Italy	25	1 345	1 418	-5	22	1 343	1 416	-5
Chile	26	1 232	1 226	0	26	1 164	1 167	0
New Zealand	27	1 208	1 349	-10	24	1 192	1 327	-10
Spain	28	1 191	1 119	7	25	1 173	1 103	6
Mexico	29	1 073	1 063	1	31	946	969	-2
Finland	30	1 067	958	11	28	1 067	957	11
Saudi Arabia	31	1 024	1 085	-6	30	982	1 048	-6
Viet Nam	32	1 023	763	34	34	771	537	44
Scandinavia <sup>5</sup>	33	986	991	-1	32	914	914	0
Indonesia	34	982	1 132	-13	40	463	581	-20
Philippines	35	927	836	11	35	722	604	19
Israel	36	889	995	-11	33	889	995	-11
Oman	37	567	510	11	36	562	507	11
South Africa	38	539	697	-23	38	496	651	-24
Portugal	39	537	454	18	37	528	445	18
Egypt	40	483	438	10	39	483	437	10
Sri Lanka	41	394	436	-10	41	394	436	-10
Kuwait	42	365	392	-7	42	365	392	-7
Peru	43	340	313	9	43	322	295	9
Kenya	44	321	295	9	45	319	292	9
Austria	45	320	374	-14	44	320	373	-14
Poland	46	318	271	17	46	318	271	17
Bahrain	47	311	421	-26	47	311	421	-26
Argentina	48	280	312	-10	48	265	294	-10

Country or group of countries	FREIGHT TONNE-KILOMETRES (millions)							
	Total services (international and domestic)				International services			
	Rank number in 2019	2019	2018	Increase or decrease (%)	Rank number in 2019	2019	2018	Increase or decrease (%)
Mauritius	49	214	234	-9	49	214	234	-9
Pakistan	50	193	218	-11	50	181	204	-11
Ireland	51	175	169	3	51	175	169	3
Jordan	52	154	176	-13	52	154	176	-13
Iran (Islamic Republic of)	53	152	170	-10	53	142	147	-4
Iceland	54	139	164	-15	54	139	163	-15
Brunei Darussalam	55	122	129	-5	55	122	129	-5
Fiji	56	109	107	2	56	109	107	2
Morocco	57	102	98	5	57	102	97	5
Panama	58	95	65	47	58	94	64	47
Bangladesh	59	86	51	71	59	86	50	71
Zambia	60	79	75	6	60	79	75	6
Ukraine	61	76	75	0	61	76	75	1
Uzbekistan	62	70	89	-21	62	70	89	-21
Angola	63	68	78	-13	63	67	77	-13
Lebanon	64	52	57	-9	64	52	57	-9
Ecuador	65	51	64	-21	67	44	57	-23
Kazakhstan	66	49	50	-2	68	36	37	-2
Trinidad And Tobago	67	47	41	15	65	47	41	15
Azerbaijan	68	47	44	7	66	46	43	7
Suriname	69	32	33	-3	69	32	33	-3
Papua New Guinea	70	31	31	-1	70	27	27	0
Algeria	71	26	28	-9	71	25	28	-9
Total for above countries (73) <sup>6</sup>		215 856	221 791	-3		185 254	191 537	-3
Rest of the World		9 145	9 959			9 116	9 925	
World total		225 001	231 750	-3		194 370	201 462	-4

1. Some 2019 data are estimates, thus the ranking and the rate of increase or decrease may change when final data become available.

2. For statistical purposes, the data for China excludes the traffic for the Hong Kong and Macao Special Administrative Regions (Hong Kong SAR and Macao SAR) of China.

3. Traffic for the Hong Kong Special Administrative Region (SAR) of China.

4. Traffic for the Macao Special Administrative Region (SAR) of China.

5. Three States – Denmark, Norway and Sweden.

6. Includes the States listed in note 5.

Source.— ICAO Air Transport Reporting Form A and A-S plus ICAO estimates.

Table 7. Estimated international non-scheduled revenue passenger traffic, 2010–2019

Category	Millions of revenue passenger-kilometres performed									
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Non-scheduled traffic <sup>1</sup>	210 475	221 000	225 378	229 660	236 320	216 615	185 241	203 033	214 706	216 212
Annual change (%)	0.1	5.0	2.0	1.9	2.9	-8.3	-14.5	9.6	5.7	0.7
Scheduled traffic	3 035 975	3 267 310	3 467 695	3 665 539	3 893 301	4 183 411	4 504 556	4 883 279	5 230 145	5 478 491
Annual change (%)	8.5	7.6	6.1	5.7	6.2	7.5	7.7	8.4	7.1	4.7
Total traffic	3 246 450	3 488 310	3 693 073	3 895 199	4 129 621	4 400 026	4 689 797	5 086 312	5 444 852	5 694 703
Annual change (%)	8.4	7.4	5.9	5.5	6.0	6.5	6.6	8.5	7.0	4.6
Non-scheduled traffic as percentage of total	6.5	6.3	6.1	5.9	5.7	4.9	3.9	4.0	3.9	3.8

1. Covers the non-scheduled traffic of scheduled airlines and non-scheduled operators.

Source.— ICAO Air Transport Reporting Form A and A-S plus ICAO estimates.

**Table 8. Traffic at world's major airports**  
**Top 25 airports ranked by total passengers, 2019**

Rank No.	City	Airport	Passengers embarked and disembarked <sup>1</sup>			Aircraft movements <sup>2</sup>		
			2019 (thousands)	2018 (thousands)	2019/2018 (%)	2019 (thousands)	2018 (thousands)	2019/2018 (%)
1	Atlanta GA	Hartsfield-Jackson Atlanta International Airport	110 531	107 394	2.9	904	895.7	1.0
2	Beijing	Beijing Capital International Airport	100 011	100 983	-1.0	594	614.0	-3.2
3	Los Angeles CA	Los Angeles International Airport	88 068	87 534	0.6	691	707.8	-2.3
4	Dubai	Dubai International Airport	86 397	89 149	-3.1	373	408.3	-8.6
5	Tokyo	Tokyo International (Haneda) Airport	85 505	87 503	-2.3	458	453.5	1.1
6	Chicago IL	O'Hare International Airport	84 649	83 339	1.6	920	903.7	1.8
7	London	Heathrow Airport	80 888	80 126	1.0	478	477.8	0.0
8	Shanghai	Pudong International Airport	76 153	74 006	2.9	512	504.8	1.4
9	Paris	Aéroport de Paris-Charles de Gaulle	76 150	72 230	5.4	483	488.1	-1.1
10	Dallas/Fort Worth TX	Dallas/Ft Worth International Airport	75 067	69 113	8.6	720	667.2	7.9
11	Guangzhou	Guangzhou Bai Yun International Airport	73 395	69 769	5.2	491	477.4	2.9
12	Amsterdam	Amsterdam Airport Schiphol	71 707	71 053	0.9	516	517.7	-0.4
13	Hong Kong	Hong Kong International Airport	71 415	74 517	-4.2	430	439.2	-2.0
14	Incheon	Incheon International Airport	71 204	68 351	4.2	407	390.2	4.2
15	Frankfurt	Flughafen Frankfurt/Main	70 556	69 510	1.5	514	512.1	0.4
16	Denver CO	Denver International Airport	69 016	64 495	7.0	632	595.5	6.1
17	New Delhi	Indira Gandhi International Airport	68 491	69 901	-2.0	466	480.7	-3.0
18	Singapore	Singapore Changi Airport	68 283	65 628	4.0	386	390.8	-1.3
19	Bangkok	Suvarnabhumi International Airport	65 422	63 379	3.2	381	370.3	2.9
20	New York NY	John F. Kennedy International Airport	62 551	61 588	1.6	456	455.5	0.1
21	Kuala Lumpur	Kuala Lumpur International Airport	62 336	60 013	3.9	408	398.8	2.4
22	Madrid	Aeropuerto de Adolfo Suárez Madrid-Barajas	61 707	57 863	6.6	426	409.8	4.0
23	San Francisco CA	San Francisco International Airport	57 419	57 708	-0.5	458	470.2	-2.5
24	Chengdu	Chengdu Shuangliu International Airport	55 859	52 951	5.5	367	352.1	4.2
25	Jakarta	Soekarno-Hatta International Airport	54 497	66 908	-18.6	391	463.1	-15.6
<b>Total</b>			<b>1,847,278</b>	<b>1,825,012</b>	<b>1.2</b>	<b>12,863</b>	<b>12,844</b>	<b>0.1</b>

**Top 25 airports ranked by international passengers, 2019**

Rank No.	City	Airport	Passengers embarked and disembarked <sup>1</sup>			Aircraft movements <sup>2</sup>		
			2019 (thousands)	2018 (thousands)	2019/2018 (%)	2019 (thousands)	2018 (thousands)	2019/2018 (%)
1	Dubai	Dubai International Airport	86 329	88 885	-2.9	408	409	-0.3
2	London	Heathrow Airport	76 044	75 307	1.0	438	436	0.6
3	Amsterdam	Amsterdam Airport Schiphol	71 680	70 956	1.0	497	499	-0.4
4	Hong Kong	Hong Kong International Airport	71 288	74 360	-4.1	412	419	-1.7
5	Incheon	Incheon International Airport	70 578	67 676	4.3	399	382	4.5
6	Paris	Aéroport de Paris-Charles de Gaulle	69 823	66 383	5.2	426	430	-0.9
7	Singapore	Singapore Changi Airport	67 601	64 890	4.2	382	386	-1.0
8	Frankfurt	Flughafen Frankfurt/Main	63 068	61 775	2.1	439	436	0.7
9	Bangkok	Suvarnabhumi International Airport	52 934	50 869	4.1	295	282	4.6
10	Madrid	Aeropuerto de Adolfo Suárez Madrid-Barajas	44 918	41 857	7.3	276	263	4.9
11	Kuala Lumpur	Kuala Lumpur International Airport	44 855	43 507	3.1	276	275	0.5
12	London	Gatwick Airport	43 124	42 348	1.8	255	240	6.5
13	Istanbul	Istanbul International Airport	51 311	49 160	4.4	338	321	5.3
14	Doha	Hamad International Airport	38 787	34 495	12.4	231	219	5.5
15	Barcelona	Aeropuerto de Barcelona-El Prat	38 631	36 668	5.4	240	232	3.4
16	Munich	Munich Airport	38 309	36 546	4.8	307	308	-0.1
17	Tokyo	Narita International Airport	36 645	35 296	3.8	207	200	3.5
18	New York NY	John F. Kennedy International Airport	34 317	33 519	2.4	179	179	0.2
19	Dublin	Dublin Airport	32 573	31 146	4.6	229	223	2.9
20	Toronto ON	Toronto Pearson International Airport	32 389	31 601	2.5	245	252	-2.8
21	Rome	Aeroporto di Roma-Fiumicino	32 344	31 430	2.9	211	207	1.6
22	Shanghai	Pudong International Airport	32 337	30 864	4.8	202	200	1.0
23	Vienna	Vienna International Airport	30 960	26 362	17.4	255	229	11.4
24	Zurich	Flughafen Zürich	30 794	30 357	1.4	235	236	-0.2
25	Copenhagen	Copenhagen Airport	28 209	28 226	-0.1	227	229	-0.8
<b>Total</b>			<b>1,219,845</b>	<b>1,184,485</b>	<b>3.0</b>	<b>7,610</b>	<b>7,490</b>	<b>1.6</b>

1. Revenue and non-revenue air carrier passengers and passengers in direct transit; scheduled and non-scheduled services.

2. All aircraft movements (commercial and non-commercial).

**Table 9. Operating, net results<sup>1</sup> and variance analysis**  
(scheduled airlines of ICAO Member States)

Year	Operating revenues USD (millions)	Operating expenses USD (millions)	Operating result		Net result <sup>2</sup>	
			Amount USD (millions)	Percentage of operating revenues	Amount USD (millions)	Percentage of operating revenues
2009	475,800	473,900	1,900	0.4	-4,600	-1.0
2010	563,500	535,900	27,600	4.9	17,300	3.1
2011	642,300	622,500	19,800	3.1	8,300	1.3
2012	705,500	687,100	18,400	2.6	9,200	1.3
2013	720,200	694,900	25,300	3.5	18,100	2.5
2014	766,900	725,200	41,700	5.4	17,300	2.3
2015	720,500	660,700	59,800	8.3	37,500	5.2
2016	709,000	643,800	65,200	9.2	35,600	5.0
2017	757,600	697,900	59,700	7.9	40,100	5.3
2018 <sup>(3)</sup>	814,200	763,300	50,900	6.3	33,400	4.1
2019 <sup>(3,4)</sup>	841,300	796,300	45,000	5.3	31,900	3.8

#### Analysis of variance in operating result (2019 over 2018)

	2019	2018	Difference
Operating revenues, USD (millions)	841,300	814,200	27,100
Operating expenses, USD (millions)	796,300	763,300	33,000
Operating result, USD (millions)	45,000	50,900	-5,900
RTK (millions)	1,042,878	1,011,515	31,363
ATK (millions)	1,530,087	1,456,381	73,706
Yield, USD (cent)	80.7	80.5	0.2
Cost/ATK, USD (cent)	52.0	52.4	-0.4
Weight load factor (%)	68.2	69.5	-1.3
Break-even weight load factor (%)	64.5	65.1	-0.6

#### Analysis of difference in operating revenues (2019 over 2018)

Due to increase in yield, USD (millions)	1,855	
Due to increase in traffic, USD (millions)	25,245	
Net increase in operating revenues, USD (millions)	27,100	(A)

#### Analysis of difference in operating expenses (2019 over 2018)

Due to decrease in unit cost, USD (millions)	-5,630	
Due to increase in capacity offered, USD (millions)	38,630	
Net increase in operating expenses, USD (millions)	33,000	(B)
Net increase in operating result (2019 over 2018), USD (millions)	-5,900	(A-B)

1. Revenues and expenses are estimated for non-reporting airlines.

2. The net result is derived from the operating result by adding (with plus or minus sign as appropriate) non-operating items (such as interest and direct subsidies) and income tax. The operating and net results quoted, are the small differences between the estimates of large figures (revenues and expenses) and are therefore susceptible to substantial uncertainties.

3. The net results for 2018 and 2019 have been provisionally estimated and exclude exceptional accounting items.

4. Complete financial data for 2019 had not been reported to ICAO at the time of writing because of variations in fiscal year reporting.

Source.— ICAO Air Transport Reporting Form EF plus ICAO estimates.

**Table 10. Commercial transport fleet<sup>1</sup> of ICAO Member States  
at the end of each year, 2010 - 2019**

Year	Turbojet		Turboprop		Total aircraft All types
	Number	Percentage	Number	Percentage	
2010	20 904	87.5	2 976	12.5	23 880
2011	21 543	87.7	3 009	12.3	24 552
2012	22 255	88.1	2 997	11.9	25 252
2013	22 893	88.2	3 061	11.8	25 954
2014	23 587	88.5	3 066	11.5	26 653
2015	24 259	88.7	3 093	11.3	27 352
2016	25 060	88.9	3 117	11.1	28 177
2017	26 100	89.3	3 136	10.7	29 236
2018	27 183	89.5	3 196	10.5	30 379
2019	27 790	89.6	3 233	10.4	31 023

1. Active and parked aircraft are included; aircraft having a maximum take-off mass of less than 9 000 kg (20 000 lbs) are not included.

Source.— Reed Business Information (RBI)

Table 11: Aviation Security

Year	Number of acts of unlawful interference	Number of acts of unlawful seizure		Number of acts of facility attack		Number of acts of sabotage	Other acts <sup>1</sup>	Number of persons injured or killed during acts of unlawful interference	
		Actual seizures	Attempted seizures	Actual facility attacks	Attempted facility attacks			Injured	Killed
1991	15	7	5	1	0	0	2	2	7
1992	10	6	2	1	0	0	1	123	10
1993	48	30	7	3	0	0	8	38	112
1994	43	22	5	4	0	2	10	57	51
1995	17	9	3	2	0	0	3	5	2
1996	22	3	12	4	0	0	3	159	134
1997	15	6	5	2	0	1	1	2	4
1998	17	11	2	1	0	0	3	1	41
1999	14	11	2	0	0	0	1	3	4
2000	30	12	8	1	0	0	9	50	58
2001 <sup>(2)</sup>	24	7	2	7	4	1	3	3 217	3 525
2002	40	2	8	24	2	2	2	14	186
2003	35	3	5	10	0	5	12	77	20
2004	16	1	4	2	2	4	3	8	91
2005	6	2	0	2	0	0	2	60	3
2006	17	1	3	4	0	1	8 <sup>(3)</sup>	27	2
2007	22	4	2	2	3	0	11	33	18
2008	23	1	6	3	0	0	13 <sup>(3)</sup>	31	11
2009	23	5	3	1	0	0	14 <sup>(3)</sup>	4	3
2010	14	0	1	1	0	1	11 <sup>(3)</sup>	13	6
2011	6	0	2	0	0	1	3 <sup>(3)</sup>	152	35
2012	10	1	2	2	0	0	5 <sup>(3)</sup>	44	20
2013	8	1	0	3	0	1	2 <sup>(3)</sup>	7	34
2014	21	2	2	9	0	1	7 <sup>(3)</sup>	44	334
2015	13	2	2	2	2	4	1	6	403
2016	9	2	0	5	0	2	0	319	58

1. Includes in-flight attacks and other acts of unlawful interference.

2. Official reports on the events of 11 September 2001 in the United States did not include the number of deaths and injuries on the ground. Therefore, estimated totals were taken from media sources.

3. Includes attempted sabotage.

Please note that starting from 2017 the categorization of the acts of unlawful interference has changed to the format presented below.

Year	Attack on aircraft in flight	Attack on airport/other aviation facility	Attack using aircraft as a weapon	Cyber-attack which endangers aviation safety	Unlawful seizure of aircraft	Other acts	Number of persons injured or killed during acts of unlawful interference	
							Deaths	Injuries
2017	1	9	1	1	2	7	8	9
2018	0	15	1	1	2	16	8	10
2019	2	10	2	5	3	25	6	12