

2017

11

Mobility and
transport

Neuchâtel 2018

Swiss civil aviation 2017



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Table of contents

1	Aerodrome infrastructure	4
2	Aircraft	6
3	Employment	8
4	Aircraft movements	10
5	Passengers	14
6	Energy and Emissions	20
7	Accidents	22

1 Aerodrome infrastructure

Civil aerodromes: overview 2017

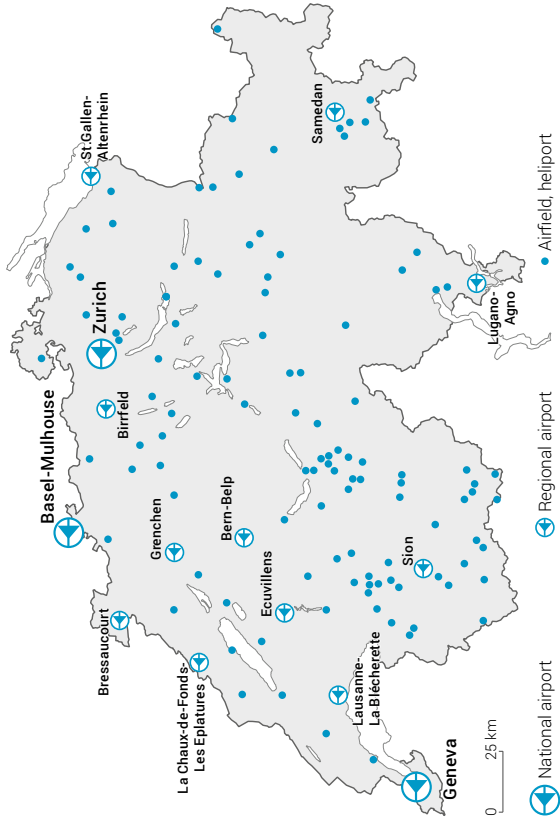
T 1

	Foundation	Longest runway	Concrete surface runways	Instrument Flight Rules (IFR) Procedures (yes/no)
	Year	Metres	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, 2017



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

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2 Aircraft

Registered aircraft

T 2.1

	2000	2005	2010	2015	2016	2017
Total aircraft	4 048	3 841	3 705	3 494	3 414	3 333
Total aeroplanes	2 014	1 892	1 913	1 850	1 823	1 786
< 2 250 kg MTOM	1 572	1 502	1 413	1 397	1 382	1 358
2 250–5 700 kg MTOM	157	149	197	169	162	174
> 5 700 kg MTOM	285	241	303	284	279	254
Helicopters	254	285	327	326	337	335
Gliders	1 024	949	824	696	658	625
Powered gliders	246	254	251	253	249	249
Airships	6	9	9	11	8	9
Free balloons	504	452	381	358	339	329

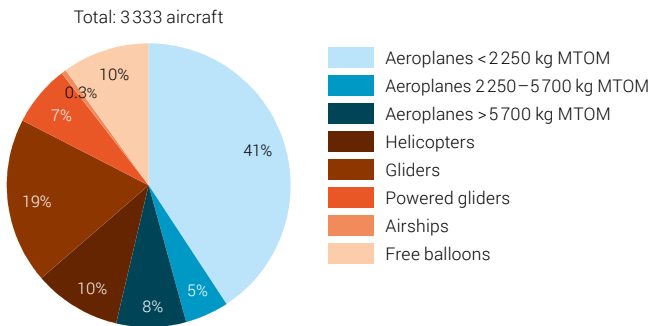
MTOM = Maximum Take Off Mass

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

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Registered aircraft, 2017

G 2.1



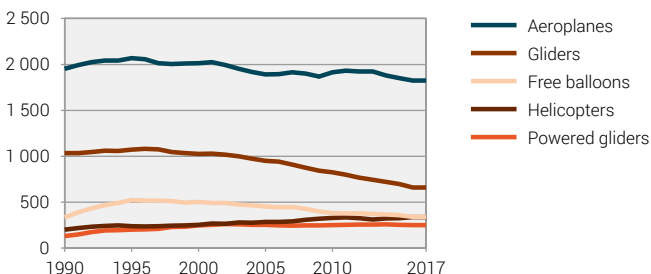
MTOM = Maximum Take Off Mass

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

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Registered aircraft

G 2.2



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

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3 Employment

Swiss aviation companies

T 3.1

	2000	2005	2010	2015	2016	2017
Total companies	420	355	322	299	296	282
Companies with scheduled traffic	5	5	9	9	8	8
Other companies with commercial traffic	172	109	81	66	62	53
Maintenance companies	94	87	90	84	85	84
Flying schools	149	154	142	140	141	137

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

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Flight personnel

Licence holders

T 3.2

	2000	2005	2010	2015	2016	2017
Private pilots	6 792	5 928	5 581	4 872	4 777	4 695
Commercial pilots	1 421	1 000	952	1 050	1 083	1 050
Airline transport pilots	2 223	2 086	2 266	2 571	2 492	2 490
Multi-Crew pilots	0	0	46	87	70	52
Helicopter pilots ¹	1 036	1 082	1 168	1 043	1 068	1 036
Glider pilots	3 145	2 764	2 617	1 715	1 766	1 675
Free balloon pilots	449	428	340	255	247	242
Validations ²	420	38	8	11	8	10
Flight engineers	14	8	2	2	3	1
Radio navigators	30	27	10	4	5	6

¹ Including Air Transport Pilot Licence ATPL (H)

² Recognition of foreign licences (Validation)

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

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4 Aircraft movements

Aircraft movements: scheduled and charter traffic

Takeoffs and landings

T4.1

	2000	2005	2010	2015	2016	2017
Total airports	537 813	418 956	416 111	460 978	468 226	467 263
Total national airports	509 584	404 428	404 921	445 349	452 788	454 401
Zurich	291 044	229 982	227 815	231 095	235 931	236 418
Geneva	118 950	116 545	123 173	146 440	148 185	147 615
Basel-Mulhouse ¹	99 590	57 901	53 933	67 814	68 672	70 368
Total regional airports	28 229	14 528	11 190	15 629	15 438	12 862
Bern-Belp	12 489	4 128	3 486	7 928	7 636	5 832
Lugano-Agno	12 017	7 741	5 479	5 397	5 187	4 008
Sion	530	80	92	572	476	521
St. Gallen-Altenrhein	3 193	2 579	2 133	1 732	2 139	2 501

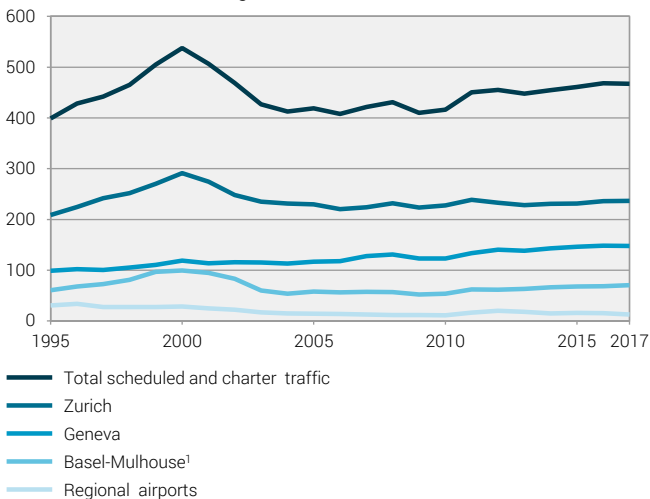
¹ Swiss and French traffic

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

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Aircraft movements: scheduled and charter traffic G 4.1

Thousand takeoffs and landings



¹ Swiss and French traffic

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

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Total aircraft movements in civil aviation, 2017

Takeoffs and landings, including general aviation

T4.2

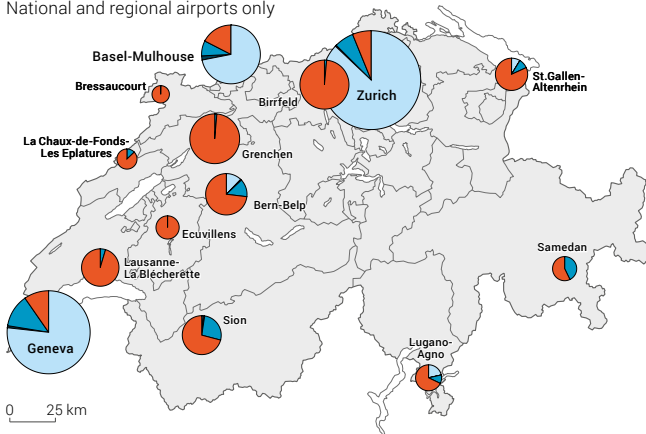
	Commercial flights		Non commercial flights	Total
	Aeroplane	Helicopter		
Total airports and airfields	532 520	101 336	767 832	1 401 688
Total national airports	497 950	6 525	52 339	556 814
Zurich	252 653	1 059	16 724	270 436
Geneva	170 376	1 857	18 543	190 776
Basel-Mulhouse	74 921	3 609	17 072	95 602
Total regional airports	28 656	18 868	313 392	360 916
Bern Belp	9 011	3 444	34 886	47 341
Lugano-Agno	5 865	117	12 683	18 665
Sion	3 804	8 028	30 089	41 921
St. Gallen-Altenrhein	5 181	55	23 540	28 776
Birrfield	944	0	65 444	66 388
Bressaucourt	16	4	8 323	8 343
Ecuvillens	0	0	14 899	14 899
Grenchen	669	274	67 616	68 559
La Chaux-de-Fonds- Les Eplatures	1 288	160	9 751	11 199
Lausanne- La Blécherette	144	1 629	36 944	38 717
Samedan	1 734	5 157	9 217	16 108
Total airfields	5 914	75 943	402 101	483 958

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

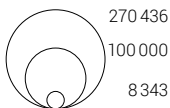
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Aircraft movements in civil aviation, 2017

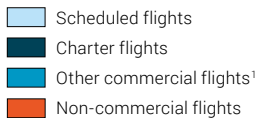
National and regional airports only



Number of takeoffs and landings



Type of traffic



¹ excluding commercial pleasure flights

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

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5 Passengers

Air passengers: scheduled and charter traffic

Passengers¹ arriving and departing

T 5.1

	2000	2005	2010
Total airports	34 426 801	30 860 051	39 009 046
Zurich	22 450 494	17 877 978	22 854 358
Geneva	7 677 763	9 360 621	11 748 972
Basel-Mulhouse ²	3 699 194	3 261 762	4 087 931
Bern-Belp	205 314	78 423	85 981
Lugano-Agno	286 507	181 453	159 497
Sion	8 760	4 843	3 912
St. Gallen-Altenrhein	98 769	94 971	68 395
	2015	2016	2017
Total airports	49 392 700	51 800 530	54 911 905
Zurich	26 251 507	27 630 699	29 361 201
Geneva	15 682 128	16 444 335	17 259 942
Basel-Mulhouse ¹	7 028 970	7 287 084	7 868 537
Bern-Belp	175 024	167 292	167 566
Lugano-Agno	156 435	167 686	135 534
Sion	6 660	4 455	9 349
St. Gallen-Altenrhein	91 976	98 979	109 776

¹ Local and transfer passengers

² Swiss and French traffic

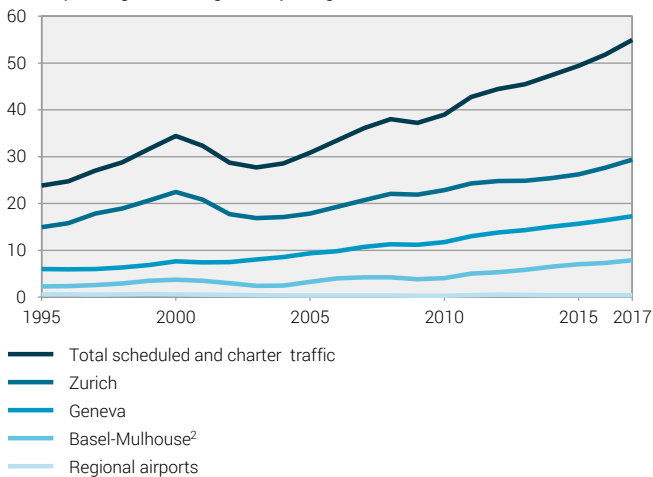
Source: FSO, FOCA – Civil aviation statistics (AVIA_ZL)

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Air passengers: scheduled and charter traffic

G 5.1

Million passengers¹ arriving and departing



¹ Local and transfer passengers

² Swiss and French traffic

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

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Air passengers by continent of true destination, 2017

Passengers¹ in scheduled and charter traffic

T 5.2

	Europe	Africa	Asia	Oceania
Total airports	25 419 746	994 067	3 323 017	115 241
Zurich	13 290 283	549 030	2 606 840	97 324
Geneva	7 746 103	315 664	663 440	17 917
Basel-Mulhouse ²	4 178 338	128 793	50 002	0
Bern-Belp	84 494	24	0	0
Lugano-Agno	60 733	556	2 735	0
Sion	4 443	0	0	0
St. Gallen-Altenrhein	55 352	0	0	0
	North America	Central America	South America	Total all continents
Total airports	2 420 349	195 016	330 090	32 797 526
Zurich	2 008 027	167 577	267 632	18 986 713
Geneva	404 433	26 931	61 738	9 236 226
Basel-Mulhouse ²	3 506	259	36	4 360 934
Bern-Belp	0	0	0	84 518
Lugano-Agno	4 383	249	684	69 340
Sion	0	0	0	4 443
St. Gallen-Altenrhein	0	0	0	55 352

¹ Local and transfer passengers

² Swiss and French traffic

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

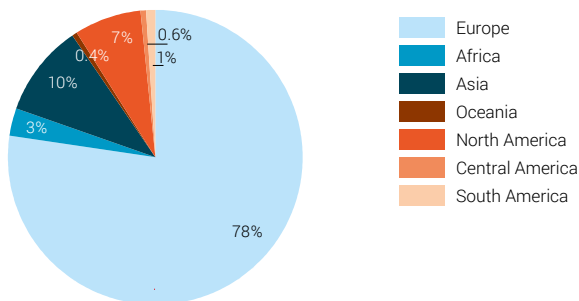
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Air passengers by continent of true destination, 2017

Passengers¹ in scheduled and charter traffic

G 5.2

Total: 32.8 million passengers



¹ Local and transfer passengers

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

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Passenger-kilometres performed

Incoming and outgoing scheduled and charter traffic

T5.3

	Scheduled traffic: Passenger-km performed, in millions			Charter traffic: Passenger-km performed, in millions		
	2016	2017	Change	2016	2017	Change
Total	91 702	99 062	7%	723	738	2%
Zurich	64 578	70 024	8%	292	221	-32%
Geneva	19 717	20 949	6%	142	151	5%
Basel-Mulhouse ¹	7 249	7 916	8%	232	311	25%
Bern-Belp	87	94	7%	54	50	-8%
Lugano-Agno	17	15	-13%	0	0	0%
Sion	0	1	*	3	6	50%
St. Gallen-Altenrhein	54	62	13%	0	0	0%

¹ Swiss and French traffic

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

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Passenger-kilometres and seat load factor by continent

Incoming and outgoing scheduled and charter traffic

T 5.4

	Passenger-km performed, in millions		Passenger-km offered, in millions		Seat load factor	
	2016	2017	2016	2017	2016	2017
Total	92 425	99 800	118 246	125 161	78%	80%
Europe	40 011	42 256	50 838	52 721	79%	80%
Africa	3 833	4 347	4 757	5 326	81%	82%
Asia	26 930	29 867	34 722	37 966	78%	79%
Oceania ¹	0	0	0	0	*	*
North America	19 069	20 232	24 863	25 548	77%	79%
Central America	742	1 153	914	1 435	81%	80%
South America	1 839	1 945	2 152	2 164	85%	90%

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 of civil aviation

Including general aviation

T 6.1

	2005	2010	2015	2016	2017
Fuel consumption (tonnes)					
Filled up in Switzerland	1 152 388	1 390 824	1 602 319	1 679 034	1 723 717
Consumed in the Swiss airspace	496 760	580 808	556 077	575 660	582 674
Gaseous emissions (tonnes)¹					
CO ₂	3 630 023	4 377 758	5 039 229	5 280 493	5 421 021
NO _x	13 952	17 635	21 228	23 599	25 751
CO	707	6 701	6 809	6 466	6 466
HC	6 483	734	835	807	795
BC	...	...	34	33	33
PM	...	...	47	46	46

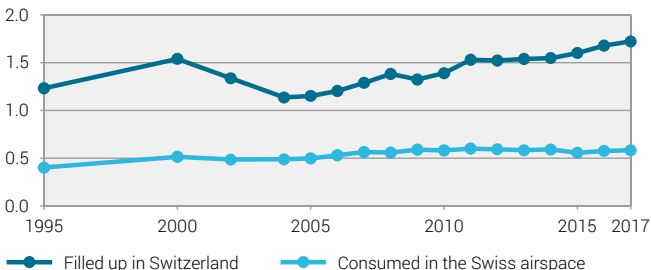
¹ International and domestic flights. The calculation is based on the fuel quantity actually filled up in Switzerland.

Fuel consumption of civil aviation

Including general aviation

G 6.1

Million tonnes



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

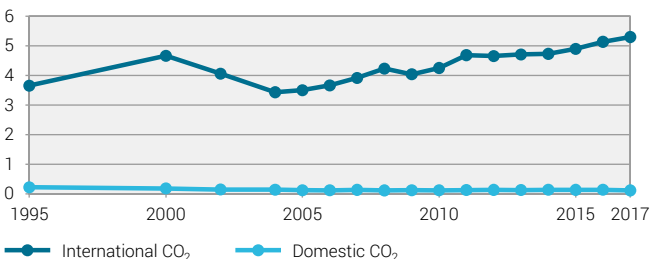
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CO₂ emissions in international and domestic civil aviation

Including general aviation

G 6.2

Million tonnes



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

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7 Accidents

Accidents and serious incidents¹ of Swiss registered aircraft at home and abroad

T 7.1

	2000	2005	2010	2015	2016	2017
Total	80	71	45	75	83	79

¹ Serious incidents are events that have nearly resulted in an aviation accident such as the unintentional convergence of two aircraft with a high risk of collision (Airprox).

Source: STSB – Aviation accident statistics

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Fatalities in Swiss registered aircraft at home and abroad

T 7.2

	2000	2005	2010	2015	2016	2017
Total	51	15	8	12	5	18
Total aeroplanes	36	8	5	7	3	15
< 2 250 kg MTOM	4	7	5	7	3	10
2 250–5 700 kg MTOM	1	1	0	0	0	5
> 5 700 kg MTOM	31	0	0	0	0	0
Helicopters	12	6	0	1	0	1
Powered gliders and gliders	3	1	3	4	2	2
Free balloons and airships	0	0	0	0	0	0

MTOM = Maximum Take Off Mass

Source: STSB – Aviation accident statistics

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Severely injured persons¹ by Swiss registered aircraft at home and abroad

T 7.3

	2000	2005	2010	2015	2016	2017
Total	23	1	7	7	9	11
Total aeroplanes	18	1	3	4	3	6
< 2 250 kg MTOM	5	0	1	4	3	6
2 250–5 700 kg MTOM	0	1	2	0	0	0
> 5 700 kg MTOM	13	0	0	0	0	0
Helicopters	3	0	4	3	5	5
Powered gliders and gliders	2	0	0	0	1	0
Free balloons and airships	0	0	0	0	0	0

¹ Severely injured persons whose treatment requires a hospital stay of more than 48 hours.
MTOM = Maximum Take Off Mass

Source: STSB – Aviation accident statistics

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