

Table 1. World total revenue traffic — international and domestic
(scheduled services, 2008–2017)

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 %
2008	2 500	1.5	4 608 466	2.0	39.9	-3.2	171 159	-1.0	4 894	11.3	603 293	1.7
2009	2 490	-0.4	4 559 935	-1.1	39.6	-0.8	155 966	-8.9	4 626	-5.5	577 401	-4.3
2010	2 707	8.7	4 922 634	8.0	47.2	19.2	186 806	19.8	4 862	5.1	645 209	11.7
2011	2 872	6.1	5 246 440	6.6	48.2	2.2	187 366	0.3	5 012	3.1	677 225	5.0
2012	3 006	4.6	5 527 089	5.3	47.5	-1.4	185 413	-1.0	5 202	3.8	700 849	3.5
2013	3 140	4.5	5 830 675	5.5	48.6	2.3	186 150	0.4	5 594	7.5	730 595	4.2
2014	3 319	5.7	6 179 175	6.0	50.2	3.3	194 816	4.7	6 084	8.8	773 431	5.9
2015	3 558	7.2	6 642 514	7.5	50.5	0.5	197 316	1.3	6 557	7.8	820 682	6.1
2016	3 797	6.7	7 133 461	7.4	52.3	3.7	204 379	3.6	6 690	2.0	871 117	6.1
2017	4 071	7.2	7 699 420	7.9	56.1	7.3	223 730	9.5	7 485	11.9	945 365	8.5

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

Table 2. World revenue traffic — international
(scheduled services, 2008–2017)

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 %
2008	920	3.9	2 820 625	3.1	23.9	-0.9	144 992	-0.8	3 213	6.2	410 465	1.7
2009	932	1.3	2 784 646	-1.3	23.3	-2.3	132 231	-8.8	3 195	-0.6	394 460	-3.9
2010	1 031	10.6	3 021 487	8.5	30.1	29.2	161 040	21.8	3 399	6.4	447 754	13.5
2011	1 119	8.5	3 251 718	7.6	31.0	2.8	161 700	0.4	3 473	2.2	470 724	5.1
2012	1 186	6.0	3 451 146	6.1	30.5	-1.6	159 433	-1.4	3 604	3.8	486 793	3.4
2013	1 247	5.2	3 648 046	5.7	31.2	2.2	159 920	0.3	3 921	8.8	506 492	4.0
2014	1 327	6.4	3 874 721	6.2	32.3	3.6	167 806	4.9	4 307	9.8	537 317	6.1
2015	1 430	7.7	4 163 446	7.5	32.6	0.8	170 107	1.4	4 606	7.0	568 133	5.7
2016	1 539	7.6	4 483 059	7.7	33.7	3.5	175 978	3.5	4 899	6.4	602 392	6.0
2017	1 660	7.9	4 860 927	8.4	37.0	9.8	194 349	10.4	5 489	12.0	657 836	9.2

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

Presentation of 2017 Air Transport Statistical Results

Table 3. Trends in load factors — international and domestic
(scheduled services, 2008–2017)

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 %
2008	4 608 466	6 062 667	76	171 159	4 894	603 293	971 318	62
2009	4 559 935	5 939 854	77	155 966	4 626	577 401	930 880	62
2010	4 922 634	6 290 211	78	186 806	4 862	645 209	965 184	67
2011	5 246 440	6 718 033	78	187 366	5 012	677 225	1 023 552	66
2012	5 527 089	7 000 614	79	185 413	5 202	700 849	1 054 332	66
2013	5 830 675	7 327 547	80	186 150	5 594	730 595	1 092 917	67
2014	6 179 175	7 742 481	80	194 816	6 084	773 431	1 154 967	67
2015	6 642 514	8 278 447	80	197 316	6 557	820 682	1 221 965	67
2016	7 133 461	8 884 871	80	204 379	6 690	871 117	1 303 304	67
2017	7 699 420	9 465 562	81	223 730	7 485	945 365	1 384 492	68

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

Table 4. Regional distribution of scheduled traffic — 2017

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	12 633	8 809	1 067 047	2 042 727	84	51 650	249 465	340 581	73
Percentage of world traffic	24.5	24.0	26.2	26.5		23.1	26.4	24.6	
Africa	1 371	1 043	83 354	161 631	71	4 167	19 758	34 180	58
Percentage of world traffic	2.7	2.8	2.0	2.1		1.9	2.1	2.5	
Middle East	3 696	1 397	217 519	724 147	75	30 787	99 345	153 166	65
Percentage of world traffic	7.2	3.8	5.3	9.4		13.8	10.5	11.1	
Asia and Pacific	16 556	11 559	1 485 001	2 607 057	81	86 712	326 684	462 051	71
Percentage of world traffic	32.1	31.5	36.5	33.9		38.8	34.6	33.4	
North America	14 304	11 083	940 807	1 768 744	83	44 433	206 703	328 771	63
Percentage of world traffic	27.7	30.2	23.1	23.0		19.9	21.9	23.7	
Latin America and Caribbean	3 029	2 831	277 466	395 114	81	5 981	43 410	65 744	66
Percentage of world traffic	5.9	7.7	6.8	5.1		2.7	4.6	4.7	
Total	51 588	36 722	4 071 193	7 699 420	81	223 730	945 365	1 384 492	68
International services									
Europe	10 587	5 908	790 652	1 782 198	84	50 412	223 251	303 660	74
Percentage of world traffic	37.5	49.0	47.6	36.7		25.9	33.9	31.8	
Africa	1 084	528	50 630	137 806	70	4 097	17 431	30 839	57
Percentage of world traffic	3.8	4.4	3.0	2.8		2.1	2.6	3.2	
Middle East	3 447	1 053	178 709	694 470	74	30 732	96 500	148 647	65
Percentage of world traffic	12.2	8.7	10.8	14.3		15.8	14.7	15.6	
Asia and Pacific	7 880	2 631	423 001	1 429 884	80	76 913	212 185	297 296	71
Percentage of world traffic	27.9	21.8	25.5	29.4		39.6	32.3	31.2	
North America	3 805	1 314	148 252	610 714	82	27 039	83 245	135 354	62
Percentage of world traffic	13.5	10.9	8.9	12.6		13.9	12.7	14.2	
Latin America and Caribbean	1 423	624	69 241	205 856	82	5 157	25 224	38 586	65
Percentage of world traffic	5.0	5.2	4.2	4.2		2.7	3.8	4.0	
Total	28 227	12 059	1 660 485	4 860 927	81	194 349	657 836	954 381	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 2017³)

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 2017	2017	2016	Increase or decrease (%)	Rank number in 2017	2017	2016	Increase or decrease (%)	Rank number in 2017	2017	2016	Increase or decrease (%)	Rank number in 2017	2017	2016	Increase or decrease (%)
United States	1	184 130	176 486	4	1	66 425	63 072	5	1	1 551 965	1 502 281	3	1	451 578	440 153	3
China ⁴	2	108 195	96 065	13	3	38 764	33 889	14	2	950 425	836 516	14	4	246 968	214 893	15
Hong Kong SAR ⁵		27 321	25 383	8		27 321	25 383	8		150 194	141 139	6		150 194	141 139	6
Macao SAR ⁶		492	497	-1		492	497	-1		4 581	4 680	-2		4 581	4 680	-2
United Arab Emirates	3	55 863	53 797	4	2	55 863	53 797	4	3	406 105	388 871	4	2	406 105	388 871	4
United Kingdom	4	35 983	34 211	5	4	35 192	33 427	5	4	323 732	307 328	5	3	314 655	298 566	5
Germany	5	32 795	32 019	2	5	31 789	31 027	2	5	255 444	251 175	2	5	245 229	241 143	2
Japan	6	27 090	24 723	10	11	18 992	16 995	12	10	191 538	179 989	6	15	97 519	90 400	8
Russian Federation	7	25 529	21 909	17	15	14 824	12 202	21	7	205 407	176 622	16	16	95 174	77 199	23
Republic of Korea	8	24 627	23 268	6	7	23 650	22 297	6	14	149 335	136 185	10	11	138 964	125 743	11
Qatar	9	24 077	21 672	11	6	24 077	21 672	11	15	143 937	137 602	5	10	143 937	137 602	5
France	10	23 943	22 927	4	10	19 001	18 128	5	9	192 910	183 571	5	8	149 163	141 687	5
Turkey	11	23 303	20 553	13	8	19 669	17 167	15	12	183 398	169 642	8	9	147 678	135 963	9
Canada	12	22 573	20 121	12	14	16 820	14 757	14	6	216 780	196 583	10	7	159 135	141 832	12
Singapore	13	19 601	18 671	5	9	19 601	18 671	5	16	134 929	126 895	6	12	134 929	126 895	6
India	14	19 364	16 463	18	20	8 940	7 566	18	11	190 402	163 967	16	20	79 240	69 528	14
Ireland	15	18 874	16 076	17	12	18 667	15 921	17	8	203 864	179 979	13	6	201 787	178 428	13
Netherlands	16	18 152	16 431	10	13	18 056	16 326	11	18	121 961	114 924	6	13	121 000	113 869	6
Australia	17	16 969	16 275	4	18	10 272	9 684	6	13	155 093	149 295	4	18	85 776	80 849	6
Thailand	18	14 309	12 399	15	16	11 746	10 154	16	20	117 131	100 875	16	17	92 947	79 551	17
Spain	19	12 807	11 796	9	17	10 772	9 865	9	19	119 288	110 962	8	14	99 471	92 207	8
Brazil	20	12 700	12 067	5	29	4 644	4 101	13	17	123 096	117 135	5	28	35 513	31 757	12
Malaysia	21	11 701	10 447	12	19	9 376	8 245	14	22	108 198	96 741	12	19	84 981	74 321	14
Indonesia	22	11 515	9 518	21	32	3 906	3 168	23	21	112 428	101 009	11	30	34 711	28 366	22
Mexico	23	9 864	8 459	17	28	4 929	3 993	23	23	89 317	76 948	16	25	41 053	33 441	23
Scandinavia ⁷	24	8 298	7 626	9	23	7 065	6 409	10	24	75 056	69 204	8	21	62 516	56 805	10
Luxembourg	25	7 549	7 097	6	21	7 549	7 097	6	82	2 274	2 195	4	79	2 274	2 195	4
Philippines	26	7 492	6 706	12	26	5 429	4 787	13	25	68 471	61 621	11	24	48 744	43 384	12
Switzerland	27	7 154	6 717	7	22	7 138	6 700	7	28	54 435	50 574	8	22	54 278	50 415	8
Saudi Arabia	28	7 061	6 295	12	24	5 510	4 771	15	26	67 949	59 799	14	23	51 573	43 785	18
Italy	29	6 049	5 655	7	27	5 313	4 919	8	29	47 471	46 724	2	26	39 967	39 233	2
Ethiopia	30	5 572	4 405	26	25	5 507	4 352	27	32	34 903	29 000	20	31	34 234	28 450	20
Viet Nam	31	5 522	4 746	16	40	3 034	2 463	23	27	56 278	47 689	18	33	30 583	24 421	25
New Zealand	32	4 587	4 229	8	31	4 046	3 754	8	34	34 537	33 297	4	35	29 035	28 250	3
Colombia	33	4 467	4 258	5	36	3 203	3 030	6	35	33 537	31 362	7	44	21 369	19 531	9
Chile	34	4 417	4 446	-1	38	3 166	3 275	-3	33	34 823	33 175	5	40	21 661	20 846	4
Belgium	35	4 076	3 823	7	30	4 076	3 823	7	40	25 916	23 484	10	36	25 916	23 483	10
South Africa	36	3 892	3 802	2	43	2 401	2 389	0	36	33 181	33 160	0	46	17 998	18 842	-4
Finland	37	3 856	3 424	13	33	3 710	3 275	13	37	32 951	29 238	13	32	31 338	27 594	14
Portugal	38	3 847	3 141	23	35	3 596	2 924	23	30	37 602	30 862	22	29	35 037	28 676	22
Hungary	39	3 604	2 915	24	34	3 596	2 914	23	31	37 152	30 013	24	27	37 077	29 998	24
Israel	40	3 211	3 031	6	37	3 176	2 996	6	45	22 870	22 386	2	39	22 483	22 006	2
Argentina	41	3 172	2 757	15	49	1 752	1 577	11	38	31 764	27 772	14	48	16 207	14 866	9
Panama	42	3 101	2 991	4	39	3 074	2 966	4	39	29 737	28 646	4	34	29 466	28 402	4
Austria	43	2 810	2 664	6	41	2 796	2 651	5	43	24 083	22 652	6	37	23 942	22 524	6
Egypt	44	2 778	2 600	7	42	2 701	2 531	7	44	23 744	22 456	6	38	22 989	21 774	6
Peru	45	2 772	2 423	14	47	2 014	1 705	18	42	24 581	22 645	9	47	17 137	15 503	11
Pakistan	46	2 574	2 379	8	46	2 261	2 071	9	41	24 603	23 359	5	43	21 458	20 240	6
Oman	47	2 460	2 108	17	44	2 385	2 047	17	46	22 367	18 456	21	41	21 575	17 792	21
Iran (Islamic Republic of)	48	2 289	1 921	19	56	1 119	872	28	48	21 540	19 041	13	55	9 550	8 275	15
Iceland	49	2 288	1 743	31	45	2 279	1 734	31	47	21 638	16 463	31	42	21 553	16 383	32
Morocco	50	1 955	1 635	20	48	1 901	1 588	20	49	18 809	15 809	19	45	18 272	15 342	19
Sri Lanka	51	1 640	1 706	-4	50	1 640	1 706	-4	50	13 984	14 546	-4	49	13 984	14 546	-4
Kuwait	52	1 405	1 045	34	51	1 405	1 045	34	52	13 269	9 251	43	50	13 269	9 251	43
Poland	53	1 388	997	39	52	1 349	963	40	54	12 063	8 659	39	52	11 621	8 269	41
Greece	54	1 290	1 193	8	58	1 086	1 008	8	51	13 319	12 302	8	53	11 205	10 377	8
Ukraine	55	1 211	1 009	20	54	1 169	974	20	53	12 548	10 621	18	51	12 125	10 259	18
Kenya	56	1 210	1 237	-2	55	1 164	1 193	-2	56	10 061	10 323	-3	56	9 539	9 809	-3
Bahrain	57	1 174	1 123	5	53	1 174	1 123	5	57	9 748	9 105	7	54	9 748	9 105	7
Azerbaijan	58	1 136	1 053	8	57	1 100	1 020	8	71	4 204	3 512	20	71	3 813	3 148	21
Kazakhstan	59	1 067	947	13	64	686	556	23	55	10 979	9 791	12	60	7 023	5 695	23
Bangladesh	60	949	829	14	60	866	759	14	61	7 376	7 773	-5	62	6 689	7 171	-7
Jordan	61	906	856	6	59	905	855	6	59	8 138	7 856	4	58	8 124	7 840	4
Mauritius	62	856	797	7	61	845	787	7	62	7 281	7 059	3	59	7 169	6 951	3
CZECHIA	63	834	587	42	62	833	586	42	58	8 930	6 181	44	57	8 920	6 173	44
Uzbekistan	64	774	694	12	63	746	665	12	63	7 113	6 401	11	61	6 814	6 087	12
Algeria	65	709	679	4	67	591	565	5	60	7 579	7 277	4	64	6 283	6 026	4
Tunisia	66	649	549	18	66	643	543	18	64	6 472	5 404	20	63	6 403	5 337	20
Fiji	67	648	573	13	65	643	569	13	67	5 452	4 858	12	66	5 404	4 814	12
Ecuador	68	611	602	2	72	472	464	2	65	5 936	5 884	1	69	4 512	4 474	1
Lebanon	69	584	536	9	68	584	536	9	68	5 090	4 677	9	67	5 090	4 677	9
Romania	70	556	503	11	70	524	486	8	66	5 780	5 233	10	65	5 438	5 043	8
El Salvador	71	529	410	29	69	529	410	29	69	4 950	4 760	4	68	4 950	4 760	4
Angola	72	482	406	19	73	445	364	22	70	4 536	3 954	15	70	4 141	3 509	18
Brunei Darussalam	73	473	456	4	71	473	456	4	72	3 768	3 660	3	72	3 768	3 660	3
Trinidad and Tobago	74	352	347	1	74	344	340	1	75	3 491	3 623	-4	74	3 411	3 545	-4
Latvia	75	334	265	26	75	334	265	26	73	3 610	2 854	26	73	3 610	2 854	26
Venezuela (Bolivarian Republic of)	76	329	467	-30	86	182	246	-26	74	3 514	4 992	-30	83	1 975	2 634	-25
Serbia	77	303	288	5	76	303	288	5	76	2 933	2 807	4	75	2 933	2 807	4
Belarus	78	291	241	21	77	291	241	21	77	2 871	2 378	21	76	2		

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 2017	2017	2016	Increase or decrease (%)	Rank number in 2017	2017	2016	Increase or decrease (%)	Rank number in 2017	2017	2016	Increase or decrease (%)	Rank number in 2017	2017	2016	Increase or decrease (%)
Iraq	79	277	242	14	79	265	230	15	78	2 753	2 409	14	77	2 636	2 290	15
Costa Rica	80	274	191	43	78	269	186	44	79	2 671	2 281	17	78	2 608	2 211	18
Bolivia (Plurinational State of)	81	260	293	-11	91	144	159	-9	80	2 511	2 842	-12	92	1 391	1 534	-9
Nigeria	82	239	323	-26	102	80	140	-43	81	2 313	3 191	-28	104	675	1 319	-49
Malta	83	229	229	0	80	229	229	0	83	2 265	2 265	0	80	2 265	2 265	0
Lithuania	84	224	223	0	81	219	219	0	86	2 056	2 051	0	82	2 014	2 009	0
Cuba	85	223	292	-24	82	195	253	-23	85	2 060	2 695	-24	86	1 785	2 298	-22
Kyrgyzstan	86	217	176	23	83	193	155	25	84	2 182	1 774	23	84	1 936	1 557	24
Papua New Guinea	87	204	187	9	95	132	118	11	90	1 748	1 603	9	98	1 062	952	12
Turkmenistan	88	195	195	0	89	161	159	1	88	1 886	1 893	0	89	1 554	1 537	1
Tajikistan	89	189	253	-26	85	186	252	-26	87	2 050	2 569	-20	81	2 024	2 554	-21
Seychelles	90	188	159	18	84	187	158	18	95	1 511	1 322	14	91	1 500	1 313	14
Cambodia	91	188	124	51	87	182	118	54	89	1 850	1 193	55	85	1 796	1 133	58
Afghanistan	92	185	212	-13	99	102	132	-23	91	1 718	1 956	-12	99	923	1 194	-23
Republic of Moldova	93	164	137	20	88	164	137	20	93	1 636	1 387	18	87	1 636	1 387	18
Bulgaria	94	157	148	6	90	151	143	6	92	1 673	1 593	5	88	1 605	1 538	4
Croatia	95	152	135	13	94	135	119	14	96	1 506	1 329	13	94	1 338	1 171	14
Namibia	96	149	148	0	92	144	145	-1	94	1 575	1 572	0	90	1 515	1 528	-1
Libya	97	148	161	-8	93	137	146	-6	97	1 466	1 600	-8	93	1 362	1 451	-6
Myanmar	98	129	124	4	115	50	46	8	98	1 331	1 273	5	116	471	434	8
Suriname	99	125	125	1	96	125	125	0	100	1 134	1 127	1	95	1 127	1 127	0
Mongolia	100	121	107	13	98	108	96	13	99	1 225	1 074	14	96	1 108	975	14
Rwanda	101	109	98	11	97	108	97	12	101	1 088	976	11	97	1 084	972	12
Total for above countries (103)⁸		925 667	852 447	9		638 580	584 199	9		7 590 929	7 029 712	8		4 756 767	4 384 046	9
Rest of the World		19 698	18 669			19 256	18 194			108 491	103 750			104 160	99 012	
World total		945 365	871 117	9		657 836	602 392	9		7 699 420	7 133 461	8		4 860 927	4 483 059	8

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 2017 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.

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 2017¹)

Country or group of countries	FREIGHT TONNE-KILOMETRES (millions)							
	Total services (international and domestic)				International services			
	Rank number in 2017	2017	2016	Increase or decrease (%)	Rank number in 2017	2017	2016	Increase or decrease (%)
United States	1	41 592	38 658	8	1	24 727	22 441	10
China ²	2	23 324	21 305	9	3	16 502	14 508	14
<i>Hong Kong SAR</i> ³		12 415	11 409	9		12 415	11 409	9
<i>Macao SAR</i> ⁴		33	29	14		33	29	14
United Arab Emirates	3	16 517	16 139	2	2	16 517	16 139	2
Republic of Korea	4	11 002	10 806	2	5	10 953	10 755	2
Qatar	5	10 970	9 206	19	4	10 970	9 206	19
Japan	6	10 685	9 361	14	6	9 700	8 412	15
Germany	7	7 391	6 943	6	7	7 382	6 933	6
Luxembourg	8	7 321	6 878	6	8	7 321	6 878	6
Singapore	9	7 007	6 696	5	9	7 007	6 696	5
Russian Federation	10	6 845	5 863	17	10	6 167	5 206	18
United Kingdom	11	5 917	5 513	7	11	5 916	5 512	7
Netherlands	12	5 698	4 746	20	12	5 698	4 746	20
Turkey	13	4 800	3 494	37	13	4 736	3 468	37
France	14	4 261	4 155	3	14	3 823	3 690	4
Canada	15	2 841	2 246	26	16	2 311	1 840	26
India	16	2 407	1 894	27	19	1 662	1 228	35
Thailand	17	2 393	2 160	11	15	2 367	2 135	11
Ethiopia	18	2 076	1 500	38	17	2 076	1 500	38
Australia	19	1 983	1 869	6	18	1 857	1 758	6
Brazil	20	1 737	1 514	15	24	1 210	1 019	19
Switzerland	21	1 581	1 533	3	20	1 581	1 532	3
Belgium	22	1 514	1 505	1	21	1 514	1 505	1
Italy	23	1 406	1 083	30	22	1 405	1 082	30
New Zealand	24	1 336	1 232	8	23	1 313	1 211	8
Malaysia	25	1 262	1 150	10	26	1 175	1 092	8
Chile	26	1 238	1 441	-14	25	1 175	1 382	-15
Colombia	27	1 141	1 143	0	27	1 067	1 071	0
Spain	28	1 066	1 068	0	28	1 048	1 043	0
Indonesia	29	1 056	975	8	36	566	458	23
Mexico	30	929	761	22	32	820	645	27
Israel	31	913	784	16	29	913	784	16
Saudi Arabia	32	868	834	4	31	826	788	5
Finland	33	852	762	12	30	852	762	12
South Africa	34	834	767	9	33	779	710	10
Scandinavia ⁵	35	772	690	12	34	762	680	12
Philippines	36	757	665	14	37	557	466	20
Azerbaijan	37	751	733	3	35	750	732	2
Viet Nam	38	453	451	0	47	279	262	6
Oman	39	435	425	2	38	434	424	2
Egypt	40	430	374	15	39	430	374	15
Portugal	41	422	327	29	40	412	317	30
Sri Lanka	42	399	403	-1	41	398	403	-1
Austria	43	391	388	1	42	391	388	1
Bahrain	44	390	387	1	43	390	387	1
Peru	45	316	276	14	45	298	259	15
Argentina	46	306	254	20	46	287	236	22

Country or group of countries	FREIGHT TONNE-KILOMETRES (millions)							
	Total services (international and domestic)				International services			
	Rank number in 2017	2017	2016	Increase or decrease (%)	Rank number in 2017	2017	2016	Increase or decrease (%)
Kuwait	47	304	223	36	44	304	223	36
Kenya	48	254	258	-1	48	252	255	-1
Pakistan	49	250	175	42	49	233	161	45
Poland	50	222	156	43	50	222	155	43
Mauritius	51	196	157	25	51	196	157	25
Iran (Islamic Republic of)	52	176	139	26	52	164	128	28
Jordan	53	159	144	10	53	159	144	10
Iceland	54	158	128	23	54	157	127	24
Ireland	55	148	118	25	55	148	118	25
Brunei Darussalam	56	133	124	7	56	133	124	7
Panama	57	127	126	1	57	127	126	1
Uzbekistan	58	127	112	13	58	127	112	13
Fiji	59	103	87	18	59	103	87	18
Zambia	60	82	80	1	60	81	80	1
Morocco	61	74	54	38	61	74	53	38
Angola	62	68	44	55	62	67	43	56
Bangladesh	63	62	54	14	66	47	42	12
Ukraine	64	60	40	47	63	56	38	48
Ecuador	65	58	60	-4	65	51	53	-3
Lebanon	66	53	46	17	64	53	46	17
Kazakhstan	67	49	39	27	68	37	29	25
Trinidad and Tobago	68	37	21	75	67	37	21	76
Seychelles	69	29	20	46	69	29	20	46
Papua New Guinea	70	29	27	9	71	25	23	10
CZECHIA	71	28	25	10	70	28	25	10
Cuba	72	25	26	-2	72	25	26	-3
Afghanistan	73	25	29	-13	79	14	19	-23
Total for above countries (75) ⁶		214 068	195 309	10		184 720	166 939	11
Rest of the World		9 662	9 070			9 629	9 039	
World total		223 730	204 379	9		194 349	175 978	10

1. Some 2017 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, 2008–2017

Category	Millions of revenue passenger-kilometres performed									
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Non-scheduled traffic ¹	223 360	197 690	210 475	221 000	225 378	229 660	236 320	216 615	185 241	210 365
Annual change (%)	-7.6	-11.5	6.5	5.0	2.0	1.9	2.9	-8.3	-14.5	13.6
Scheduled traffic	2 820 625	2 784 646	3 021 487	3 251 718	3 451 146	3 648 046	3 874 721	4 163 446	4 483 059	4 860 927
Annual change (%)	3.1	-1.3	8.5	7.6	6.1	5.7	6.2	7.5	7.7	8.4
Total traffic	3 043 985	2 982 336	3 231 962	3 472 718	3 676 524	3 877 706	4 111 041	4 380 061	4 668 300	5 071 292
Annual change (%)	2.2	-2.0	8.4	7.4	5.9	5.5	6.0	6.5	6.6	8.6
Non-scheduled traffic as percentage of total	7.3	6.6	6.5	6.4	6.1	5.9	5.7	4.9	4.0	4.1

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, 2017

Rank No.	City	Airport	Passengers embarked and disembarked ¹			Aircraft movements ²		
			2017 (thousands)	2016 (thousands)	2017/2016 (%)	2017 (thousands)	2016 (thousands)	2017/2016 (%)
1	Atlanta GA	Hartsfield-Jackson Atlanta International Airport	103 903	104 172	-0.3	880	898	-2.1
2	Beijing	Beijing Capital International Airport	95 786	94 393	1.5	597	606	-1.5
3	Dubai	Dubai International Airport	88 242	83 654	5.5	408	415	-1.6
4	Tokyo	Tokyo International (Haneda) Airport	85 409	80 224	6.5	453	448	1.0
5	Los Angeles CA	Los Angeles International Airport	84 558	80 922	4.5	700	697	0.5
6	Chicago IL	O'Hare International Airport	79 828	77 961	2.4	867	868	-0.1
7	London	Heathrow Airport	78 015	75 715	3.0	476	475	0.2
8	Hong Kong	Hong Kong International Airport	72 664	70 306	3.4	432	422	2.5
9	Shanghai	Pudong International Airport	70 001	66 002	6.1	497	480	3.5
10	Paris	Aéroport de Paris-Charles de Gaulle	69 471	65 933	5.4	483	479	0.7
11	Amsterdam	Amsterdam Airport	68 515	63 626	7.7	515	497	3.6
12	Dallas/Fort Worth TX	Dallas/Ft Worth International Airport	67 092	65 599	2.3	654	673	-2.7
13	Guangzhou	Guangzhou Bai Yun International Airport	65 887	59 732	10.3	465	435	6.9
14	Frankfurt	Flughafen Frankfurt/Main	64 500	60 787	6.1	476	463	2.7
15	Istanbul	Atatürk International Airport	63 872	60 279	6.0	461	465	-1.0
16	New Delhi	Indira Gandhi International Airport	63 452	55 631	14.1	448	407	10.2
17	Jakarta	Soekarno-Hatta International Airport	63 016	58 195	8.3	447	385	16.1
18	Singapore	Singapore Changi Airport	62 220	58 698	6.0	378	365	3.6
19	Incheon	Incheon International Airport	62 158	57 850	7.4	363	343	5.9
20	Denver CO	Denver International Airport	61 379	58 267	5.3	575	566	1.7
21	Bangkok	Suvarnabhumi International Airport	60 861	55 892	8.9	352	341	3.2
22	New York NY	John F. Kennedy International Airport	59 393	59 106	0.5	446	452	-1.2
23	Kuala Lumpur	KL International Airport	58 558	52 645	11.2	387	357	8.5
24	San Francisco CA	San Francisco International Airport	55 822	53 105	5.1	460	450	2.2
25	Madrid	Aeropuerto de Adolfo Suárez Madrid-Barajas	53 386	50 396	5.9	388	378	2.5
Total			1,757,990	1,669,091	5.3	12,609	12,365	2.0

Top 25 airports ranked by international passengers, 2017

Rank No.	City	Airport	Passengers embarked and disembarked ¹			Aircraft movements ²		
			2017 (thousands)	2016 (thousands)	2017/2016 (%)	2017 (thousands)	2016 (thousands)	2017/2016 (%)
1	Dubai	Dubai International Airport	87 722	83 106	5.6	408	420	-2.7
2	London	Heathrow Airport	73 187	71 030	3.0	436	436	0.0
3	Hong Kong	Hong Kong International Airport	72 462	70 098	3.4	413	403	2.5
4	Amsterdam	Amsterdam Airport	68 401	63 534	7.7	496	479	3.7
5	Paris	Aéroport de Paris-Charles de Gaulle	63 697	60 385	5.5	426	424	0.5
6	Singapore	Singapore Changi Airport	61 574	58 158	5.9	373	361	3.5
7	Incheon	Incheon International Airport	61 521	57 152	7.6	355	335	6.2
8	Frankfurt	Flughafen Frankfurt/Main	57 122	53 708	6.4	397	386	3.0
9	Bangkok	Suvarnabhumi International Airport	48 812	45 291	7.8	260	258	0.7
10	Istanbul	Atatürk International Airport	44 477	41 036	8.4	311	318	-2.4
11	Kuala Lumpur	KL International Airport	42 351	36 963	14.6	267	239	11.6
12	London	Gatwick Airport	41 473	39 264	5.6	251	245	2.4
13	Madrid	Aeropuerto de Adolfo Suárez Madrid-Barajas	38 479	36 075	6.7	245	239	2.9
14	Doha	Hamad International Airport	35 262	37 216	-5.3	220	243	-9.6
15	Munich	Munich Airport	34 722	32 569	6.6	294	286	2.9
16	Barcelona	Aeropuerto de Barcelona-El Prat	34 527	32 315	6.8	224	215	4.3
17	Tokyo	Narita International Airport	33 091	31 991	3.4	195	190	2.8
18	New York NY	John F. Kennedy International Airport	32 431	31 781	2.0	179	178	0.6
19	Toronto ON	Toronto Pearson International Airport	29 655	27 429	8.1	246	242	1.7
20	Rome	Aeroporto di Roma-Fiumicino	29 379	29 096	1.0	196	205	-4.1
21	Dublin	Dublin Airport	29 285	27 641	5.9	209	201	4.1
22	Zurich	Flughafen Zürich	28 671	26 938	6.4	227	225	0.6
23	Shanghai	Pudong International Airport	28 360	26 911	5.4	192	182	5.5
24	Copenhagen	Copenhagen International Airport	27 126	26 932	0.7	231	237	-2.6
25	Manchester	Manchester Airport	25 397	23 303	9.0	159	150	5.9
Total			1,129,185	1,069,922	5.5	7,210	7,094	1.6

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
2008	569,500	570,600	-1,100	-0.2	-26,100	-4.6
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 ³	709,000	643,800	65,200	9.2	35,600	5.0
2017 ^{3,4}	757,600	697,900	59,700	7.9	40,100	5.3

Analysis of variance in operating result (2017 over 2016)

	2017	2016	Difference
Operating revenues, USD (millions)	757,600	709,000	48,600
Operating expenses, USD (millions)	697,900	643,800	54,100
Operating result, USD (millions)	59,700	65,200	-5,500
RTK (millions)	945,365	871,117	74,248
ATK (millions)	1,384,492	1,303,304	81,188
Yield, USD (cent)	80.1	81.4	-1.3
Cost/ATK, USD (cent)	50.4	49.4	1.0
Weight load factor (%)	68.3	66.8	1
Break-even weight load factor (%)	62.9	60.7	2

Analysis of difference in operating revenues (2017 over 2016)

Due to reduction in yield, USD (millions)	-11,831	
Due to increase in traffic, USD (millions)	60,431	
Net increase in operating revenues, USD (millions)	48,600	(A)

Analysis of difference in operating expenses (2017 over 2016)

Due to increase in unit cost, USD (millions)	13,995	
Due to increase in capacity offered, USD (millions)	40,105	
Net increase in operating expenses, USD (millions)	54,100	(B)
Net decrease in operating result (2017 over 2016), USD (millions)	-5,500	(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 2016 and 2017 have been provisionally estimated and exclude exceptional accounting items.

4. Complete financial data for 2017 had not been reported to ICAO at the time of writing because of variations in fiscal year reporting.

**Table 10. Commercial transport fleet¹ of ICAO Member States
at the end of each year, 2008 - 2017**

Year	Turbojet		Turboprop		Total aircraft All types
	Number	Percentage	Number	Percentage	
2008	19 650	87.1	2 902	12.9	22 552
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

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 2017 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