

Table 1. World total revenue traffic — international and domestic
(scheduled services, 2009–2018)

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 %
2009	2 488	-0.4	4 561 413	-1.1	40.0	-0.8	155 819	-8.9	4 620	-5.5	577 747	-4.3
2010	2 705	8.7	4 924 229	8.0	47.6	19.2	186 631	19.8	4 855	5.1	645 596	11.7
2011	2 870	6.1	5 248 140	6.6	48.7	2.2	187 191	0.3	5 006	3.1	677 631	5.0
2012	3 004	4.6	5 528 880	5.3	48.0	-1.4	185 239	-1.0	5 195	3.8	701 269	3.5
2013	3 138	4.5	5 832 564	5.5	49.1	2.3	185 975	0.4	5 586	7.5	731 033	4.2
2014	3 316	5.7	6 181 177	6.0	50.7	3.3	194 633	4.7	6 076	8.8	773 895	5.9
2015	3 556	7.2	6 644 666	7.5	51.0	0.5	197 131	1.3	6 549	7.8	821 174	6.1
2016	3 794	6.7	7 135 773	7.4	52.8	3.7	204 187	3.6	6 681	2.0	871 639	6.1
2017	4 062	7.1	7 707 118	8.0	56.6	7.1	222 996	9.2	7 449	11.5	945 904	8.5
2018	4 322	6.4	8 257 635	7.1	58.0	2.4	230 967	3.6	7 393	-0.7	1 004 763	6.2

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

Table 2. World revenue traffic — international
(scheduled services, 2009–2018)

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 %
2009	936	1.3	2 789 696	-1.3	23.5	-2.3	132 028	-8.8	3 203	-0.6	394 499	-3.9
2010	1 035	10.6	3 026 966	8.5	30.4	29.2	160 793	21.8	3 408	6.4	447 798	13.5
2011	1 123	8.5	3 257 615	7.6	31.3	2.8	161 452	0.4	3 482	2.2	470 771	5.1
2012	1 190	6.0	3 457 405	6.1	30.8	-1.6	159 189	-1.4	3 613	3.8	486 840	3.4
2013	1 252	5.2	3 654 662	5.7	31.5	2.2	159 675	0.3	3 932	8.8	506 542	4.0
2014	1 332	6.4	3 881 747	6.2	32.6	3.6	167 549	4.9	4 318	9.8	537 369	6.1
2015	1 436	7.7	4 170 997	7.5	32.9	0.8	169 847	1.4	4 618	7.0	568 188	5.7
2016	1 544	7.6	4 491 189	7.7	34.0	3.5	175 708	3.5	4 912	6.4	602 451	6.0
2017	1 651	6.9	4 868 788	8.4	37.2	9.4	193 478	10.1	5 474	11.4	658 064	9.2
2018	1 764	6.9	5 201 856	6.8	37.8	1.6	200 652	3.7	5 448	-0.5	697 072	5.9

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

Presentation of 2018 Air Transport Statistical Results

Table 3. Trends in load factors — international and domestic
(scheduled services, 2009–2018)

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 %
2009	4 561 413	5 948 503	77	155 819	4 620	577 747	931 795	62
2010	4 924 229	6 299 370	78	186 631	4 855	645 596	966 133	67
2011	5 248 140	6 727 814	78	187 191	5 006	677 631	1 024 558	66
2012	5 528 880	7 010 807	79	185 239	5 195	701 269	1 055 369	66
2013	5 832 564	7 338 216	79	185 975	5 586	731 033	1 093 991	67
2014	6 181 177	7 753 755	80	194 633	6 076	773 895	1 156 102	67
2015	6 644 666	8 281 130	80	197 131	6 549	821 174	1 222 698	67
2016	7 135 773	8 887 995	80	204 187	6 681	871 639	1 304 086	67
2017	7 707 118	9 477 045	81	222 996	7 449	945 904	1 385 428	68
2018	8 257 635	10 105 144	82	230 967	7 393	1 004 763	1 452 363	69

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

Table 4. Regional distribution of scheduled traffic — 2018

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 (%)
Total (international and domestic) services									
Europe	13 147	8 930	1 123 001	2 175 225	84	53 575	263 614	355 855	74
Percentage of world traffic	24.2	23.6	26.0	26.3		23.2	26.2	24.5	
Africa	1 419	1 099	95 188	175 918	73	4 163	21 273	36 185	59
Percentage of world traffic	2.6	2.9	2.2	2.1		1.8	2.1	2.5	
Middle East	3 647	1 456	228 438	758 419	74	32 576	104 499	164 282	64
Percentage of world traffic	6.7	3.9	5.3	9.2		14.1	10.4	11.3	
Asia and Pacific	18 022	12 165	1 604 493	2 871 467	82	87 845	352 307	488 633	72
Percentage of world traffic	33.2	32.2	37.1	34.8		38.0	35.1	33.6	
North America	14 840	11 355	978 402	1 852 183	84	46 419	216 162	337 335	64
Percentage of world traffic	27.3	30.0	22.6	22.4		20.1	21.5	23.2	
Latin America and Caribbean	3 205	2 819	292 832	424 422	81	6 389	46 908	70 073	67
Percentage of world traffic	5.9	7.5	6.8	5.1		2.8	4.7	4.8	
Total	54 279	37 823	4 322 354	8 257 635	82	230 967	1 004 763	1 452 363	69
International services									
Europe	11 047	6 058	842 745	1 901 718	84	52 316	236 392	318 224	74
Percentage of world traffic	37.3	48.9	47.8	36.6		26.1	33.9	31.6	
Africa	1 091	534	51 855	144 249	72	4 082	18 127	31 855	57
Percentage of world traffic	3.7	4.3	2.9	2.8		2.0	2.6	3.2	
Middle East	3 359	1 081	183 901	724 394	74	32 430	101 102	159 241	63
Percentage of world traffic	11.3	8.7	10.4	13.9		16.2	14.5	15.8	
Asia and Pacific	8 643	2 770	458 953	1 574 630	81	77 642	226 938	314 447	72
Percentage of world traffic	29.2	22.3	26.0	30.3		38.7	32.6	31.3	
North America	3 907	1 340	154 451	634 177	82	28 635	86 890	140 072	62
Percentage of world traffic	13.2	10.8	8.8	12.2		14.3	12.5	13.9	
Latin America and Caribbean	1 554	615	72 075	222 689	81	5 546	27 623	41 986	66
Percentage of world traffic	5.3	5.0	4.1	4.3		2.8	4.0	4.2	
Total	29 600	12 399	1 763 979	5 201 856	81	200 652	697 072	1 005 825	69

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^{1,2}
(countries and groups of countries whose airlines performed more than 100 million total tonne-kilometres in 2018³)

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			Increase or decrease	Rank number			Increase or decrease	Rank number			Increase or decrease	Rank number			Increase or decrease
	in 2018	2018	2017	(%)	in 2018	2018	2017	(%)	in 2018	2018	2017	(%)	in 2018	2018	2017	(%)
United States	1	192 408	184 130	4	1	69 027	66 425	4	1	1 627 875	1 551 965	5	1	467 838	451 578	4
China ⁴	2	120 538	108 195	11	3	43 400	38 764	12	2	1 070 347	950 425	13	4	281 490	246 968	14
Hong Kong SAR ⁵		28 323	27 321	4		28 323	27 321	4		158 404	150 194	5		158 404	150 194	5
Macao SAR ⁶		563	494	14		563	494	14		5 314	4 611	15		5 314	4 611	15
United Arab Emirates	3	55 632	55 930	-1	2	55 632	55 930	-1	3	409 367	406 105	1	2	409 367	406 105	1
United Kingdom	4	39 308	35 943	9	4	38 506	35 156	10	4	356 465	323 349	10	3	347 274	314 304	10
Germany	5	31 852	32 655	-2	5	30 972	31 614	-2	5	242 054	248 024	-2	5	233 645	238 030	-2
Republic of Korea	6	29 147	27 374	6	6	27 929	26 119	7	13	178 239	164 424	8	8	166 232	152 042	9
Russian Federation	7	27 631	25 529	8	15	15 876	14 824	7	6	229 060	205 407	12	16	107 097	95 174	13
Qatar	8	26 594	24 077	10	7	26 594	24 077	10	15	152 223	143 937	6	11	152 223	143 937	6
Japan	9	26 391	27 090	-3	13	18 278	18 992	-4	11	197 830	191 538	3	17	102 440	97 519	5
Turkey	10	25 859	23 303	11	8	22 481	19 669	14	12	194 991	183 398	6	9	159 345	147 678	8
France	11	25 041	23 943	5	10	19 760	19 001	4	10	201 955	192 910	5	10	155 258	149 163	4
Canada	12	23 754	22 573	5	14	17 863	16 820	6	8	224 308	216 780	3	7	166 339	159 135	5
India	13	22 413	19 358	16	20	9 949	8 940	11	9	221 194	190 344	16	20	88 931	79 240	12
Ireland	14	20 606	18 871	9	9	20 376	18 669	9	7	224 623	204 660	10	6	222 317	202 638	10
Netherlands	15	18 813	18 219	3	11	18 696	18 123	3	20	127 739	121 961	5	13	126 571	121 000	5
Singapore	16	18 685	17 346	8	12	18 685	17 346	8	16	144 643	135 587	7	12	144 643	135 587	7
Australia	17	17 396	16 969	3	18	10 620	10 272	3	14	159 061	155 093	3	19	88 990	85 776	4
Thailand	18	16 043	14 630	10	17	13 524	12 151	11	18	132 748	119 169	11	15	107 932	95 743	13
Spain	19	14 005	12 768	10	17	11 778	10 740	10	19	110 914	119 074	10	14	108 918	99 291	10
Brazil	20	13 732	12 700	8	29	5 361	4 644	15	17	134 841	123 096	10	27	41 959	35 513	18
Indonesia	21	12 564	11 419	10	31	4 271	3 819	12	21	123 534	111 371	11	30	38 495	33 723	14
Malaysia	22	12 430	12 178	2	19	10 318	10 095	2	22	113 966	111 059	3	18	92 867	90 524	3
Mexico	23	11 097	9 864	13	27	5 678	4 929	15	23	100 042	89 317	12	25	47 063	41 053	15
Scandinavia ⁷	24	8 647	8 099	7	22	7 641	6 848	12	24	78 726	73 161	8	21	68 572	60 374	14
Saudi Arabia	25	7 981	7 061	13	24	6 478	5 510	18	25	75 731	67 949	11	22	59 809	51 573	16
Switzerland	26	7 931	7 155	11	21	7 915	7 138	11	28	59 775	54 436	10	23	59 617	54 279	10
Philippines	27	7 688	7 078	9	26	5 880	5 457	8	26	69 226	63 910	8	24	52 743	49 017	8
Luxembourg	28	7 572	7 549	0	23	7 572	7 549	0	82	2 491	2 274	10	80	2 491	2 274	10
Ethiopia	29	6 350	5 522	14	25	6 274	5 507	14	31	42 559	34 903	22	28	41 804	34 234	22
Viet Nam	30	6 209	5 522	12	37	3 563	3 034	17	27	63 592	56 278	13	32	36 224	30 583	18
Italy	31	6 155	5 851	5	28	5 432	5 141	6	29	47 961	44 755	7	29	40 729	37 649	8
Colombia	32	4 947	4 621	7	36	3 635	3 362	8	35	36 063	33 545	8	41	23 426	21 439	9
Chile	33	4 878	4 418	10	38	3 395	3 168	7	33	36 807	34 866	6	42	21 601	21 684	0
New Zealand	34	4 804	4 587	5	32	4 235	4 046	5	34	36 748	34 537	6	35	30 938	29 035	7
Hungary	35	4 387	3 604	22	30	4 380	3 596	22	30	45 225	37 152	22	26	45 157	37 077	22
Portugal	36	4 160	3 843	8	34	3 888	3 592	8	32	40 718	37 562	8	31	37 916	34 997	8
Finland	37	4 108	3 666	12	33	4 002	3 567	12	36	34 855	31 052	12	33	33 626	29 908	12
South Africa	38	3 965	3 892	2	46	2 027	2 400	-16	37	34 652	33 181	4	50	15 218	17 998	-15
Belgium	39	3 770	4 136	-9	35	3 770	4 136	-9	44	25 127	25 916	-3	37	25 126	25 916	-3
Israel	40	3 405	3 210	6	39	3 369	3 175	6	46	23 918	22 785	5	40	23 535	22 411	5
Panama	41	3 300	3 031	9	40	3 295	3 026	9	38	32 528	29 853	9	34	32 472	29 801	9
Argentina	42	3 020	3 009	0	52	1 619	1 752	-8	39	29 907	29 966	0	52	14 650	16 208	-10
Peru	43	3 020	2 802	8	45	2 160	2 014	7	41	27 076	24 880	9	44	18 612	17 137	9
Iran (Islamic Republic of)	44	3 003	3 116	-4	56	1 242	1 271	-2	40	27 243	28 040	-3	56	10 509	10 586	-1
Egypt	45	2 990	2 700	11	41	2 885	2 621	10	43	25 737	23 228	11	38	24 695	22 453	10
Oman	46	2 854	2 461	16	42	2 779	2 384	17	42	25 938	22 381	16	36	25 170	21 571	17
Iceland	47	2 552	2 297	11	43	2 543	2 288	11	45	24 229	21 638	12	39	24 148	21 553	12
Austria	48	2 455	2 810	-13	44	2 440	2 796	-13	47	20 697	24 083	-14	43	20 548	23 942	-14
Morocco	49	1 906	2 005	-5	48	1 841	1 949	-6	48	18 081	19 268	-6	45	17 440	18 714	-7
Sri Lanka	50	1 897	1 681	13	47	1 897	1 681	13	51	16 180	14 169	14	46	16 180	14 169	14
Pakistan	51	1 864	1 929	-3	51	1 663	1 716	-3	49	17 815	18 515	-4	47	15 780	16 303	-3
Poland	52	1 808	1 388	30	50	1 767	1 349	31	52	15 972	12 061	32	49	15 503	11 619	33
Kuwait	53	1 800	1 538	17	49	1 800	1 538	17	54	15 506	13 536	15	48	15 506	13 536	15
Kazakhstan	54	1 559	1 214	28	63	767	686	12	50	16 329	12 597	30	61	7 875	7 023	12
Ukraine	55	1 497	1 211	24	53	1 454	1 173	24	53	15 584	12 616	24	51	15 098	12 195	24
Kenya	56	1 459	1 334	9	54	1 384	1 278	8	56	11 658	11 053	5	55	10 940	10 517	4
Greece	57	1 367	1 295	6	57	1 147	1 093	5	55	14 141	13 368	6	53	11 857	11 275	5
Bahrain	58	1 362	1 174	16	55	1 362	1 174	16	57	11 641	9 748	19	54	11 641	9 748	19
Bangladesh	59	1 170	1 120	4	58	1 053	1 038	2	58	10 616	9 087	17	58	9 528	8 401	13
Jordan	60	955	906	5	59	953	905	5	60	8 517	8 138	5	59	8 503	8 124	5
Mauritius	61	915	856	7	60	905	845	7	63	7 517	7 281	3	62	7 403	7 169	3
Czechia	62	897	834	8	61	896	833	8	59	9 668	8 930	8	57	9 660	8 920	8
Uzbekistan	63	855	774	10	62	821	746	10	61	8 408	7 113	18	60	8 045	6 814	18
Algeria	64	740	710	4	67	611	593	3	62	7 879	7 590	4	63	6 471	6 305	3
Fiji	65	698	648	8	64	693	643	8	67	5 909	5 452	8	66	5 856	5 404	8
Tunisia	66	635	586	8	65	629	580	8	65	6 319	5 769	10	64	6 253	5 698	10
Ecuador	67	625	611	2	71	475	472	1	66	5 996	5 936	1	70	4 448	4 512	-1
Lebanon	68	623	585	6	66	623	585	6	68	5 508	5 104	8	67	5 508	5 104	8
Romania	69	608	556	9	68	574	523	10	64	6 338	5 775	10	65	5 969	5 434	10
El Salvador	70	570	529	8	69	570	529	8	69	5 162	4 950	4	68	5 162	4 950	4
Brunei Darussalam	71	484	473	2	70	484	473	2	74	3 920	3 768	4	72	3 920	3 768	4
Angola	72	466	417	12	72	435	387	12	71	4 292	3 877	11	71	3 949	3 556	11
Nigeria	73	428	318	35	119	33	37	-10	72	4 088	2 960	38	126	137	172	-20
Latvia	74	416	334	24	73	416	334	24	70	4 482	3 610	24	69	4 480	3 610	24
Azerbaijan	75	411	447	-8	74	373	410	-9	73	4 033	4 204	-4	73	3 626	3 813	-5
Malta	76	362	229	58	75	362	229	58	75	3 581	2 265	58	74	3 581	2 265	58
Trinidad And Tobago	77	359	352	2	76	352	344	2	76	3 536	3 491	1	75	3 459	3 411	1
Costa Rica	78	343	273	25	77	341	268	27</								

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 2018	2018	2017	Increase or decrease (%)	Rank number in 2018	2018	2017	Increase or decrease (%)	Rank number in 2018	2018	2017	Increase or decrease (%)	Rank number in 2018	2018	2017	Increase or decrease (%)
Bolivia (Plurinational State of)	79	327	314	-4	84	181	172	-6	80	3 131	3 043	-3	86	1 701	1 644	-3
Belarus	80	325	291	-12	78	325	291	-12	79	3 217	2 871	-12	77	3 217	2 871	-12
Turkmenistan	81	311	285	-9	80	242	224	-8	78	3 255	2 940	-11	79	2 498	2 277	-10
Serbia	82	282	303	-7	79	282	303	-7	81	2 622	2 933	-11	78	2 622	2 933	-11
Nepal	83	232	202	-15	83	185	170	-9	84	2 269	1 970	-15	83	1 806	1 654	-9
Cambodia	84	228	188	-22	81	223	182	-23	83	2 275	1 850	-23	81	2 227	1 796	-24
Afghanistan	85	227	198	-15	92	126	117	-8	85	2 091	1 844	-13	94	1 112	1 051	-6
Iraq	86	223	201	-11	82	204	181	-13	86	2 073	1 856	-12	82	1 877	1 656	-13
Papua New Guinea	87	185	204	-9	94	124	132	-6	92	1 539	1 748	-12	97	963	1 062	-9
Rwanda	88	176	133	-33	85	176	132	-33	87	1 765	1 325	-33	84	1 762	1 321	-33
Republic of Moldova	89	176	164	-7	86	176	164	-7	88	1 748	1 636	-7	85	1 748	1 636	-7
Myanmar	90	174	169	-3	103	83	84	-1	89	1 697	1 711	-1	101	792	824	-4
Namibia	91	158	149	-6	87	153	144	-6	90	1 647	1 575	-5	87	1 577	1 515	-4
Croatia	92	154	152	-1	89	137	135	-1	93	1 521	1 506	-1	89	1 354	1 338	-1
Venezuela (Bolivarian Republic of)	93	151	302	-50	104	80	177	-55	96	1 351	3 089	-56	105	711	1 841	-61
Kyrgyzstan	94	143	217	-34	91	128	192	-34	94	1 432	2 176	-34	92	1 281	1 931	-34
Bulgaria	95	143	163	-12	90	137	157	-13	91	1 562	1 783	-12	88	1 496	1 721	-13
Suriname	96	140	125	-11	88	140	125	-12	100	1 064	1 134	-6	95	1 064	1 127	-6
Mongolia	97	136	121	-13	93	124	108	-15	95	1 405	1 225	-15	91	1 290	1 108	-16
Libya	98	123	148	-17	95	117	137	-15	98	1 233	1 466	-16	93	1 169	1 362	-14
Tajikistan	99	117	135	-13	96	116	133	-13	97	1 338	1 468	-9	90	1 326	1 448	-8
Democratic Republic of the Congo	100	113	135	-16	141	2	-	-	99	1 136	1 344	-15	140	25	-	-
Cuba	101	109	254	-57	98	93	226	-59	102	913	2 060	-56	103	748	1 785	-58
Georgia	102	109	63	-72	97	109	63	-73	101	1 040	600	-73	96	1 039	596	-74
Madagascar	103	103	89	-15	101	84	72	-16	103	879	751	-17	106	688	580	-19
Total for above countries (105) ⁸		984 617	925 997	6		677 305	638 546	6		8 145 494	7 596 927	7		5 093 485	4 762 435	7
Rest of the World		20 146	19 907			19 767	19 518			112 141	110 191			108 371	106 353	
World total		1 004 763	945 904	6		697 072	658 064	6		8 257 635	7 707 118	7		5 201 856	4 868 788	7

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 2018 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.

Data coverage — 96% official statistics reported by Member States, 4% 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 2018¹)

Country or group of countries	FREIGHT TONNE-KILOMETRES (millions)							
	Total services (international and domestic)				International services			
	Rank number in 2018	2018	2017	Increase or decrease (%)	Rank number in 2018	2018	2017	Increase or decrease (%)
United States	1	42 985	41 592	3	1	25 865	24 727	5
China ²	2	25 256	23 324	8	2	18 136	16 502	10
<i>Hong Kong SAR</i> ³		12 677	12 415	2		12 677	12 415	2
<i>Macao SAR</i> ⁴		32	33	-3		32	33	-3
United Arab Emirates	3	15 963	16 616	-4	3	15 963	16 616	-4
Qatar	4	12 667	10 970	15	4	12 667	10 970	15
Republic of Korea	5	11 930	11 512	4	5	11 877	11 455	4
Japan	6	9 421	10 685	-12	6	8 486	9 700	-13
Germany	7	7 970	7 902	1	7	7 932	7 861	1
Luxembourg	8	7 323	7 321	0	8	7 323	7 321	0
Russian Federation	9	6 811	6 845	-1	10	6 130	6 167	-1
United Kingdom	10	6 198	5 916	5	9	6 198	5 915	5
Turkey	11	5 949	4 800	24	11	5 916	4 736	25
Netherlands	12	5 887	5 855	1	12	5 887	5 855	1
Singapore	13	5 195	5 063	3	13	5 195	5 063	3
France	14	4 444	4 261	4	14	3 972	3 823	4
Canada	15	3 434	2 841	21	15	2 770	2 311	20
India	16	2 704	2 407	12	19	1 893	1 662	14
Thailand	17	2 666	2 512	6	16	2 637	2 485	6
Ethiopia	18	2 089	2 076	1	17	2 089	2 076	1
Australia	19	2 028	1 983	2	18	1 899	1 857	2
Brazil	20	1 846	1 737	6	24	1 309	1 210	8
Switzerland	21	1 841	1 581	16	20	1 841	1 581	16
Italy	22	1 418	1 437	-1	21	1 416	1 435	-1
Malaysia	23	1 404	1 455	-3	22	1 331	1 340	-1
Colombia	24	1 349	1 274	6	26	1 274	1 200	6
New Zealand	25	1 349	1 336	1	23	1 327	1 313	1
Belgium	26	1 285	1 574	-18	25	1 285	1 574	-18
Chile	27	1 226	1 238	-1	27	1 167	1 175	-1
Indonesia	28	1 132	1 052	8	36	581	564	3
Spain	29	1 117	1 079	4	28	1 102	1 060	4
Mexico	30	1 090	929	17	31	969	820	18
Saudi Arabia	31	1 085	868	25	29	1 048	826	27
Israel	32	995	913	9	30	995	913	9
Finland	33	958	852	12	32	957	852	12
Philippines	34	836	753	11	35	604	560	8
Scandinavia ⁵	35	741	762	-3	33	737	760	-3
South Africa	36	716	833	-14	34	649	779	-17
Oman	37	510	435	17	37	507	434	17
Viet Nam	38	481	453	6	44	300	279	8
Portugal	39	454	422	8	38	445	412	8
Egypt	40	438	404	8	39	437	404	8
Sri Lanka	41	436	398	9	40	436	398	10
Bahrain	42	421	390	8	41	421	390	8
Kuwait	43	392	310	27	42	392	310	27
Austria	44	374	391	-5	43	373	391	-5
Peru	45	313	317	-1	45	295	298	-1
Argentina	46	312	305	2	46	294	287	2

Country or group of countries	FREIGHT TONNE-KILOMETRES (millions)							
	Total services (international and domestic)				International services			
	Rank number in 2018	2018	2017	Increase or decrease (%)	Rank number in 2018	2018	2017	Increase or decrease (%)
Kenya	47	295	276	7	47	292	273	7
Iran (Islamic Republic of)	48	291	326	-11	51	187	209	-11
Poland	49	271	222	22	48	271	222	22
Mauritius	50	234	196	19	49	234	196	19
Pakistan	51	218	215	1	50	204	204	0
Jordan	52	176	159	11	52	176	159	11
Ireland	53	169	154	9	53	169	154	9
Iceland	54	164	167	-2	54	163	166	-1
Brunei Darussalam	55	129	133	-2	55	129	133	-2
Fiji	56	107	103	4	56	107	103	4
Morocco	57	98	78	25	57	97	78	25
Uzbekistan	58	89	127	-29	58	89	127	-29
Angola	59	78	67	16	59	77	67	16
Ukraine	60	75	54	40	60	75	54	40
Zambia	61	75	82	-8	61	75	81	-7
Ecuador	62	64	58	11	62	57	51	11
Bangladesh	63	64	62	3	64	48	47	3
Lebanon	64	57	53	6	63	57	53	6
Kazakhstan	65	50	50	1	68	37	37	1
Panama	66	48	46	4	65	48	46	4
Azerbaijan	67	44	62	-28	66	43	60	-29
Trinidad and Tobago	68	41	37	10	67	41	37	10
Suriname	69	33	23	43	69	33	23	43
Papua New Guinea	70	31	29	6	71	27	25	8
Afghanistan	71	30	21	38	75	20	15	30
Algeria	72	28	25	14	70	28	24	15
Namibia	73	26	22	18	72	26	22	18
Czechia	74	25	28	-9	73	25	28	-9
Total for above countries (76) ⁶		221 158	213 299	4		190 870	183 807	4
Rest of the World		9 809	9 697			9 782	9 671	
World total		230 967	222 996	4		200 652	193 478	4

1. Some 2018 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.

Data coverage — 96% official statistics reported by Member States, 4% other sources and ICAO estimation methodology.
Source. — ICAO Air Transport Reporting Form A and A-S plus ICAO estimates.

Table 7. Estimated international non-scheduled revenue passenger traffic, 2009–2018

Category	Millions of revenue passenger-kilometres performed									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Non-scheduled traffic ¹	197 690	210 475	221 000	225 378	229 660	236 320	216 615	185 241	203 033	214 706
Annual change (%)	-11.5	6.5%	5.0%	2.0%	1.9%	2.9%	-8.3%	-14.5%	9.6%	5.7%
Scheduled traffic	2 789 696	3 026 966	3 257 615	3 457 405	3 654 662	3 881 747	4 170 997	4 491 189	4 868 788	5 201 856
Annual change (%)										
Total traffic	2 987 386	3 237 441	3 478 615	3 682 783	3 884 322	4 118 067	4 387 612	4 676 430	5 071 821	5 416 562
Annual change (%)										
Non-scheduled traffic as percentage of total	6.6	6.5	6.4	6.1	5.9	5.7	4.9	4.0	4.0	4.0

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, 2018

Rank No.	City	Airport	Passengers embarked and disembarked ¹			Aircraft movements ²		
			2018 (thousands)	2017 (thousands)	2018/2017 (%)	2018 (thousands)	2017 (thousands)	2018/2017 (%)
1	Atlanta GA	Hartsfield-Jackson Atlanta International Airport	107 394	103 934	3.3	896	879.6	1.8
2	Beijing	Beijing Capital International Airport	100 983	95 786	5.4	614	597.3	2.8
3	Dubai	Dubai International Airport	89 149	88 242	1.0	408	409.5	-0.3
4	Los Angeles CA	Los Angeles International Airport	87 534	84 559	3.5	708	700.4	1.1
5	Tokyo	Tokyo International (Haneda) Airport	87 503	85 409	2.5	453	453.1	0.1
6	Chicago IL	O'Hare International Airport	83 339	79 828	4.4	904	867.0	4.2
7	London	Heathrow Airport	80 126	78 015	2.7	478	475.9	0.4
8	Hong Kong	Hong Kong International Airport	74 517	72 664	2.6	439	432.4	1.6
9	Shanghai	Pudong International Airport	74 006	70 001	5.7	505	496.8	1.6
10	Paris	Aéroport de Paris-Charles de Gaulle	72 230	69 471	4.0	488	482.7	1.1
11	Amsterdam	Amsterdam Airport Schiphol	71 053	68 515	3.7	518	514.3	0.7
12	New Delhi	Indira Gandhi International Airport	69 901	63 452	10.2	481	447.9	7.3
13	Guangzhou	Guangzhou Bai Yun International Airport	69 769	65 852	5.9	477	465.3	2.6
14	Frankfurt	Flughafen Frankfurt/Main	69 510	64 500	7.8	512	475.5	7.7
15	Dallas/Fort Worth TX	Dallas/Ft Worth International Airport	69 113	67 093	3.0	667	654.3	2.0
16	Incheon	Incheon International Airport	68 351	62 158	10.0	390	363.2	7.4
17	Istanbul	Atatürk International Airport	68 193	64 118	6.4	465	460.8	0.8
18	Jakarta	Soekarno-Hatta International Airport	66 908	63 000	6.2	469	447.4	4.7
19	Singapore	Singapore Changi Airport	65 628	62 220	5.5	391	378.4	3.3
20	Denver CO	Denver International Airport	64 495	61 379	5.1	595	575.0	3.5
21	Bangkok	Suvarnabhumi International Airport	63 379	60 861	4.1	370	351.7	5.2
22	New York NY	John F. Kennedy International Airport	61 588	59 550	3.4	455	448.8	1.4
23	Kuala Lumpur	KL International Airport	60 013	58 558	2.5	400	387.2	3.3
24	Madrid	Aeropuerto de Adolfo Suárez Madrid-Barajas	57 863	53 384	8.4	410	387.6	5.7
25	San Francisco CA	San Francisco International Airport	57 708	55 823	3.4	470	460.3	2.1
Total			1,840,255	1,758,374	4.7	12,962	12,612	2.8

Top 25 airports ranked by international passengers, 2018

Rank No.	City	Airport	Passengers embarked and disembarked ¹			Aircraft movements ²		
			2018 (thousands)	2017 (thousands)	2018/2017 (%)	2018 (thousands)	2017 (thousands)	2018/2017 (%)
1	Dubai	Dubai International Airport	88 885	87 722	1.3	408	409	-0.3
2	London	Heathrow Airport	75 307	73 187	2.9	436	433	0.7
3	Hong Kong	Hong Kong International Airport	74 361	72 462	2.6	411	404	1.7
4	Amsterdam	Amsterdam Airport Schiphol	70 956	68 401	3.7	499	496	0.6
5	Incheon	Incheon International Airport	67 676	61 521	10.0	372	355	4.8
6	Paris	Aéroport de Paris-Charles de Gaulle	66 383	63 697	4.2	422	418	1.0
7	Singapore	Singapore Changi Airport	64 890	61 574	5.4	386	373	3.5
8	Frankfurt	Flughafen Frankfurt/Main	61 775	57 122	8.1	426	395	7.8
9	Bangkok	Suvarnabhumi International Airport	50 869	48 812	4.2	278	260	6.9
10	Istanbul	Atatürk International Airport	48 979	44 470	10.1	325	311	4.5
11	Kuala Lumpur	KL International Airport	43 532	42 355	2.8	273	265	2.8
12	London	Gatwick Airport	42 348	41 477	2.1	240	238	0.6
13	Madrid	Aeropuerto de Adolfo Suárez Madrid-Barajas	41 857	38 479	8.8	258	241	7.2
14	Barcelona	Aeropuerto de Barcelona-El Prat	36 668	34 527	6.2	228	219	4.0
15	Munich	Munich Airport	36 546	34 722	5.3	301	294	2.2
16	Tokyo	Narita International Airport	35 300	33 091	6.7	197	193	2.1
17	Doha	Hamad International Airport	34 495	35 262	-2.2	217	217	-0.1
18	New York NY	John F. Kennedy International Airport	33 486	32 570	2.8	178	180	-1.0
19	Toronto ON	Toronto Pearson International Airport	31 610	29 613	6.7	252	245	2.9
20	Rome	Aeroporto di Roma-Fiumicino	31 430	29 379	7.0	204	194	5.0
21	Dublin	Dublin Airport	31 145	29 285	6.4	213	202	5.4
22	Shanghai	Pudong International Airport	30 864	28 360	8.8	200	192	4.1
23	Zurich	Flughafen Zürich	30 357	28 671	5.9	234	226	3.8
24	Copenhagen	Copenhagen Airport	28 226	27 126	4.1	238	231	3.0
25	Vienna	Vienna International Airport	26 362	23 735	11.1	225	209	7.7
Total			1,184,309	1,127,620	5.0	7,419	7,199	3.0

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).

Source.— ICAO Air Transport Reporting Form I, Airports Council International (ACI) and airport websites.

Table 9. Operating, net results¹ and variance analysis
(scheduled airlines of ICAO Member States)

Year	Operating revenues USD (millions)	Operating expenses USD (millions)	Operating result		Net result ²	
			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 ⁽³⁾	757,600	697,900	59,700	7.9	40,100	5.3
2018 ^(3,4)	814,200	763,300	50,900	6.3	33,400	4.1

Analysis of variance in operating result (2018 over 2017)

	2018	2017	Difference
Operating revenues, USD (millions)	814,200	757,600	56,600
Operating expenses, USD (millions)	763,300	697,900	65,400
Operating result, USD (millions)	50,900	59,700	-8,800
RTK (millions)	1,004,763	945,904	58,859
ATK (millions)	1,452,363	1,385,428	66,935
Yield, USD (cent)	81.0	80.1	0.9
Cost/ATK, USD (cent)	52.6	50.4	2.2
Weight load factor (%)	69.2	68.3	1
Break-even weight load factor (%)	64.9	62.9	2

Analysis of difference in operating revenues (2018 over 2017)

Due to increase in yield, USD (millions)	9,458	
Due to increase in traffic, USD (millions)	47,142	
Net increase in operating revenues, USD (millions)	56,600	(A)

Analysis of difference in operating expenses (2018 over 2017)

Due to increase in unit cost, USD (millions)	31,682	
Due to increase in capacity offered, USD (millions)	33,718	
Net increase in operating expenses, USD (millions)	65,400	(B)
Net reduction in operating result (2018 over 2017), USD (millions)	-8,800	(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 2017 have been provisionally estimated and exclude exceptional accounting items.

4. Complete financial data for 2018 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 fleet¹ of ICAO Member States
at the end of each year, 2009 - 2018**

Year	Turbojet		Turboprop		Total aircraft All types
	Number	Percentage	Number	Percentage	
2009	20 332	87.4	2 932	12.6	23 264
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

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)

Presentation of 2018 Air Transport Statistical Results

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 ¹	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 ²	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 ³	27	2
2007	22	4	2	2	3	0	11	33	18
2008	23	1	6	3	0	0	13 ³	31	11
2009	23	5	3	1	0	0	14 ³	4	3
2010	14	0	1	1	0	1	11 ³	13	6
2011	6	0	2	0	0	1	3 ³	152	35
2012	10	1	2	2	0	0	5 ³	44	20
2013	8	1	0	3	0	1	2 ³	7	34
2014	21	2	2	9	0	1	7 ³	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	16	1	1	2	16	8	10