



11

Mobility and Transport

409-1600

Swiss civil aviation 2016



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

Federal Department of Home Affairs FDHA
Federal Statistical Office FSO

Neuchâtel 2017

Published by:	Federal Statistical Office (FSO)
Information:	Federal Office of Civil Aviation (FOCA), tel. +41 (0)58 465 80 39, info@bazl.admin.ch
Author:	Caroline Strahm, FSO
Series:	Swiss Statistics
Topic:	11 Mobility and Transport
Original text:	English
Layout:	DIAM Section, Prepress/Print
Graphics:	DIAM Section, Prepress/Print
Maps:	DIAM Section, ThemaKart
Front page:	FSO; Concept: Netthoevel & Gaberthüel, Biel; Photograph: © Berlinerpixel.de – Fotolia.com
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Orders:	Federal Statistical Office, CH-2010 Neuchâtel, tel. +41 (0)58 463 60 60, fax +41 (0)58 463 60 61, order@bfs.admin.ch
Price:	free of charge
FSO number:	409-1600

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1 Aerodrome infrastructure

Swiss aerodromes: overview 2016

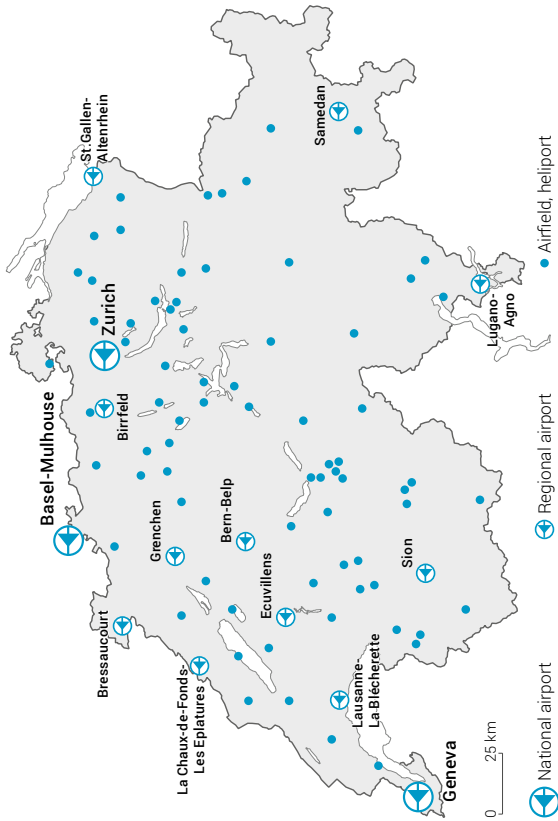
T 1

Aerodrome	Foundation	Longest runway	Concrete surface runways	Instrument Flight Rules (IFR) Procedures (yes/no)
	Year	Meters	Number	
Total airports and airfields			33	
Total national airports			6	
Zurich	1948	3 700	3	yes
Geneva	1922	3 900	1	yes
Basel-Mulhouse	1946	3 900	2	yes
Total regional airports			11	
Bern-Belp	1929	1 730	1	yes
Lugano-Agno	1947	1 350	1	yes
Sion	1935	2 000	1	yes
St. Gallen-Altenrhein	1926	1 500	1	yes
Birrfeld	1937	725	1	no
Bressaucourt	2011	800	1	no
Ecuvillens	1953	800	1	no
Grenchen	1931	1 000	1	yes
La Chaux-de-Fonds- Les Eplatures	1912	1 130	1	yes
Lausanne- La Blécherette	1910	875	1	no
Samedan	1937	1 800	1	no
Total airfields			16	

Source: FSO, FOCA – Civil aviation statistics (AVIA_ZL)

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Civil aerodromes in 2016



Source: FSO, FOCA – Civil aviation statistics (AVIA_ZL)

2 Aircraft

Swiss aircraft register

T 2.1

Type of aircraft	2005	2010	2013	2014	2015	2016
Total aircraft	3 841	3 705	3 620	3 556	3 494	3 414
Total aeroplanes	1 892	1 913	1 924	1 880	1 850	1 823
< 2 250 kg MTOM	1 502	1 413	1 458	1 425	1 397	1 382
2 250–5 700 kg MTOM	149	197	176	171	169	162
> 5 700 kg MTOM	241	303	290	284	284	279
Helicopters	285	327	312	321	326	337
Gliders	949	824	745	720	696	658
Powered gliders	254	251	255	258	253	249
Airships	9	9	11	11	11	8
Free balloons	452	381	373	366	358	339

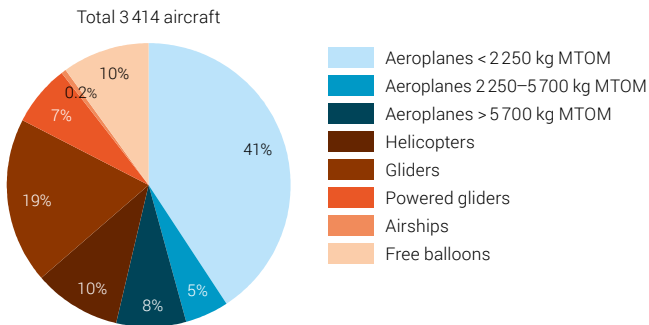
MTOM = Maximum Take Off Mass

Source: FSO, FOCA – Civil aviation statistics (AVIA_ZL)

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Swiss aircraft register, 2016

G 2.1



MTOM = Maximum Take Off Mass

Source: FSO, FOCA – Civil aviation statistics (AVIA_ZL)

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3 Employment

Swiss aviation companies

T 3.1

Companies	2005	2010	2013	2014	2015	2016
Companies with scheduled traffic	5	9	8	8	9	8
Other companies with commercial traffic	109	81	70	68	66	62
Maintenance companies	87	90	91	85	84	85
Flying schools	154	142	142	138	140	141

Source: FSO, FOCA – Civil aviation statistics (AVIA_ZL)

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Flight personnel (licences)

T 3.2

Type of licence	2005	2010	2013	2014	2015	2016
Private pilots	5 928	5 581	5 146	4 904	4 872	4 777
Commercial pilots	1 000	952	1 133	1 107	1 050	1 083
Airline transport pilots	2 086	2 266	2 470	2 478	2 571	2 492
Multi-Crew pilots	0	46	69	94	87	70
Helicopter pilots ¹	1 082	1 168	976	1 025	1 043	1 068
Glider pilots	2 764	2 617	1 832	1 729	1 715	1 766
Free balloon pilots	428	340	303	278	255	247
Validations	38	8	11	15	11	8
Flight engineers	8	2	1	3	2	3
Radio navigators	27	10	2	4	4	5

¹ Including Air Transport Pilot License ATPL (H)

Source: FSO, FOCA – Civil aviation statistics (AVIA_ZL)

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4 Aircraft movements

Scheduled and charter traffic

T4.1

Airport	Movements					
	2005	2010	2013	2014	2015	2016
Total airports	418 956	416 111	447 737	454 837	460 978	468 226
Total national airports	404 428	404 921	429 911	440 135	445 349	452 788
Zurich	229 982	227 815	228 314	230 652	231 095	235 931
Geneva	116 545	123 173	138 503	143 265	146 440	148 185
Basel-Mulhouse ¹	57 901	53 933	63 094	66 218	67 814	68 672
Total regional airports ²	14 528	11 190	17 826	14 702	15 629	15 438
Bern-Belp	4 128	3 486	10 559	7 981	7 928	7 636
Lugano-Agno	7 741	5 479	4 830	4 576	5 397	5 187
Sion	80	92	446	475	572	476
St.Gallen-Altenrhein	2 579	2 133	1 991	1 670	1 732	2 139

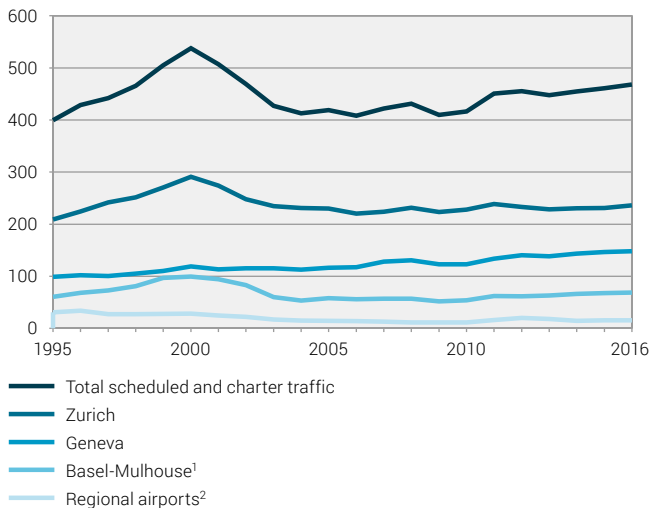
¹ Swiss and French traffic

² Regional airports with scheduled and charter traffic

Aircraft movements

G 4.1

Thousands movements



¹ Swiss and French traffic

² Regional airports with scheduled and charter traffic

Source: FSO, FOCA – Civil aviation statistics (AVIA_ZL)

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Total airport movements, 2016

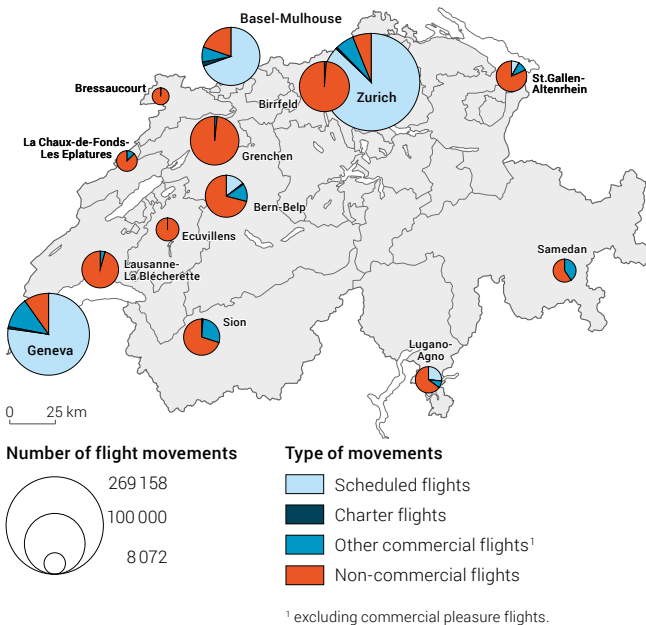
T4.2

Airport	Movements			
	Commercial traffic		Non commercial traffic	Total
	Aeroplane	Helicopter		
Total airports and airfields	530 917	99 838	761 219	1 391 974
Total national airports	494 076	6 403	54 080	554 559
Zurich	251 616	987	16 555	269 158
Geneva	169 417	1 760	18 663	189 840
Basel-Mulhouse	73 043	3 656	18 862	95 561
Total regional airports	30 066	18 540	310 455	359 061
Bern Belp	11 074	3 400	35 416	49 890
Lugano-Agno	6 781	106	12 702	19 589
Sion	3 057	8 041	26 021	37 119
St.Gallen-Altenrhein	4 762	47	21 583	26 392
Birrfield	882	0	70 245	71 127
Bressaucourt	50	14	8 008	8 072
Ecuvillens	2	0	14 840	14 842
Grenchen	750	384	65 720	66 854
La Chaux-de-Fonds- Les Eplatures	1 368	159	10 488	12 015
Lausanne- La Blécherette	33	1 624	36 543	38 200
Samedan	1 307	4 765	8 889	14 961
Total airfields	6 775	74 895	396 684	478 354

Source: FSO, FOCA – Civil aviation statistics (AVIA_ZL)

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Take-offs and landings in civil aviation in 2016



Source: FSO, FOCA – Civil aviation statistics (AVIA_ZL)

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5 Traffic performance

Total passengers: scheduled and charter traffic

T 5.1

Airport	2005	2010	2013
Total airports	30 860 051	39 009 046	45 501 533
Zurich	17 877 978	22 854 358	24 853 679
Geneva	9 360 621	11 748 972	14 328 107
Basel-Mulhouse ¹	3 261 762	4 087 931	5 843 927
Bern-Belp	78 423	85 981	244 699
Lugano-Agno	181 453	159 497	142 570
Sion	4 843	3 912	2 591
St.Gallen-Altenrhein	94 971	68 395	85 960
Airport	2014	2015	2016
Total airports	47 406 431	49 392 700	51 800 530
Zurich	25 451 017	26 251 507	27 630 699
Geneva	15 057 335	15 682 128	16 444 335
Basel-Mulhouse ¹	6 498 654	7 028 970	7 287 084
Bern-Belp	177 539	175 024	167 292
Lugano-Agno	135 530	156 435	167 686
Sion	2 258	6 660	4 455
St.Gallen-Altenrhein	84 098	91 976	98 979

¹ Swiss and French traffic

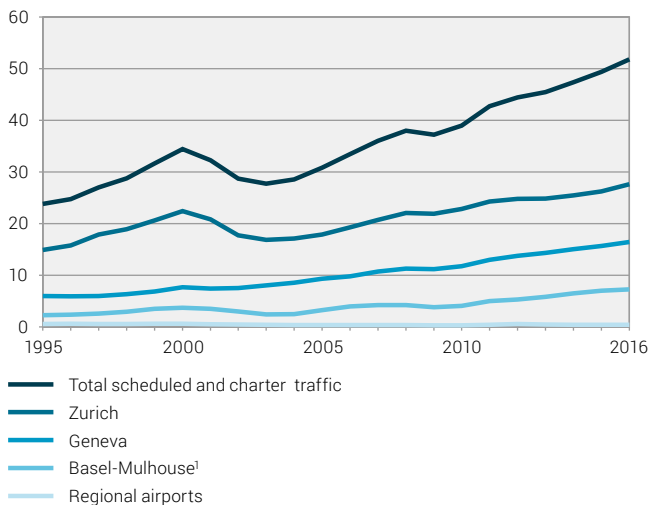
Source: FSO, FOCA – Civil aviation statistics (AVIA_ZL)

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Number of passengers per airport

G 5.1

Passengers arriving and departing, in millions



¹ Swiss and French traffic

Source: FSO, FOCA – Civil aviation statistics (AVIA_ZL)

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Destinations of departing passengers: scheduled and charter traffic, 2016

T 5.2

Continent	Zurich	Geneva	Basel- Mulhouse	Total
Total	14 112 902	8 236 398	3 660 097	26 009 397
Europe	10 116 877	7 335 386	3 503 637	20 955 900
Africa	388 587	199 163	94 863	682 613
Asia	1 834 090	449 147	47 192	2 330 429
Oceania	92 859	1 182	261	94 302
North America	1 366 702	235 311	11 009	1 613 022
Central America	116 617	4 321	1 508	122 446
South America	197 170	11 888	1 627	210 685

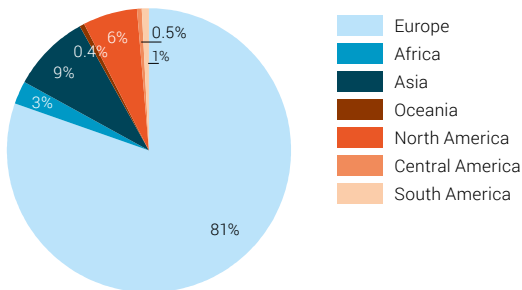
Source: FSO, FOCA – Civil aviation statistics (AVIA_ZL)

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Passenger traffic flows by continent of destination, 2016

G 5.2

Total passengers: 26 009 397



Source: FSO, FOCA – Civil aviation statistics (AVIA_ZL)

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Passenger-kilometres performed: scheduled and charter traffic

T 5.3

Airport	Scheduled traffic: Passenger-km performed, in millions			Charter traffic: Passenger-km performed, in millions		
	2015	2016	Change	2015	2016	Change
Total	86 196	91 702	6%	1 305	723	-45%
Zurich	60 112	64 578	7%	740	292	-61%
Geneva	18 826	19 717	5%	163	142	-13%
Basel-Mulhouse	7 082	7 249	2%	366	232	-37%
Bern-Belp	112	87	-22%	32	54	69%
Lugano-Agno	16	17	6%	0	0	0%
Sion	0	0	0%	4	3	-25%
St.Gallen Altenrhein	48	54	13%	0	0	0%

Source: FSO, FOCA – Civil aviation statistics (AVIA_ZL)

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Seat load factor by continent: scheduled and charter traffic

T 5.4

Continent	Passenger-km Performed, in millions		Offered, in millions		Factor	
	2015	2016	2015	2016	2015	2016
Total	87 501	92 425	110 553	118 246	79%	78%
Europe	38 185	40 011	48 285	50 838	79%	79%
Africa	4 125	3 833	5 201	4 757	79%	81%
Asia	25 078	26 930	32 112	34 722	78%	78%
Oceania ¹	0	0	0	0	*	*
North America	17 986	19 069	22 526	24 863	80%	77%
Central America	560	742	673	914	83%	81%
South America	1 567	1 839	1 756	2 152	89%	85%

¹ No direct flights from/to Switzerland

Source: FSO, FOCA – Civil aviation statistics (AVIA_ZL)

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6 Energy and emissions

Fuel consumption and gaseous emissions

T 6.1

	1990	2000	2010	2014	2015
Fuel consumption [t]					
Filled up in Switzerland	1 054 448	1 540 307	1 390 824	1 549 228	1 602 319
Consumed in the Swiss airspace	...	513 678	580 808	590 830	556 077
Gaseous emissions [t]					
CO ₂	3 321 512	4 851 967	4 377 758	4 872 262	5 039 229
NO _x	12 549	18 470	17 635	19 913	21 228
CO	7 183	8 782	6 701	6 964	6 809
HC	991	905	734	807	835
BC	...	...	...	...	34
PM	...	...	...	...	47

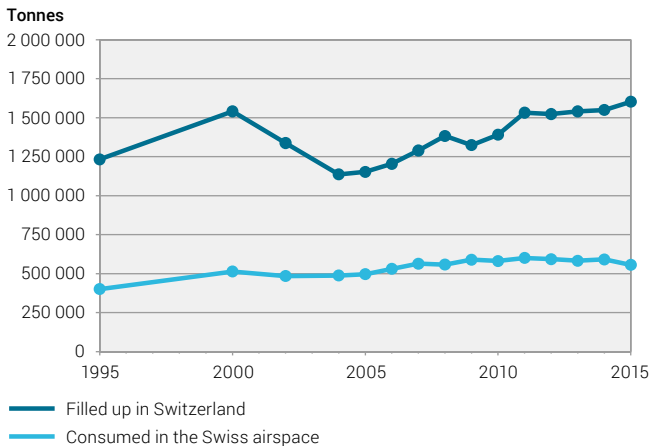
The calculation is based on the fuel quantity actually filled up in Switzerland.

Source: FSO, FOCA – Civil aviation statistics (AVIA_ZL)

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Fuel consumption

G 6.1



Source: FSO, FOCA – Civil aviation statistics (AVIA_ZL)

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7 Accidents

Accidents and serious incidents of Swiss registered aircraft at home and abroad

T 7.1

Accidents and serious incidents	2005	2010	2013	2014	2015	2016
Total	71	45	64	59	75	83

Source: FSO, FOCA – Civil aviation statistics (AVIA_ZL)

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Fatalities in Swiss registered aircraft at home and abroad

T 7.2

Fatalities	2005	2010	2013	2014	2015	2016
Total	15	8	15	8	12	5
Total aeroplanes	8	5	4	2	7	3
< 2 250 kg MTOM	7	5	4	2	7	3
2 250–5 700 kg MTOM	1	0	0	0	0	0
> 5 700 kg MTOM	0	0	0	0	0	0
Helicopters	6	0	8	5	1	0
Powered gliders and gliders	1	3	2	1	4	2
Free balloons and airships	0	0	1	0	0	0

MTOM = Maximum Take Off Mass

Source: FSO, FOCA – Civil aviation statistics (AVIA_ZL)

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Severely injured persons by Swiss registered aircraft at home and abroad

T 7.3

Severely injured persons	2005	2010	2013	2014	2015	2016
Total	1	7	14	14	7	9
Total aeroplanes	1	3	2	9	4	3
< 2 250 kg MTOM	0	1	2	9	4	3
2 250–5 700 kg MTOM	1	2	0	0	0	0
> 5 700 kg MTOM	0	0	0	0	0	0
Helicopters	0	4	6	4	3	5
Powered gliders and gliders	0	0	1	0	0	1
Free balloons and airships	0	0	5	1	0	0

MTOM = Maximum Take Off Mass

Source: FSO, FOCA – Civil aviation statistics (AVIA_ZL)

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Orders

Tel. +41 (58) 463 60 60

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