PANORAMA 017

CONSOLIDATED FINANCIAL STATEMENT

ÉCOLE POLYTECHNIQUE
FÉDÉRALE DE LAUSANNE

FOREWORD

ANNUAL FINANCIAL STATEMENTS CERTIFIED UNDER IPSAS

EPFL's 2017 financial statements were prepared under the International Public Sector Accounting Standards (IPSAS) in full and have been certified as such, unlike the 2016 and 2015 financial statements which were prepared using transitional provisions for the adoption of IPSAS by the ETH Domain.

Two changes in 2017 make it difficult to compare the 2017 and 2016 financial statements: the full transition to IPSAS, as mentioned above; and the adoption of a new accounting standard for net defined benefit liabilities (IPSAS 39, ''Employee benefits'').

Concerning the first change, the largest impact results from an expansion of the scope of consolidation. As of 1 January 2017, all entities over which EPFL has control – Fondation EPFL Innovation Park (FEIP); Fondation pour les Étudiants de l'EPFL (FEE); Société pour le Quartier de l'Innovation (SQIE); and Société pour le Quartier Nord de l'EPFL (SQNE) – or has significant influence – Fondation Les Bois Chamblard (FBC); Fondation Campus Biotech Geneva (FCBG); Fondation du Centre Universitaire Protestant de Lausanne (FCUPL); and Fondation Institut d'Imagerie Moléculaire Translationnelle (IIMT) – are included in the scope of consolidation. This, plus the full adoption of IPSAS in 2017, increased operating revenue by KCHF 32,075 and operating expenses by KCHF 26,894 for the year, and resulted in a KCHF 420,131 rise in total assets at 1 January 2017.

The second change led to a KCHF 45,995 decrease in liabilities and an equivalent increase in equity (restated amounts at 1 January 2017). The new accounting standard also lifted personnel expenses by KCHF 42,319, but had no impact on cash flow.

CHF 1000	2016	2017
Operating revenue	997 485	1 051 190
Change vs previous year	2%	5%
Operating expenses	957 328	1 029 486
Change vs previous year	3%	6%
Net finance income / expense	– 1 822	– 8 221
Share of surplus / deficit of associated entities and joint ventures	–	– 1 876
Surplus (+) or deficit (–)	**38 335**	**11 607**
Third-party funds as % of operating revenue	32%	34%
Personnel expenses as % of operating revenue	62%	64%

STATEMENT OF FINANCIAL PERFORMANCE

The growth in operating revenue is due mainly to the addition of controlled entities to the scope of consolidation, which added KCHF 32,075, combined with a KCHF 14,601 increase in the Federal financial contribution and a KCHF 7,477 rise in research contributions, donations and bequests. Even with the revenue from the new fully-consolidated entities, the Federal financial contribution still accounts for nearly two-thirds of EPFL's revenue. This contribution is intended primarily to cover the costs of capital investment, operations and overheads. The remaining third of EPFL's revenue comes from research contributions, donations, bequests and services, and is used mainly to finance the research projects and mandates carried out by the School's scientific staff, PhD students and post-docs.

The growth in operating expenses largely reflects the adoption of the new accounting standard mentioned above and the resulting impact on personnel expenses. In addition to this one-time charge, the change in scope of consolidation raised operating expenses by KCHF 5,623. The underlying growth in EPFL's personnel expenses was only KCHF 3,546, or 0.6%, in 2017.

The increase in the net finance expense stems primarily from the newly consolidated finance leases for the SQIE and SQNE buildings.

The decline in the surplus for the year can therefore be attributed mainly to the adoption of new accounting standards.

STATEMENT OF FINANCIAL POSITION

CHF 1000	31.12.2016	31.12.2017
Current assets	521 901	742 599
Non-current assets	691 025	872 346
Total assets	**1 212 927**	**1 614 945**
Liabilities	1 346 405	1 528 531
Valuation reserves	– 433 061	– 270 049
Dedicated reserves	170 002	233 267
Free reserves	162 594	159 758
Other equity	– 33 014	– 36 561
Equity	– 133 478	86 414
Total liabilities and equity	**1 212 927**	**1 614 945**

Total assets at 1 January 2017 increased by KCHF 420,131 as a result of the full adoption of IPSAS (with transitional provisions no longer being applied) and the switch to IPSAS 39. This increase breaks down as follows:

- Finance leases – non-current assets grew by KCHF 226,765 as a result of adding in the net value of the SQIE and SQNE buildings obtained through finance leases. This change in accounting treatment also increased liabilities by KCHF 293,894 and reduced equity by KCHF 67,128.
- Receivables from non-exchange transactions – the current portion of these receivables, which totalled KCHF 196,919, is now listed separately, thereby reducing non-current assets and increasing current assets.
- Usage rights – the recognition of the right to use the Microcity building in Neuchatel resulted in a KCHF 62,489 increase in non-current assets and in liabilities.
- Net defined benefit liabilities – KCHF 45,995 was reclassified from liabilities to equity.

The KCHF 63,265 increase in dedicated reserves can be attributed primarily to:

- A KCHF 6,632 rise in donations and bequests.
- A KCHF 43,651 increase in teaching and research reserves; part of this increase is transitional because it concerns funding received in advance for the BBP and the ETH Board's new Strategic Focus Areas.

CASH FLOW STATEMENT

CHF 1000	2016	2017
Cash flows from operating activities	197 628	60 544
Cash flows from investing activities	– 78 361	– 50 554
Cash flows from financing activities	–	– 7 263
Total cash flow	**119 267**	**2 727**

Cash flows from operating activities (KCHF 60,544) come from the KCHF 11,607 surplus for the year adjusted for the non-cash revenue and expenses recognized in the statement of financial performance (e.g., depreciation and amortization) and from the statement of financial position that are related to the School's operations (mainly net current assets, dedicated third-party funds and net defined benefit liabilities). The large cash flow in 2016 was primarily due to funding received that year for research projects for which EPFL is the leading house (most notably the HBP). Those funds were distributed to the project partners in 2017.

Cash flows from investing activities decreased by KCHF 27,807, including a KCHF 8,112 decline in investments in non-current assets; the remainder is related to non-recurring activities. The decline in ordinary investing activities stems from temporal factors: the net change in down payments on non-current assets was KCHF 11,434 in 2016, whereas it was only KCHF 1,297 in 2017.

A SOLID, SUSTAINABLE FINANCIAL POSITION

To summarize, EPFL has a healthy income statement with operating revenue growing slightly faster than operating expenses. On the balance sheet, the KCHF 72,026 increase in dedicated third-party funds and KCHF 63,265 rise in dedicated reserves reflect the successful efforts of EPFL researchers in raising third-party funds for the financing of medium-term projects.

Bertold Walther
Head of Accounting Department

Caroline Kuyper
Vice President for Finances

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GLOSSARY

BBP	Blue Brain Project
BCC	Building Cost Classification
BVG	Altersvorsorge
BVV 2	Ordinance on occupational retirement, survivors' and disability pension
CHUV	Centre hospitalier universitaire vaudois
CSCS	Centre Suisse de Calcul Scientifique
CTI	Commission pour la technologie et l'innovation
DBO	Defined Benefit Obligation
EPFL	Ecole polytechnique fédérale de Lausanne
EPFZ	Ecole polytechnique fédérale de Zürich
EPT	Equivalent à plein temps
ETH	Eidgenössischen technischen Hochschulen
EU	European Union
EUR	Euro, monnaie unique européenne
FEE	Fondation pour les étudiants de l'EPFL
FEIP	Fondation EPFL Innovation Park
FP	European Union Framework Programmes for Research
FTE	Full Time Equivalent
H2020	Horizon 2020
HBP	Human Brain Project
IIMT	Imagerie Moléculaire Translationnelle
IPSAS	International Public Sector Accounting Standards
KCHF	Thousands of Swiss Francs
OASI	Old-age insurance system
PhD	Philosophiæ doctor
PUC	Projected Unit Credit
SCCER	Swiss Competence Centers for Energy Research
SERI	The State Secretariat for Education, Research and Innovation
SNB	Swiss National Bank
SNSF	Swiss National Science Foundation, Swiss National Science Foundation
SQIE	Société pour le quartier de l'innovation de l'EPFL
SQNE	Société pour le quartier nord de l'EPFL
STCC	SwissTech Convention Center
STH	SwissTech Hotel
USD	United States Dollar

CONSOLIDATED FINANCIAL STATEMENTS

Rounding differences: it is possible that the sum of figures presented in this document does not correspond exactly to the total amounts shown in the tables. Variations are calculated on unrounded figures and may differ from values based on the figures in the tables, which are rounded.

CONSOLIDATED STATEMENT OF FINANCIAL PERFORMANCE

CHF 1000	Actual 2016 *	Actual 2017	*Change to actual absolute*	Notes
Federal financial contribution	612 337	627 164	*14 828*	5
Federal contribution to accommodation	68 570	68 343	*– 227*	5
Total federal contribution	**680 907**	**695 507**	***14 601***	
Tuition fees and other utilisation fees	**11 827**	**11 891**	***64***	6
Swiss National Science Foundation (SNSF)	90 700	88 464	*– 2 236*	
Commission for Technology and Innovation (CTI)	16 165	19 962	*3 797*	
Special federal funding of applied research	15 037	15 210	*173*	
EU Framework Programmes for Research and Innovation (FP)	63 015	59 116	*– 3 900*	
Industry-oriented research (private sector)	37 394	44 082	*6 688*	
Other project-oriented third-party funding (incl. cantons, municipalities, international organisations)	26 680	20 214	*– 6 466*	
Research contributions, mandates and scientific services	**248 992**	**247 048**	***– 1 944***	7
Donations and bequests	**27 993**	**37 413**	***9 421***	8
Other revenue	**27 767**	**59 332**	***31 565***	9
Operating revenue	**997 485**	**1 051 190**	***53 706***	
Personnel expenses	620 173	671 661	*51 489*	10, 26
Other operating expenses	267 428	270 927	*3 499*	11
Depreciation	51 524	65 763	*14 239*	19, 21
Transfer expenses	18 203	21 134	*2 931*	12
Operating expenses	**957 328**	**1 029 486**	***72 158***	
Operating result	**40 156**	**21 704**	***– 18 452***	
Net finance income / expense	**– 1 822**	**– 8 221**	***– 6 399***	13
Share of surplus / deficit of associated entities and joint ventures	**–**	**– 1 876**	***– 1 876***	18
Surplus (+) or deficit (–)	**38 335**	**11 607**	***– 26 727***	

* The 2016 financial statements include EPFL only, whereas the 2017 financial statements cover the expanded scope of consolidation, which includes the fully consolidated entities and equity-accounted entities listed in Note 34. Adding these entities to the scope of consolidation increased operating revenue by KCHF 32,075 and operating expenses by KCHF 26,894. Most of the rise in personnel expenses reflects the switch to a new accounting standard for employee benefits (IPSAS 39) and a change in the underlying actuarial assumptions. The increase in the net finance expense stems from KCHF 7,642 of finance expenses from finance leases (see Notes 2, 3, 4, 13 and 19).

Operating revenue as a whole grew by KCHF 53,706. Not including the newly consolidated entities, revenue rose 2.2%. This reflects a KCHF 14,828 increase in the Federal financial contribution, which totalled KCHF 627,164 in 2017 and included KCHF 10,884 in funding for the ETH Board's Strategic Focus Areas (personalized healthcare, data science and advanced manufacturing). Research contributions, mandates and scientific services and donations and bequests rose by KCHF 7,477, or 2.7%. The growth in other revenue can be attributed to the expansion of the scope of consolidation mentioned earlier; this line item consists primarily of building revenue (from high-tech companies at SQIE, startups at FEIP and student housing at SQNE), as well as rental income from the SwissTech Convention Center and SwissTech Hotel.

Out of the KCHF 72,158 increase in operating expenses, personnel expenses accounted for KCHF 51,489, including KCHF 5,623 from the change in the scope of consolidation and KCHF 42,471 from the switch to a new accounting standard for employee benefits (IPSAS 39) and a change in the underlying actuarial assumptions. The KCHF 14,239 increase in depreciation comes from the depreciation recognized on the buildings held by SQIE and SQNE obtained through finance leases.

The increase in the net finance expense can be attributed to additional charges arising from the long-term financial liabilities inherent to finance leases.

The surplus for the year fell by KCHF 26,727, despite the expanded scope of consolidation, as a result of the adoption of new accounting standards (with no impact on cash flow).

CONSOLIDATED BALANCE SHEET

CHF 1000	31.12.2016 *	31.12.2017	*Change absolute*	Notes
Cash and cash equivalents	209 830	218 002	*8 173*	14
Current receivables from non-exchange transactions	16 746	219 060	*202 314*	15
Current receivables from exchange transactions	10 011	12 912	*2 901*	15
Current financial assets and loans	272 612	283 131	*10 519*	20
Inventories	2 039	2 185	*146*	16
Prepaid expenses and accrued income	10 664	7 309	*– 3 355*	17
Total current assets	**521 901**	**742 599**	***220 698***	
Property, plant and equipment	199 323	445 521	*246 198*	19
Intangible assets	2 825	64 054	*61 229*	19
Non-current receivables from non-exchange transactions	388 668	251 026	*– 137 642*	15
Investments in associated entities and joint ventures	1 527	37 738	*36 211*	18
Non-current financial assets and loans	23 927	6 510	*– 17 417*	20
Co-financing	74 755	67 497	*– 7 258*	21
Total non-current assets	**691 025**	**872 346**	***181 321***	
Total assets	**1 212 927**	**1 614 945**	***402 019***	
Current liabilities	132 437	68 631	*– 63 806*	22
Current financial liabilities	443	14 342	*13 899*	23
Accrued expenses and deferred income	36 639	32 295	*– 4 343*	24
Short-term provisions	21 560	29 594	*8 034*	25
Short-term liabilities	**191 078**	**144 862**	***– 46 216***	
Dedicated third-party funds	446 252	518 278	*72 026*	27
Non-current financial liabilities	23 374	353 149	*329 775*	23
Net defined benefit liabilities	664 861	490 364	*– 174 497*	26
Long-term provisions	20 839	21 878	*1 039*	25
Long-term liabilities	**1 155 326**	**1 383 669**	***228 342***	
Total liabilities	**1 346 405**	**1 528 531**	***182 126***	
Valuation reserves	– 433 061	– 270 049	*163 012*	
Dedicated reserves	170 002	233 267	*63 265*	
Free reserves	162 594	159 758	*– 2 837*	
Co-financing of state-owned real estate	74 755	67 497	*– 7 258*	21
Reserves from associated entities	–	37 738	*37 738*	18
Accumulated surplus (+)/deficit (-)	– 107 769	– 141 796	*– 34 027*	
Total equity	**– 133 478**	**86 414**	***219 892***	
Total liabilities and equity	**1 212 927**	**1 614 945**	***402 019***	

* Amounts at 31 December 2016 have not been restated. Restatements related to the full adoption of IPSAS (i.e., without the six exceptions) and the switch from IPSAS 25 to IPSAS 39 were carried out at 1 January 2017. See Note 2.

Total assets grew 33%, mainly as a result of the new accounting standards (the full adoption of IPSAS and the switch to IPSAS 39, see Note 2) and the addition of new entities to the scope of consolidation (see Note 2).

Current assets increased largely as a result of the reclassification of the current portion of non-exchange transactions to ''Current receivables from non-exchange transactions'' as of 31 December 2017 (subsidies and donations).

The rise in non-current assets reflects the addition at 31 December 2017 of the net value of buildings obtained through finance leases.

Liabilities grew primarily as a result of the new accounting treatment of finance-lease liabilities (the offsetting entries for non-current assets), partly offset by a sharp reduction in defined benefit liabilities following the change in accounting standards and the new actuarial assumptions. The KCHF 72,026 increase in dedicated third-party funds reflects an increase in funding for medium-term research projects.

The increase in equity can be attributed to higher dedicated reserves as a result of greater funding for medium-term research projects, and a rise in valuation reserves related to defined benefit liabilities. The use of dedicated reserves is subject to fewer restrictions than the use of dedicated third-party funds.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

CHF 1000	Valuation reserves	Dedicated donations and bequests	Teaching and research reserves	Infrastructure and administration reserves	Dedicated reserves	Free reserves	Co-financing of state-owned real estate	Reserves from associated entities	Accumulated surplus (+)/ deficit (-)	Total equity
2016										
Stand per 01.01.2016	– 299 895	117 860	42 627	1 384	161 870	147 870	72 538	–	– 121 030	– 38 647
Surplus (+) or deficit (-)									38 335	38 335
Revaluation of financial assets	–	–	–	–	–	–	–	–	–	–
Change from defined benefit liability	– 133 166	–	–	–	–	–	–	–	–	– 133 166
Hedging transactions	–	–	–	–	–	–	–	–	–	–
Total items directly recognised in equity	– 133 166	–	–	–	–	–	–	–	–	– 133 166
Reclassifications in equity	–	– 4 613	11 745	1 000	8 132	14 724	2 217	–	– 25 074	–
Currency translations	–	–	–	–	–	–	–	–	–	–
Total changes	– 133 166	– 4 613	11 745	1 000	8 132	14 724	2 217	–	13 261	– 94 831
Stand per 31.12.2016	**– 433 061**	**113 246**	**54 372**	**2 384**	**170 002**	**162 594**	**74 755**	**–**	**– 107 769**	**– 133 478**
2017										
Changes from restatement as of 01.01.2017	–	390	–	–	390	–	–	40 422	5 269	46 081
Stand per 01.01.2017	– 433 061	113 636	54 372	2 384	170 392	162 594	74 755	40 422	– 102 500	– 87 397
Surplus (+) or deficit (-)									11 607	11 607
Revaluation of financial assets	–	–	–	–	–	–	–	–	–	–
Change from defined benefit liability	163 012	–	–	–	–	–	–	–	–	163 012
Hedging transactions	–	–	–	–	–	–	–	–	–	–
Total items directly recognised in equity	163 012	–	–	–	–	–	–	–	–	163 012
Changes in investments in associated entities directly recognised in equity	–	–	–	–	–	–	–	– 807	–	– 807
Reclassifications in equity	–	6 632	43 651	12 592	62 875	– 2 837	– 7 258	– 1 876	– 50 904	–
Currency translations	–	–	–	–	–	–	–	–	–	–
Total changes	163 012	6 632	43 651	12 592	62 875	– 2 837	– 7 258	– 2 683	– 39 296	173 812
Stand per 31.12.2017	**– 270 049**	**120 268**	**98 023**	**14 976**	**233 267**	**159 758**	**67 497**	**37 738**	**– 141 796**	**86 414**

Equity grew by KCHF 173,812 in 2017. 93% of this increase, or KCHF 163,012, is due to changes in valuation reserves (resulting from new actuarial assumptions for net defined benefit liabilities, see Note 26).

Valuation reserves

Valuation reserves relate to net defined benefit liabilities and are discussed in Note 26. The negative position at the start of the period is due to the recognition of a provision for defined benefit liabilities, initially calculated under IPSAS 25 and then under IPSAS 39 starting on 1 January 2017. Changes since 1 January 2014 that affect equity have been recorded in valuation reserves. These defined benefit liabilities totalled KCHF 490,364 at 31 December 2017.

Dedicated reserves

Dedicated reserves mainly include remaining commitments under contracts with new professors (start-up funds) in the amount of KCHF 19,847 (vs. KCHF 24,615 in 2016) and contractual commitments with donors in the amount of KCHF 12,058 (vs. KCHF 5,748 in 2016). The increase in these reserves is temporary and reflects the fact that funds received for the BBP and the ETH Board's new Strategic Focus Areas have not yet been used. The organizational structures for the Strategic Focus Areas are in the process of being set up. The increase in infrastructure and administration reserves is partly due to greater construction needs (e.g., to replace the heating system) and partly due to new renovation reserves for the SQIE and SQNE buildings.

Co-financing

EPFL provides co-financing through third-party funding that is used for the construction of buildings belonging to the Swiss federal government. The decrease in co-financing in 2017 is mainly due to a KCHF 5,000 repayment following the withdrawal of a sponsor.

CONSOLIDATED CASH FLOW STATEMENT

CHF 1000	2016 *	2017	*Change absolute*
Surplus (+) or deficit (–)	38 335	11 607	*–26 728*
Depreciation	51 524	65 763	*14 239*
Share of surplus/deficit of associated entities and joint ventures	–	1 876	*1 876*
Net finance income/expense (non-cash)	925	–718	*–1 643*
Increase/decrease in net working capital	88 491	–74 940	*–163 431*
Increase/decrease in net defined benefit liabilities	–10 620	30 985	*41 605*
Increase/decrease in provisions	3 209	7 176	*3 967*
Increase/decrease in non-current receivables	–49 000	–5 277	*43 723*
Increase/decrease in dedicated third-party funds	74 289	18 026	*–56 263*
Reclassification and other (non-cash) income	476	6 045	*5 569*
Cash flows from operating activities	**197 628**	**60 544**	***–137 084***
Purchase of property, plant and equipment	–63 048	–54 185	*8 863*
Purchase of intangible assets	–708	–1 459	*–751*
Increase in co-financing	–4 000	–	*4 000*
Increase in loans	–3 500	-3	*3 497*
Increase in current and non-current financial assets	–22 051	–1 519	*20 532*
Total investments	**–93 307**	**–57 167**	***36 140***
Disposal of property, plant and equipment	–	780	*780*
Disposal of intangible assets	–	–	*–*
Decrease in co-financing	–	5 000	*5 000*
Decrease in loans	750	119	*–631*
Decrease in current and non-current financial assets	14 196	714	*–13 482*
Total divestments	**14 946**	**6 613**	***–8 333***
Dividends received from associated entities and Joint Ventures	–	–	*–*
Cash flows from investing activities	**–78 361**	**–50 554**	***27 807***
Increase in short-term and long-term financial liabilities	–	1 000	*1 000*
Decrease in short-term and long-term financial liabilities	–	–8 263	*–8 263*
Cash flows from financing activities	**–**	**–7 263**	***–7 263***
Total cash flow	**119 267**	**2 727**	***–116 540***

CHF 1000	2016 *	2017	*Change absolute*
Changes from restatement as of 01.01.2017	–	5 445	*5 445*
Cash and cash equivalents at the beginning of the period	**90 562**	**215 275**	***124 713***
Total cash flow	119 267	2 727	*− 116 540*
Cash and cash equivalents at the end of the period	**209 830**	**218 002**	***8 172***
Net effect of currency translation on cash and cash equivalents	–	–	–
Contained in the cash flows from operating activities are:			
Dividends received	1 432	37	*− 1 395*
Interest received	640	544	*− 96*
Interest paid	− 3	− 8 543	*− 8 540*

* 2016 amounts have not been restated. Restatements related to the full adoption of IPSAS (i.e. without the six exceptions) and the switch from IPSAS 25 to IPSAS 39 were carried out at 1 January 2017. See Note 2.

The large cash flow in 2016 was due primarily to funding received for the HBP, for which EPFL is the leading house. The cash flow that year was also impacted by substantial reclassifications of financial investments between long-term and short-term.

The decrease in short-term and long-term financial liabilities in 2017 essentially relates to a reduction in finance-lease liabilities, as well as to the repayment of mortgage liabilities at a newly consolidated entity. These two factors are also reflected in the ''Interest paid'' line item.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

01 BUSINESS ACTIVITY

EPFL is one of two Swiss Federal Institutes of Technology. With the status of a federal school since 1969, the engineering school has grown in many ways, to the extent of becoming one of the most famous European institutions of science and technology. EPFL is Europe's most cosmopolitan technical university, with students, professors and staff from over 120 nations. A dynamic environment, open to Switzerland and the world, EPFL is centred on its three missions: teaching, research and technology transfer. EPFL works together with an extensive network of partners including other universities and institutes of technology, developing and emerging countries, secondary schools and colleges, industry and economy, political circles and the general public, to bring about real impact for society.

The School brings together some 14,500 people, including 10,700 students. 13 complete Bachelor's programmes and 24 Master's programmes are offered in Engineering, Basic Sciences, Information Technology and Communication, Life Sciences, as well as in the field of Construction, Architecture and the Environment. They are accompanied by exchange programmes in the world's best institutions and industrial internships to better understand the realities of the corporate world.

02 BASIS OF ACCOUNTING

These financial statements are consolidated financial statements covering the reporting period from 1 January 2017 to 31 December 2017. The reporting date is 31 December 2017. The accounts presented in French are authentic.

LEGAL PRINCIPLES

The accounting system for the EPFL is based on the following legal foundations (incl. directives and regulations):

- Federal Act on the Federal Institutes of Technology of 4 October 1991 (ETH Act; SR 414.110)
- Ordinance concerning the Domain of the Swiss Federal Institutes of Technology of 19 November 2003 (Ordinance on the ETH Domain; SR 414.110.3)
- Ordinance on Finance and Accounting of the ETH Domain of 5 December 2014 (SR 414.123)
- Accounting Manual for the ETH Domain (version 6.2)

ACCOUNTING STANDARDS

The consolidated financial statements of EPFL have been prepared in accordance with the International Public Sector Accounting Standards (IPSAS). The underlying accounting provisions are set out in the Directive Accounting Manual for the ETH Domain (Art. 34 of the Directives, Ordinance on Finance and Accounting of the ETH Domain, SR 414.123).

IPSAS STANDARDS THAT HAVE BEEN PUBLISHED BUT NOT YET APPLIED

The following IPSAS has been published up to the reporting date. It is only to become effective later, and has not been applied early in the present consolidated financial statements.

IPSAS 40 Public Sector Combinations

The standard listed above comes into effect on 1 January 2019. The impact on the consolidated financial statements will be analysed systematically. There are no further changes or interpretations which would not have to be applied and which would have a significant impact on EPFL accounts.

RESTATEMENT OF THE CONSOLIDATED FINANCIAL STATEMENTS OF EPFL AS OF 1 JANUARY 2017

In 2015, EPFL transitioned to IPSAS, apart from the six items below, which were applied on 1 January 2017:

1. IPSAS 6-8 or now 34-38 (Consolidated and Separate Financial Statements, Investments in Associates, Interests in Joint Ventures) were not applied to investments held over 20%.
2. Based on the contractual provisions, the receivables from non-exchange transactions (IPSAS 23) were not completely divided into a current and non-current portion.
3. The provisions stated in the Accounting Manual for the ETH Domain for ''holiday and overtime payments including long-service awards already earned'' were not fully implemented.
4. The provisions on disclosure of financial instruments (IPSAS 30) were not fully implemented.
5. The provisions on finance leases (IPSAS 13) were not applied to EPFL. Instead, they were treated in a similar way to the former accounting method (based on the Accounting Manual for the ETH Domain). Any commitments made were disclosed in the Notes to the annual financial statements.
6. The provisions of IPSAS 23.76 et seq. on transfers of services in-kind and goods in-kind were not applied.

IPSAS 39 Employee Benefits, which comes into effect on 1 January 2018, superseding IPSAS 25, was adopted early as per 1 January 2017.

As EPFL is preparing complete IPSAS financial statements for the first time for the period to 31.12.2017 (First IPSAS Financial Statements), the simplified procedure can be applied for the restatement in accordance with IPSAS 33 (First-time Adoption of Accrual Basis IPSASs).

The previous year's figures are presented pursuant to the annual financial statements 2016, whereas the effective date for the restatement is 01.01.2017.

The financial implications of the implementation of the above six items and the application of IPSAS 39 are recognised in the restatement as of 1 January 2017. They are explained in this section.

CHF 1000	Balance sheet 31.12.2016 (before restatement)	*Reclassifications* Distinction of current/non-current receivables from non-exchange transactions	*Reclassifications* Other	*Revaluation* Expanded scope of consolidation	*Revaluation* Net defined benefit liabilities (IPSAS 39)	*Revaluation* In-kind services received	*Revaluation* Other	Total changes	Opening balance sheet as of 01.01.2017
Total current assets	521 901	196 919	– 100	20 661	–	–	–	217 480	739 381
Total non-current assets	691 025	– 196 919	–	283 082	–	62 489	54 000	202 652	893 677
Total assets	**1 212 927**	–	**– 100**	**303 743**	–	**62 489**	**54 000**	**420 131**	**1 633 058**
Short-term liabilities	191 078	–	– 100	16 350	–	2 343	1 731	20 324	211 403
Long-term liabilities	1 155 326	–	–	285 576	– 45 995	60 145	54 000	353 726	1 509 053
Total liabilities	**1 346 405**	–	**– 100**	**301 926**	**– 45 995**	**62 489**	**55 731**	**374 051**	**1 720 455**
Valuation reserves	– 433 061	–	–	–	–	–	–	–	– 433 061
Dedicated reserves	170 002	–	–	390	–	–	–	390	170 392
Free reserves	162 594	–	–	–	–	–	–	–	162 594
Reserves from associated entities	–	–	–	40 422	–	–	–	40 422	40 422
Other equity	– 33 014	–	–	– 38 995	45 995	–	– 1 731	5 269	– 27 745
Total equity	**– 133 478**	–	–	**1 817**	**45 995**	–	**– 1 731**	**46 081**	**– 87 397**
Total liabilities and equity	**1 212 927**	–	**– 100**	**303 743**	–	**62 489**	**54 000**	**420 131**	**1 633 058**

Reclassifications

Receivables from non-exchange transactions were previously reported as non-current. Based on the contracts, they were first split into current and non-current parts. KCHF 196,919 were identified as current and reclassified accordingly.

Ajustements

- The first time application of IPSAS standards 34-38 (consolidated and separate financial statements, investments in associates and joint ventures) leads to an increase in the balance sheet total of KCHF 304,694 (transitional provisions 1). This effect arises, in particular, when allowing for the leases on real estate in connection with the ordinary partnership entities SQNE and SQIE. The lease contracts are based on 99-year leases whereby EPFL is entitled to terminate them after 30 years. In this case, the real estate will be transferred to the Federal Government in return for a contractually fixed compensation payment unless a subsequent lessee can be found who will continue to lease the premises at identical terms. The compensation payment is indexed and fixed to 78.9% of the construction costs. When these leases were taken into account for the first time, various assessments or interpretations of the IPSAS were conducted (see explanatory notes in Annex 4 Estimates and management judgements). These assessments resulted in classifying these contracts accounting-wise as finance lease with a rental term of thirty years. This decision is taken from a purely accounting perspective and in no way obliges the senior management of the EPFL to terminate or extend the agreement effectively after thirty years. Given the fact that operating costs have proved to be higher than had been originally planned, EPFL has also identified an impairment on the SQNE premises amounting to KCHF 52,142. The value in use represents the recoverable service amount. This resulted in the following adjustments to the opening values as of 01.012017:

- Increase of KCHF 324,548 in the gross purchase value of the buildings
- Increase of KCHF 97,783 in the accumulated depreciation and impairment on buildings
- Increase of KCHF 293,894 in financial liabilities
- Reduction of KCHF 67,128 in equity

The first-time application of IPSAS 39 (Employee Benefits) has reduced net defined benefit liabilities by KCHF 45,995.

The provisions of IPSAS 23.76 et seq. regarding the transfer of services in-kind and goods in-kind were applied in EPFL in the reporting year and prompted the recognition of a donated right at EPFL of KCHF 62,489 (Microcity building in Neuchatel).

The other revaluations have factored in a project contract in the order of KCHF 54,000, which had been concluded in the previous years, as well as KCHF 1'731 for the complete implementation of the regulations for ''holiday and overtime payments including long service awards already earned'' (transitional provision 3).

The full implementation of the disclosure of financial instruments had no impact on the balance sheet as the recognition of and accounting policies for financial instruments have already been applied since 2015, when converting to IPSAS (transitional provision 4).

03 ACCOUNTING POLICIES

The accounting policies are derived from the basis of accounting. The consolidated financial statements present a true and fair view of EPFL's financial position, financial performance and cash flows, presenting revenue and expenses in the period in which they occur (accrual accounting).

The consolidated financial statements are based on historical cost. Exceptions to this rule are described in the following presentation of the accounting principles.

CONSOLIDATION PRINCIPLES

The consolidated annual financial statements of EPFL comprise the two Federal Institutes of Technology, the four research institutes and the ETH Board, as well as all the entities over which the aforementioned institutions or the ETH Board exercise direct or indirect control.

Control means that EPFL is exposed, or has rights, to variable benefits from its involvement with the entity, and has the ability to affect the nature or amount of those benefits through its power over the entity.

EPFL Board has power when it has existing rights that give it the current ability to direct the relevant activities, i.e., the activities that significantly affect the nature or amount of the benefits from its involvement with the other entity. This is normally the case if EPFL directly or indirectly holds more than 50% of the voting rights or voting rights that can potentially be exercised. These entities are fully consolidated.

All intercompany receivables, liabilities, expenses and revenue from internal transactions within the economic entity, as well as unrealised intercompany surpluses or deficits are eliminated in the course of consolidation.

Investments in associated entities with a 20 % to 50 % share of the voting rights and/or in entities in which EPFL has significant influence, but not control, are not included in the consolidated figures, but rather are recognised using the equity method and are reported under the position investments in associated entities. In the equity method, the value of the investment is initially recognized at cost and adjusted thereafter to reflect any changes in the share of the net assets of the associated entity. Significant balances and transactions with these entities are shown separately as items with associated entities and joint ventures.

Consolidation is performed on the basis of the uniform accounting policies and normally on the basis of the separate financial statements of EPFL and of the controlled entities prepared as at the same reporting date. Due to time constraints, there may be cases where it is not possible to use the financial statements for the period ended 31 December 2017. Therefore, financial statements from the previous year are used, which are immaterial compared to the consolidated financial statements for EPFL, and which are adjusted for the effects of significant transactions occurred between the reporting date of the previous year and 31 December 2017.

Investments newly acquired in the course of the reporting period are included in the consolidated financial statements provided that they meet the consolidation criteria and if they exceed the thresholds defined in the Ordinance on Finance and Accounting of the ETH Domain two years in succession. Entities which are sold are included up to the time when control is lost, which generally corresponds to the date of the sale. Profits realised from the sale of controlled and associated entities as well as joint ventures are recognised in the finance result.

Changes to the investment quotas of EPFL in controlled entities which do not lead to the loss of control over any of those entities are recognised in the balance sheet as an equity transaction. The book values of the shares held by EPFL and those of the non-controlling interests are adjusted to reflect changes in the share quotas in the controlled entities. Any difference between the amount by which the non-controlling interests are adjusted and the fair value of the consideration paid or received is recognised directly under equity and attributable to EPFL.

If EPFL loses control of a controlled entity, the deconsolidation gain or loss is recognised in surplus or deficit. This is determined from the difference between:
- the total amount of the fair value of the consideration received and the fair value of the shares retained and
- the carrying amount of the assets (including any goodwill) and of the liabilities of the controlled entity and of any non-controlling interest.

An overview of the controlled and associated entities can be found in section 34 Relationships with controlled and associated entities.

CURRENCY TRANSLATION

The reporting is prepared in Swiss francs (CHF). All figures are shown in thousands of Swiss francs (CHF 1000/KCHF) unless indicated otherwise.

Transactions in foreign currencies are translated using the exchange rate valid at the time of the transaction. The date on which the transaction is first recognised is to be used for the transaction date.

For each reporting date, monetary items in foreign currencies are translated using the closing rate. Resulting currency-translation differences are recognised under finance income or finance expense. Non-monetary items are translated using the exchange rate on the day of the transaction.

Assets and liabilities of controlled entities with a different functional currency are translated using the closing rate, statement of financial performance and cash flow statement are translated using an average rate. Translation differences resulting from the translation of net assets and the statement of financial performance are recognised under equity.

The main currencies and their exchange rates are:

Currency	Entity	Closing rate as of 31.12.2016	**Closing rate as of 31.12.2017**	Average rate 2016	**Average rate 2017**
EUR	1	1.0717	1.1701	1.0901	1.1116
USD	1	1.0160	0.9743	0.9850	0.9846
GBP	1	1.2582	1.3168	1.3349	1.2681

REVENUE RECOGNITION

Each inflow of funds into an entity is to be examined to see whether it is revenue from exchange transactions (IPSAS 9) or revenue from non-exchange transactions (IPSAS 23). If there is a revenue from exchange transactions (IPSAS 9), the revenue will always be recognised at the time the goods and services are delivered. In the case of project contracts, the performance obligation which has not yet been provided is allocated to liabilities. The revenue is billed and itemised to reflect the progress of the project, based on the costs incurred in the reporting period.

For revenue from non-exchange transactions (IPSAS 23), a distinction is to be made between whether or not there is an obligation to pay/repay. Should any such obligation apply, the relevant amount will be recognised as borrowed capital when the contract is concluded and will be released to income in step with the progress of the project.

If there is neither a corresponding exchange nor an obligation to pay or repay as stipulated in IPSAS 23, as is frequently the case with donations, a revenue that affects net income is to be booked in the reporting year which increases the net assets/equity of the entity accordingly.

The revenue is structured as follows.

Total federal contribution
The grants by the Federal Government or Parliament to the ETH Domain include the federal financial contribution (in the narrower sense) and the federal contribution to accommodation. Both these types of revenue are classed as revenue from non-exchange transactions (IPSAS 23).

The contributions by the Federal Government are recognised in the year in which they are paid. Unused funds from federal financial contributions result in reserves under equity.

The contribution towards accommodation corresponds to the accommodation expenses, equating to a rent calculated for the state-owned buildings used by the Federal Government and EPFL. The accommodation expenditure is recognised as part of other operating expense.

Tuition fees and others utilisation fees
Revenue from tuition fees and other utilisation fees are to be classed as revenue from exchange transactions (IPSAS 9). In principle, the revenue is recognised at the time the goods or services are delivered. If significant services are provided beyond the reporting date, an accrued income is recognised.

Research contributions, mandates and scientific services
Project-related contributions are given to EPFL by various donors, with the aim of promoting teaching and research. Project financing largely involves multi-year projects. Depending on the characteristics of the contributions, they are classed as revenue from exchange transactions or revenue from non-exchange transactions. The type of revenue recognised depends on whether there is a performance or repayment obligation. Revenue from non-exchange transactions (IPSAS 23) is recognised if there is a receivable that is legally binding, the inflow of funds is probable, and there is no further performance obligation. Usually, a performance obligation exists and revenue is recognised as the project progresses in the accounting period based on the resources consumed.

Donations and bequests
Revenue from donations and bequests is to be classed as a revenue from non-exchange transactions (IPSAS 23). Donations without any conditional risk of repayment are generally recognised in full as revenue when the contract is signed. The donations also include the in-kind contributions, which are differentiated between as follows:

- Goods in-kind are entered at the time the contract is signed. Assets are posted in accordance with prevailing regulations (capitalisation and depreciation).
- Donated rights within the meaning of operational leasing are posted as expenses and revenue; those within the meaning of finance leasing are assessed at their fair value at the time the contract is concluded, if known, and they are depreciated over the period of useful life. If a performance obligation exists, a liability is recorded, and the revenue will be realised annually in accordance with the services provided. If there is no performance obligation, the revenue will be recognised entirely upon capitalisation of the capital good.
- Material services in-kind which are received will not be recorded but are disclosed and commented upon in the notes.

Due to the high number and the difficulty in elicitation, separability and mesurement of rights of use and services in kind within research agreements, these are not recognised. There is only a general description of the research activity in the notes section.

Other revenue
Other service revenue and revenue from real estate, inter alia, is counted as other revenue. This revenue is classed as revenue from exchange transactions (IPSAS 9). In principle, the revenue is recognised at the time the goods or services are delivered. If the service is provided beyond the reporting date, an accrued income is recognised.

CASH AND CASH EQUIVALENTS

Cash and cash equivalents include cash on hand, demand and term deposits with financial institutions, as well as funds that are invested with the Federal Government, with a maximum term of 90 days. Cash and cash equivalents are valued at nominal value.

RECEIVABLES

Receivables from exchange transactions (from goods and services) and from non-exchange transactions are presented separately in the balance sheet.

For receivables from non-exchange transactions (IPSAS 23), such as from SNSF and EU projects and from other donors, an inflow of funds in relation to the total contractual project volume is probable. Therefore, the total amount of the project is usually recognised as a receivable at inception of the agreement if the fair value can be measured reliably. If the recognition criteria cannot be met, information is disclosed under contingent assets.

Non-current receivables of over CHF 10 million are stated at amortised cost using the effective interest method. Current receivables from exchange transactions are stated at cost when the revenue is realised.

Value adjustments are made to receivables on the basis of experience and on a case-by-case assessment.

INVENTORIES

Inventories are to be valued at the lower of cost and net realisable value. Costs are calculated using the weighted average method. For inventories that are difficult to sell, appropriate value adjustments are to be made.

PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment items are recognised in the balance sheet at cost less accumulated depreciation. Depreciation is applied linearly, according to the estimated period of useful life. The estimated periods of useful life are:

Asset category	Useful life
Immovable assets	
Property	unrestricted
Leasehold improvements ≤ CHF 1 million	10 years
Leasehold improvements > CHF 1 million	according to components [1]
Buildings and structures	according to components [2]
Movable assets	
Machinery, equipment, tools, devices	5 years
Passenger vehicles, delivery vehicles, trucks, aircraft, ships, etc.	5 years
Furnishings	5 years
IT and communication	3 years

[1] In the case of items of property, plant and equipment with a value of CHF 1 million or above, it is checked whether components (with a value that is significant in relation to the total value) need to be recognised and depreciated separately because they have a different useful life (components approach).

[2] Useful life depends on the type of building, its purpose and the fabric of the building (20–100 years). Assets under construction are not yet depreciated.

Capitalised leasehold improvements and installations in rented premises are depreciated over the estimated useful life or the shorter period of the lease.

For incoming property, plant and equipment, it is checked whether components that represent a significant portion of the total value should be capitalised and depreciated separately because of their different periods of useful life (component approach).

Major renovations and value-enhancing investments that increase the economic benefit of a property, plant and equipment item or extend its useful life are to be capitalised and depreciated over the estimated useful life. Costs merely for repairs and maintenance are recognised as an expense. Borrowing costs for assets under construction are capitalised.

The residual value of property, plant and equipment that is decommissioned or sold is derecognised at the time of the asset's physical disposal. The gains or losses resulting from the derecognition of an item of property, plant and equipment are recognised as operating revenue or operating expenses.

Movable cultural items and works of art (e.g. teaching collections, art or historical collections, libraries) are not recognised as assets. An inventory of these items is kept.

INTANGIBLE ASSETS

Intangible assets are recognised at cost. For standard software, the depreciation is applied linearly over three years, with an effect on surplus or deficit. Other intangible assets are depreciated linearly over the estimated period of useful life, with a period of depreciation that is to be determined for each individual case.

IMPAIRMENTS (PROPERTY, PLANT AND EQUIPMENT AND INTANGIBLE ASSETS)

Each year, property, plant and equipment as well as intangible assets are reviewed for any indications of impairment. If any such indications are found, an impairment test is to be carried out. If the carrying amount continually exceeds the value in use or the net realisable value, an impairment is recognised, with an effect on the surplus or deficit.

If the main purpose of an investment is to generate a commercial return, the impairment is calculated using IPSAS 26 (Impairment of cash-generating assets). For all other investments, any impairment is calculated in accordance with the provisions of IPSAS 21 (Impairment of non cash-generating assets). The main criteria for the judgement are the original motives behind the respective investments and the significance of the planned cash inflows.

LEASE

Leases for real estate, equipment, other movable assets and vehicles where EPFL basically assumes all the risks and rewards associated with the ownership are to be treated as financial leases. The asset and liability from a financial lease are recognised at the fair value of the leased object or at the lower present value of the minimum lease payments, at the date when the lease starts. Each lease payment is divided into the reduction of the outstanding liability and the finance charge. The reduction is deducted from the capitalised lease liability.

The depreciation of the leased goods occurs over the shorter of the useful life or the lease term, if the transfer of ownership is not certain by the end of the lease term

Other leases where the ETH Domain acts as the lessee are recognised as operating leases. They are not carried in the balance sheet but are recognised as expenses in the statement of financial performance according to the accrual principle.

Long-term leases of real estate are assessed separately depending on whether they are for plots of land or buildings.

FINANCIAL ASSETS AND LOANS

Financial assets are recognised at fair value if they are purchased with the intention of generating short-term profits from market price fluctuations, or if they are designated as financial assets at fair value (for instance investments held that do not entitle the holder to exert a significant influence). Changes in value are recognised in surplus or deficit.

The other non-current financial investments which are held for an indefinite period and may be sold at any time for reasons of liquidation or as a response to changes in market conditions are classified as ''available for sale'' and recognised in the balance sheet at their fair value or at their purchase value if the fair value cannot be determined reliably. Gains and losses that are not realised are recognised in equity, and only transferred to surplus or deficit when the financial assets are sold or decrease in value (impairment). The item ''available for sale'', for instance, includes investments which are not controlled or significantly influenced.

Loans granted and fixed deposits are to be recognised in the balance sheet either at amortised cost (nominal value under CHF 10m, as well as current loans and fixed deposits over CHF 10m) or at amortised cost using the effective interest method (non-current loans and fixed deposits over CHF 10m). The effective interest method allocates the difference between the acquisition cost and the repayment amount (premium/discount) over the period of the investment, using the net present value method. Impairments are made on the basis of a case-by-case assessment.

Derivative financial instruments are primarily to be used for the purpose of hedging an investment or as a strategic position. They are valued solely at fair values. Any value adjustments are usually recognised in surplus or deficit.

INVESTMENT PROPERTY

Investment property will only be reported separately if it is material. Otherwise, it is recognised in the balance sheet under property, plant and equipment and disclosed accordingly.

CO-FINANCING OF STATE-OWNED REAL ESTATE

Co-financing refers to third-party funding acquired by the ETH Domain that is used for building projects for the Federal Government's own properties.

Co-financing items are valued according to the valuation of the underlying properties, which the Federal Government recognises in the balance sheet at cost minus the accumulated depreciation. This means that the value of the co-financing items goes down in proportion to the ongoing depreciation. Co-financing items are reported with the same amounts in both the assets and in the liabilities (equity) of the balance sheet.

CURRENT LIABILITIES

Current liabilities are usually recognised in the balance sheet on receipt of the invoice. Current accounts with third parties (including social insurance institutions) are also recognised in the balance sheet under this item. They are valued at the nominal value.

FINANCIAL LIABILITIES

Financial liabilities include monetary liabilities resulting from financing activities, as well as negative replacement values from derivative financial instruments. The monetary liabilities are usually interest-bearing. Liabilities that are due for repayment within twelve months of the reporting date are current. They are always measured at amortised cost. Derivative financial instruments are measured at their fair value.

PROVISIONS

Provisions are recognised when a past event leads to a present obligation, an outflow of funds is likely, and the amount can be estimated reliably.

NET DEFINED BENEFIT LIABILITIES

All employees and pensioners of EPFL are insured under the pension scheme of the ETH Domain in the collective institution ''Swiss Federal Pension Fund'' (PUBLICA). There are no further significant pension schemes at the controlled entities, which is why any further statements in the text refer to the pension scheme of the ETH Domain with PUBLICA. The net defined benefit liabilities correspond to the present value of defined benefit obligations (DBO), measured according to the methodology in IPSAS 39, less the fair value of plan assets.

The defined benefit obligations are calculated by external actuarial experts annually using the Projected Unit Credit method (''PUC method''). The calculation is made based on information on the beneficiaries (salary, vested benefits, etc.) and relevant assumptions. The assumptions include both demographic (retirement rates, disability rates, mortality rates, etc.) and financial ones (salary development, pension development, discount rate, etc.). The amounts calculated are discounted to the valuation date by applying the discount rate. Changes in estimates of economic conditions can affect significantly defined benefit obligations.

Under the PUC method, benefit entitlements are added evenly over the number of years of service to be rendered, rather than reflecting the actual distribution of retirement credits under the ETH Domain's pension scheme, where they are graduated and increase with age. The defined benefit obligations were valued based on the current membership data of the ETH Domain's pension scheme as of 31 October 2017, using actuarial assumptions as of 31 December 2017 (e.g. BVG 2015 actuarial tables), and on the plan provisions of the ETH Domain's pension scheme. The results were then adjusted using pro rata estimated cash flows as of 31 December 2017. The fair value of plan assets is used with reference to the estimated performance as of 31 December 2017.

The statement of financial performance includes the current service cost, the past service cost arising from plan amendments and curtailments, gains and losses from plan settlements, administrative costs as well as the interest expense from defined benefit obligations in personnel expenses.

The effects of plan amendments and curtailments (past service cost) that are deemed fully vested are recognised immediately in surplus or deficit in the period in which they occur. Actuarial and investment gains and losses on defined benefit plans are recognised directly in equity in the reporting period in which they occur.

Significant other long-term employee benefits (e.g. future long-service award) are also measured using the PUC method.

DEDICATED THIRD-PARTY FUNDS

The liabilities from dedicated projects whose revenue has been classed as a revenue from non-exchange transactions (IPSAS 23) are recognised in the balance sheet as dedicated third-party funds in non-current liabilities, non-current because the projects usually last for several years and the short-term component of the liability cannot be determined.

The valuation is done by considering the outstanding performance obligation on the reporting date. The figure is calculated from the contractually agreed project total minus services performed until the reporting date.

EQUITY

Net assets/equity is the residual interest in the assets of an entity after deducting all its liabilities. EPFL's equity is structured as follows:

Valuation reserves

The following entries which do not affect surplus or deficit are made in the valuation reserves.

- **Revaluation reserves for financial assets** that come under the category ''available for sale'' and which are recognised in the balance sheet at fair value. Changes to the fair value are recognised in equity, until the financial assets are sold.
- **Valuation reserves from defined benefit obligations.** Actuarial and investment gains and losses from defined benefit obligations or plan assets are recognised in equity, without affecting the surplus or deficit.
- **Valuation reserves from hedging transactions**. If hedge accounting is used, positive and negative replacement values from hedging transactions are recognised in equity, and released to surplus or deficit as soon as the underlying hedged transaction has an effect on the surplus or deficit.

Dedicated reserves

The dedicated reserves under equity include:

- **Donations and bequests**. This item includes remaining funds, not yet used, from donations and bequests that do not qualify as borrowed capital but which are nonetheless tied to certain conditions. Freely available funds (without conditions) from donations and bequests are to be listed under free reserves.
- **Reserves for teaching and research** (electoral/appointment commitments, teaching and research projects). This item indicates that different commitments exist, and that corresponding reserves have had to be created to cover them. Commitments are subject to a resolution, generally by the Directorate/Executive Board, and must be verifiable at any time.
  In the majority of cases, this involves electoral commitments, i.e. funds granted to newly appointed professors within the scope of contractual agreements to enable them to set-up their chair. These reserves are recognised when corresponding commitments have been made in writing, and an employment contract is in place. It is mandatory to set them up, even if the funding has not yet been received. These appointment credits are generally used up within three to five years.
- **Reserves for infrastructure and administration** (value fluctuations, construction projects). They include reserves for value fluctuations of the securities portfolio and reserves for construction projects.
  The value fluctuation reserves are determined from the investment strategy; they serve as risk capital.
  The reserve for construction projects relates to Federal Government funds which were granted and paid out for real estate projects, and which have not yet been used due to delays.

Dedicated reserves must have been generated (with the exception of electoral/appointment commitments). Recognition and release take place within the equity.

Free reserves

Free reserves include:

- Free reserves that are at the disposal of the Executive Board or Directorate. There are no external or internal conditions imposed which would restrict their freedom of disposal.
- Free research reserves of the departments and the professors. They derive primarily from the remaining balance of completed third-party funded projects. They serve teaching and research purposes, as well as to cover losses (e.g. short-term losses of earnings, foreign currency losses). They are not specifically earmarked in terms of time or purpose, however.

Co-financing of state-owned real estate

If third-party resources are used for constructions projects in real estate, and this real estate is owned by the Federal Government, this is referred to as co-financing. Firstly, these funds transferred to the Federal Government are recognised as co-financing under non-current assets, and secondly, the third-party funds that are recognised as revenue via the statement of financial performance are recognised as dedicated equity under the heading of co-financing.

Reserves from associated entities

This item includes valuation reserves from the inclusion of the share of equity of investments in associated entities which are valued applying the equity method.

Accumulated surplus/deficit

The item "Accumulated surplus/deficit" shows the status of the accumulated results as at the reporting date. It consists of: the surplus or deficit carried forward, the surplus or deficit for the period and reclassifications in equity.

The surplus or deficit carried forward is accumulated annually as part of the appropriation of surplus or deficit. The portion of the surplus or deficit that has not yet been distributed is included

in the surplus or deficit of the period. If currency translation adjustments of foreign, fully consolidated investments held arise during the consolidation, they are recognised under equity, without an effect on surplus or deficit.

CONTINGENT LIABILITIES AND CONTINGENT ASSETS

A contingent liability is either a possible obligation that arises from past events and whose existence will be confirmed only by the occurrence or non-occurrence of an uncertain future event not wholly within the control of the entity or a present obligation that arises from past events, but is not recognised because of its low probability of occurrence (less than 50%) or because the obligation cannot be measured reliably, as a result of which the criteria for recognising a provision are not met.

A contingent asset is defined as a possible asset from a past event whose existence first has to be confirmed by a future event. The occurrence of this event cannot be controlled. This only includes contingent assets from third parties.

FINANCIAL COMMITMENTS

Financial commitments are presented in the Notes if they are based on events prior to the reporting date, and will definitely lead to obligations towards third parties after the reporting date, and their amount can be reliably determined.

CASH FLOW STATEMENT

The cash flow statement shows the cash flows from operating activities and from investment and financing activities. The figures are shown according to the indirect method. This means operational cash flow based on the surplus or deficit for the period, adjusted to reflect value flows which do not trigger any direct flow of funds. The "total cash flow" corresponds to the change in the "Cash and cash equivalents" item on the balance sheet.

ESTIMATION UNCERTAINTY IN THE APPLICATION OF ACCOUNTING POLICIES

When preparing the consolidated financial statements in accordance with generally accepted accounting principles, it is necessary to use estimates and assumptions. The estimates and assumptions are based on past experience as well as other appropriate, substantiated factors, such as expectations about the occurrence of future events. Additionally, when applying the accounting policies, decisions have to be made that may have a significant effect on the figures shown in the consolidated financial statements. Although these estimates are based on management's best knowledge, the actual results may deviate from those estimates.

This applies especially to the following items.

Useful life and impairment of plant, property and equipment

The useful life of plant, property and equipment is defined in due regard for current technical circumstances and past experiences and is reviewed periodically. A change in the estimate can impact upon the future level of the depreciations and of the carrying amount.

Within the scope of the regular impairment test, estimates are also made which may result in a reduction of the carrying amount (impairment).

When IPSAS 13 was applied for the first time at EPFL, an impairment on the assets of the ordinary partnership entity SQNE amounting to KCHF 52,142 was recognised, with effect from 1 January 2017 (see explanations in Note 2). This estimate includes assumptions about future cash flows to determine the value in use resp. fair value.

Provisions

Provisions have a higher reliance on estimates than other balance sheet items. This may lead to a higher or lower outflow of funds depending on the outcome of the respective situation.

Net defined benefit liabilities

The net defined benefit liabilities is calculated based on long-term actuarial assumptions for the defined benefit obligations and for the expected return on plan assets. These assumptions may deviate from the actual future development. The determination of the discount rate and the future salary developments form an important part of the actuarial valuation.

Recognition of donations

EPFL regularly receives donations in the form of assets. According to IPSAS these must first be recognised as assets at their fair value. Estimates have to be made by the management when assessing this fair value.

Discounting rates

Uniform discount rates are defined for the discounting of non-current receivables, liabilities and provisions. These are based on a risk-free interest rate and a credit risk premium. However, because of the current interest rate situation these discounting rates are subject to some uncertainties.

Leasings financiers

When accounting for two long-term lease contracts (see also explanations in Note 2 Basis of accounting), EPFL applied the following significant management judgements when these leases were recognised for the first time:

- Both leases are classified as finance leases because the main risks and rewards incidental to ownership have been transferred to EPFL.
- With regard to the term of the lease, EPFL regards a ''30-year rental period'' as the most likely accounting scenario as it represents the most economically viable solution. This decision is taken from a purely accounting perspective and in no way obliges the senior management of

the EPFL to terminate or extend the agreement effectively after thirty years. The impairment of the leased assets of the ordinary partnership entity SQNE is calculated on the basis of IPSAS 21 ''Impairment of non-cash-generating assets'' because the main objective of this investment is to upgrade the EPFL site through the addition of conference and lecture facilities and student accommodation, and the economic return is not the primary objective.

05 TOTAL FEDERAL CONTRIBUTION

CHF 1000	2016	2017	*Change absolute*
Federal financial contribution	612 337	627 164	*14 828*

CHF 1000	2016	2017	*Change absolute*
Federal contribution to accommodation	68 570	68 343	*– 227*

The basic funding granted by the Swiss federal government, also called the federal contribution, accounts for two-thirds of EPFL's operating revenue. This funding is intended primarily to cover the costs of teaching, research and overheads. It also covers the rent charged to EPFL by the Swiss federal government for the use of government-owned land and buildings.

The total federal contribution rose by 2.4%, or KCHF 14,828, in 2017, whereas the federal contribution to accommodation was essentially unchanged.

06 TUITION FEES AND OTHER UTILISATION FEES

CHF 1000	2016	2017	*Change absolute*
Tuition fees	8 649	9 110	*462*
Utilisation and adminstration fees (IPSAS 9)	3 178	2 780	*– 398*
Tuition fees and other utilisation fees	**11 827**	**11 891**	***64***

Tuition fees derive primarily from Bachelor's, Master's and PhD programmes, as well as post-graduate courses. Utilisation and administration fees consist mainly of income from continuing education classes, which accounted for most of the decline in this line item in 2017 since the number of continuing education classes offered varies from year to year.

07 RESEARCH CONTRIBUTIONS, MANDATES AND SCIENTIFIC SERVICES

CHF 1000	2016	2017	of which revenues IPSAS 23	of which revenues IPSAS 9	*Change absolute*
Swiss National Science Foundation (SNSF)	90 700	88 464	88 464	–	*– 2 236*
Commission for Technology and Innovation (CTI)	16 165	19 962	19 962	–	*3 797*
Special federal funding of applied research	15 037	15 210	13 556	1 654	*173*
EU Framework Programmes for Research and Innovation (FP)	63 015	59 116	59 116	–	*– 3 900*
Industry-oriented research (private sector)	37 394	44 082	21 367	22 715	*6 688*
Other project-oriented third-party funding (incl. cantons, municipalities, international organisations)	26 680	20 214	18 059	2 155	*– 6 466*
Total research contributions, mandates and scientific services	**248 992**	**247 048**	**220 523**	**26 524**	***– 1 944***
EU Framework Programmes for Research and Innovation (FP)					
of which financed by SERI	7 935	8 623	8 623	–	*688*

Research contributions, mandates and scientific services include all funding granted by national and international institutions, as well as third-party funding from Swiss cantons and municipalities, international organisations, Swiss federal agencies and private-sector entities. Third-party funding is mainly aimed at two- to five-year projects, and is recognised as revenue on a percentage-of-completion basis during the accounting period in which the funding is used.

Research contributions, mandates and scientific services fell 0.8% in 2017 to KCHF 247,048. The decline in funding from the SNSF partly reflects the completion of the Nano-Tera and SystemsX programmes. The substantial increase in funding from the CTI is due to the ramp-up of the SCCER programmes, including the FURIES programme headed by EPFL. The reduction in funding for EU Framework Programmes is essentially due to the transition from FP7 to H2020.

The ''Industry-oriented research (private sector)'' and ''Other project-oriented third-party funding (incl. cantons, municipalities, international organisations)'' line items can vary considerably from one year to the next depending on the specific research projects being carried out. For 2017, the net change in these two line items was KCHF 222.

08 DONATIONS AND BEQUESTS

CHF 1000	2016	2017	*Change absolute*
Donations and bequests	27 993	37 413	*9 421*

This line item consists of donations and bequests made to EPFL and its consolidated entities, as well as revenue from usage rights. These funds allow EPFL to implement strategic initiatives (such as creating new chairs) and acquire the necessary equipment to spur both research and teaching.

The increase can be attributed to KCHF 7,027 in co-financing received for the construction of a new building on campus, and to revenue from usage rights for the Microcity building in Neuchatel and Industrie 17 building in Sion (the cantons donated the rights to use these buildings free of charge, representing a value of KCHF 4,267 – see table below). In 2016, the Canton of Geneva made a non-recurring KCHF 5,000 contribution to EPFL to help the School open a branch in the Campus Biotech buildings in Geneva.

CHF 1000	2017
Goods in-kind	–
Donated rights	4 267
Total in-kind contributions recognised as revenue	**4 267**
Services in-kind	2 829
Total in-kind contributions not recognised as revenue	**2 829**
Total in-kind contributions received	**7 096**

The donated rights concern the use of the Microcity building, made available by the Canton of Neuchatel, and the Industrie 17 building, made available by the Canton of Valais.

The KCHF 2,829 of services in-kind corresponds to the value of the high-speed computing capacity provided by the Swiss National Supercomputing Centre (CSCS, part of EPFZ).

09 OTHER REVENUE

CHF 1000	2016	2017	*Change absolute*
Licences and patents	5 050	4 919	*– 131*
Sales	4 267	3 326	*– 941*
Refunds	3 596	3 505	*– 91*
Other services	11 365	20 854	*9 489*
Real estate revenue	3 368	25 017	*21 649*
Profit from disposals (property, plant and equipment)	121	471	*350*
Other miscellaneous revenue	–	1 239	*1 239*
Total other revenue	**27 767**	**59 332**	***31 565***

Consolidated entities added KCHF 32,075 to other revenue. The "Other services" line item relates primarily to STCC and STH. "Refunds" consists essentially of travel expenses reimbursed to EPFL employees by other institutions and patent fees charged to the holders of EPFL licences. The additional real estate revenue comes from SQIE, FEIP and SQNE.

10 PERSONNEL EXPENSES

CHF 1000	2016	2017	*Change absolute*
Professors	77 695	77 622	*– 73*
Scientific personnel	263 601	263 113	*– 488*
Technical and administrative personnel, apprentices, trainees	171 662	181 717	*10 056*
IC, Suva and other refunds	– 2 159	– 2 107	*53*
Total salaries and wages	**510 799**	**520 346**	***9 547***
Social insurances OASI/DI/IC/MB	31 740	32 633	*893*
Net pension costs	49 180	91 500	*42 319*
Accident and sickness insurance Suva (BU/NBU/KTG)	1 597	1 618	*21*
Employer's contribution to Family Compensation Fund (FAK/FamZG)	11 259	11 423	*164*
Total social insurance schemes and pension expenses	**93 776**	**137 174**	***43 398***
Other employer contributions	193	135	*– 58*
Temporary personnel	5 380	4 870	*– 510*
Change in provisions for untaken leave and overtime	2 225	1 689	*– 537*
Change in provisions for contributions to long-service awards	1 223	1 030	*– 193*
Other personnel expenses	6 576	6 417	*– 159*
Total personnel expenses	**620 173**	**671 661**	***51 489***

Personnel expenses rose 8.3%, or KCHF 51,489, in 2017. Of that increase, 6.7 percentage points, or KCHF 42,319, comes mainly from the switch from IPSAS 25 to IPSAS 39 and the change in the underlying actuarial assumptions, with no effect on cash flow. Of that increase, 0.9 percentage points, or KCHF 5,623, comes from the consolidated entities, meaning that the actual increase in the School's personnel expenses was 0.6%, or KCHF 3,546.

Full-time equivalents (FTEs)	2016	2017
Professors	322	323
Scientific personnel	3 429	3 539
Technical and administrative personnel, apprentices, trainees	1 694	1 779
Total Full-time equivalents	**5 445**	**5 641**

The amounts in the above table are not comparable. The 2016 figures are those at 31 December 2016, while the 2017 figures are monthly averages. The consolidated entities added 43.5 FTEs recorded under technical and administrative personnel.

Looking at EPFL alone, the number of FTE professors was flat between 31 December 2016 and 31 December 2017, the number of FTE scientific personnel increased by 35, and the number of FTE technical and administrative personnel, apprentices and trainees rose by 86, mainly due to new hires to support large research projects such as the Human Brain Project, Blue Brain Project and Swiss Data Science Center.

11 OTHER OPERATING EXPENSES

CHF 1000	2016	2017	*Change absolute*
Expenses for goods and materials	39 332	39 966	*635*
Premises costs	97 573	104 541	*6 968*
Energy costs	13 308	13 970	*662*
IT expenses	26 674	27 778	*1 104*
Expenses for consultations, expertises and guest lecturers	33 331	29 143	*– 4 188*
Library expenses	7 328	5 274	*– 2 055*
Other operating costs	49 882	50 256	*374*
Total other operating expenses	267 428	270 927	*3 499*

The consolidated entities added KCHF 7,594 to other operating expenses. The decline in expenses for consultations, expertises, and guest lecturers can be attributed primarily to the change in the scope of consolidation and the elimination of inter-company transactions. The drop in library expenses reflects the reclassification of certain costs to "Expenses for consultations, expertises, and guest lecturers" and fewer purchases of subscriptions to databases and electronic journals.

Other operating expenses at EPFL alone fell 1.5%.

12 TRANSFER EXPENSES

CHF 1000	2016	2017	*Change absolute*
Scholarships and grants to students and doctoral students	7 346	6 431	*– 915*
Contributions to research projects	–	9 586	*9 586*
Other transfer expenses	10 857	5 117	*– 5 740*
Total transfer expenses	18 203	21 134	*2 931*

Contributions to research projects are listed in a separate line item for the first time in 2017. They consist of funds transferred to project partners, and can vary considerably from one year to the next depending on the type and pace of the research projects in question. In 2017, this line item included KCHF 721 that remains to be transferred to the CHUV and KCHF 505 transferred to PSI for the joint purchase of a high-performance neutron spectrometer.

Other transfer expenses include fees paid to academic organisations and subsidies for non-academic activities like day care and student clubs.

13 FINANCE RESULT

CHF 1000	2016	2017	*Change absolute*
Interest income	981	544	*– 438*
Income from investments	2 534	37	*– 2 496*
Changes in fair value of financial assets	582	970	*388*
Foreign currency gains	1 538	2 161	*623*
Other finance income	151	38	*– 113*
Total Finance income	5 786	3 750	*– 2 036*
Interest expense	601	8 668	*8 067*
Other financing costs for provision of capital	–	–	*–*
Changes in fair value of financial assets	3 881	182	*– 3 699*
Foreign currency losses	2 835	2 890	*55*
Impairment of loans and fixed deposits	–	–	*–*
Other finance expense	291	231	*– 60*
Total Finance expense	7 608	11 971	*4 363*
Total net finance income / expense	**– 1 822**	**– 8 221**	***– 6 399***

Finance income

The decline in income from investments is due in part to the addition of SQIE to the scope of consolidation, meaning that EPFL's share of the profits of SQIE is no longer recorded in this line item.

Finance expense

The increase in interest expense stems mainly from the interest charge on the financial liability that was recognised following the reclassification of the rental agreements for the SQIE and SQNE buildings as finance leases (see Note 19). The decrease in changes in fair value of financial assets reflects the addition of SQNE to the scope of consolidation, as EPFL previously booked a 90% share of SQNE's result.

Foreign currency losses include realised losses arising from timing differences between the recognition of foreign-currency receivables and liabilities and their settlement, as well as from value adjustments of these line items (including cash and cash equivalents) at 31 December 2017.

14 CASH AND CASH EQUIVALENTS

CHF 1000	31.12.2016	31.12.2017	*Change absolute*
Cash	66	66	*–*
Swiss Post	88 321	49 923	*– 38 398*
Bank	20 958	27 529	*6 571*
Short-term deposits (≤ 90 days)	100 485	140 485	*40 000*
Total cash and cash equivalents	209 830	218 002	*8 173*

Consolidated entities added KCHF 3,330 to cash and cash equivalents. KCHF 40,000 in cash was transferred from the Swiss Post account to the Swiss Federal Finance Administration (in short-term deposits) to avoid being charged negative interest rates.

15 RECEIVABLES

CHF 1000	31.12.2016	31.12.2017	*Change absolute*
Receivables from project contracts and donations	401 274	465 342	*64 068*
Other receivables	4 572	4 787	*215*
Value adjustments	– 433	– 43	*390*
Total Receivables from non-exchange transactions	**405 414**	**470 086**	***64 672***
of which current	16 746	219 060	*202 314*
of which non-current	388 668	251 026	*– 137 642*
Receivables from project contracts and donations	10 800	13 746	*2 946*
Other receivables	177	460	*283*
Value adjustments	– 966	– 1 294	*– 328*
Total Receivables from non-exchange transactions	**10 011**	**12 912**	***2 901***
of which current	10 011	12 912	*2 901*
of which non-current	–	–	*–*

The increase in receivables from project contracts and donations can be attributed primarily to a single donor. The reclassifications between non-current and current receivables from non-exchange transactions is due to the elimination of one of the six IPSAS exceptions (see Note 2).

Past due of receivables

CHF 1000	Total receivables	Not past due	Past due up to 90 days	Past due 91 to 180 days	Past due more than 180 days
31.12.2017					
Gross amount	**484 335**	**476 082**	**2 491**	**4 398**	**1 363**
Receivables from non-exchange transactions	**470 129**	465 951	1 595	2 554	28
Receivables from exchange transactions	**14 206**	10 131	896	1 844	1 334
Value adjustments	**– 1 336**	**–**	**–**	**– 6**	**– 1 330**
of which individually impaired	**– 873**				

Value adjustments of receivables

CHF 1000	Value adjustments of receivables from non-exchange transactions	Value adjustments of receivables from exchange transactions
2017		
as of 31.12.2016	**– 433**	**– 966**
Changes from restatement as of 01.01.2017	–	– 69
as of 01.01.2017	**– 433**	**– 1 035**
Recognition of value adjustments	– 43	– 553
Derecognition of uncollectable impaired receivables	–	156
Reversal of redundant value adjustments	433	138
Changes to the scope of consolidation	–	–
as of 31.12.2017	**– 43**	**– 1 294**

This table is given for the first time in 2017. 2016 amounts are not shown because they have not been restated.

16 INVENTORIES

CHF 1000	31.12.2016	31.12.2017	*Change absolute*
Inventories purchased	1 974	2 121	*147*
Inventories self-produced	65	63	*– 2*
Total inventories	2 039	2 185	*146*

Consolidated entities added KCHF 122 to inventories.

Inventories purchased are valued at purchase price. Inventories self-produced are valued at production cost.

17 PREPAID EXPENSES AND ACCRUED INCOME

CHF 1000	31.12.2016	31.12.2017	*Change absolute*
Interest	26	–	*– 26*
Prepaid expenses	–	5 355	*5 355*
Other prepaid expenses and accrued income	10 638	1 954	*– 8 684*
Total prepaid expenses and accrued income	10 664	7 309	*– 3 355*

Consolidated entities added KCHF 1,312 to prepaid expenses and accrued income.

Prepaid expenses are listed in a separate line item for the first time in 2017.

18 INVESTMENTS IN ASSOCIATED ENTITIES AND JOINT VENTURES

Details about the significant associated entities can be found in the tables below. All the associated entities can be found in the scope of consolidation on note 34.

There are no joint ventures in EPFL's scope of consolidation.

Change in associated entities

CHF 1000	2017
as of 01.01.	40 422
Additions	–
Disposals	–
Dividends received	–
Share of the annual surplus or deficit	– 1 876
Share of items directly recognised in equity	– 807
Currency translation differences	–
as of 31.12.	37 738

Summary financial information on associated entities

The aggregated financial information about the material associated entities is indicated below. This reflects the amounts of the financial statements of the associated entities which are adjusted to the accounting of the ETH Domain applying simplifications.

CHF 1000	Foundation Les Bois Chamblard	Foundation Campus Biotech Geneva
31.12.2017		
Reporting date used	31.12.2016	31.12.2017
Current assets	12 233	17 509
Non-current assets	15 574	14 546
Short-term liabilities	33	9 432
Long-term liabilities	1 105	9 438
Revenue	130	28 601
Surplus (+) or deficit (–)	– 697	– 1 982

The reporting date of 31 December 2016 is used for Fondation Les Bois Chamblard because this associated entity has its financial statements audited and publishes them after EPFL publishes its own financial statements. However, the amounts given include any material events occurring in 2017.

Aggregated information for individually immaterial associated entities included in the scope of consolidation

CHF 1000	2017
Revenue	760
Surplus (+) or deficit (–)	– 586

Unrecognised share of losses of associated entities

No associated entities reported losses in 2017.

19 PROPERTY, PLANT AND EQUIPMENT AND INTANGIBLE ASSETS

CHF 1000	Large scale research plants and equipment, machinery, furnishings, vehicles	IT hardware	Advance payments, movable assets under construction	Total movable assets
Purchase value				
Changes from restatement as of 01.01.2017	7 089	2 533	455	10 077
as of 01.01.2017	415 786	124 795	36 284	576 865
Additions	26 323	1 910	12 452	40 685
Reclassifications	6 423	4 053	– 10 476	–
Disposals	– 3 836	– 9	– 679	– 4 524
as of 31.12.2017	444 696	130 749	37 581	613 026
Accumulated depreciation				
Changes from restatement as of 01.01.2017	2 699	2 313	–	5 012
as of 01.01.2017	290 888	116 238	–	407 125
Depreciation	37 574	6 006	–	43 579
Impairments	648	–	–	648
Reversed impairments	–	–	–	–
Reclassifications	–	–	–	–
Disposals value adjustments	– 635	– 9	–	– 644
as of 31.12.2017	328 474	122 234	–	450 708
Balance sheet value as of 31.12.2017	**116 222**	**8 515**	**37 581**	**162 318**
thereof leased assets	–	–	–	–
Purchase value				
as of 01.01.2016	375 711	114 382	24 395	514 488
Additions	25 921	4 430	22 860	53 212
Reclassifications	7 189	3 449	– 10 639	–
Disposals	– 124	–	– 787	– 911
as of 31.12.2016	408 697	122 262	35 829	566 788
Accumulated depreciation				
as of 01.01.2016	252 754	104 200	–	356 953
Depreciation	34 876	9 724	–	44 601
Impairments	590	–	–	590
Reversed impairments	–	–	–	0
Reclassifications	–	–	–	0
Disposals value adjustments	– 31	–	–	– 31
as of 31.12.2016	288 189	113 924	–	402 113
Balance sheet value as of 31.12.2016	**120 509**	**8 338**	**35 829**	**164 675**
thereof leased assets	–	–	–	–

	Property, buildings	Assets under construction	Total immovable assets	Total property, plant and equipment	Total intangible assets
	369 811	101	369 912	379 989	70 555
	407 149	**20 225**	**427 374**	**1 004 239**	**78 366**
	4 336	4 426	8 762	49 447	1 459
	3 853	– 3 853	–	–	–
	–	– 101	– 101	– 4 625	–
	415 338	**20 697**	**436 035**	**1 049 060**	**79 825**
	113 489	–	113 489	118 501	8 035
	136 303	–	**136 303**	**543 428**	**13 022**
	16 528	–	16 528	60 107	2 750
	–	–	–	648	–
	–	–	–	–	–
	–	–	–	–	–
	–	–	–	– 644	–
	152 831	–	**152 831**	**603 539**	**15 772**
	262 507	**20 697**	**283 204**	**445 521**	**64 054**
	–	–	216 048	216 048	–
	33 758	**13 810**	**47 568**	**562 055**	**7 155**
	24	9 971	9 996	63 207	708
	3 556	– 3 556	–	–	–
	–	– 101	– 101	– 1 012	– 53
	37 338	**20 124**	**57 462**	**624 250**	**7 811**
	18 721	–	**18 721**	**375 674**	**4 530**
	4 094	–	4 094	48 694	457
	–	–	–	590	–
	–	–	–	–	–
	–	–	–	–	–
	–	–	–	– 31	–
	22 814	–	**22 814**	**424 927**	**4 986**
	14 524	**20 124**	**34 648**	**199 323**	**2 825**
	–	–	–	–	–

Property, plant and equipment
Almost all of the buildings that EPFL uses are owned by the Swiss federal government and are therefore not recognised as assets on EPFL's balance sheet but rather on that of the Swiss federal government. In 2016, EPFL's immovable assets consisted primarily of fixtures and fittings installed by tenants (BCC 3) in buildings owned by the Swiss federal government and rented buildings. The two rental agreements for the SQIE and SQNE buildings were reclassified as finance leases at 1 January 2017 (see Sections 2 and 4 and Note 13), which increased their purchase values by KCHF 324,548 and accumulated depreciation by KCHF 97,783. The estimates used to value the finance leases are given in Note 4, ''Estimation uncertainty and management judgements.''

The main additions to movable assets in 2017 were a spectrometer for the magnetic resonance laboratory (CHF 2,582), a gyrotron for the Swiss Plasma Center (KCHF 1,007) and computing clusters for Scientific IT and Application Support units and the Laboratory of Photonics and Quantum Measurements (KCHF 3,286).

The main additions to immovable assets in 2017 were fixtures and fittings installed by tenants (BCC 3) in the MED and ArtLab buildings as well as renovations to auditoriums and elevators.

Intangible assets
The KCHF 70,555 of restated intangible assets (based on purchase value) at 1 January 2017 consist mainly of the usage right (within the meaning of a finance lease) for the Microcity building in Neuchatel. Amortisation of this right totalled KCHF 2,343 in 2017.

20 FINANCIAL ASSETS

CHF 1000	31.12.2016	31.12.2017	*Change absolute*
Securities and fixed deposits	40 457	50 863	*10 407*
Positive replacement values	–	–	–
Other financial assets	232 156	232 156	–
Loans	–	112	*112*
Total current financial assets and loans	272 612	283 131	*10 519*
Securities and fixed deposits	–	–	–
Other financial assets	5 628	6 366	*738*
Loans	18 299	144	*– 18 155*
Total non-current financial assets and loans	23 927	6 510	*– 17 417*

Consolidated entities added KCHF 9,590 to securities and fixed deposits.

Other financial assets include EPFL deposits with the Swiss Federal Finance Administration (under a cash management agreement).

The decline in non-current loans is due to the addition of SQNE to the scope of consolidation.

Maturity schedule

CHF 1000	Total loans	Not past due	Past due up to 90 days	Past due 91 to 180 days	Past due more than 180 days
31.12.2017					
Gross amount	256	253	–	–	3
(Individual) Impairment	–	–	–	–	–

The loans in the above schedule pertain to newly consolidated entities. No impairment charges have been recognised on these loans.

21 CO-FINANCING

CHF 1000	2016	2017	*Change absolute*
Purchase value			
Changes from restatement as of 01.01.2017	–	–	–
as of 01.01.	87 883	91 883	*4 000*
Additions	4 000	–	*– 4 000*
Disposals	–	– 5 000	*– 5 000*
as of 31.12.	91 883	86 883	*– 5 000*
Accumulated depreciation			
Changes from restatement as of 01.01.2017	–	–	–
as of 01.01.	15 345	17 128	*1 783*
Depreciation	1 783	2 258	*476*
Disposals	–	–	–
as of 31.12.	17 128	19 386	*2 258*
Balance sheet value as of 31.12.	**74 755**	**67 497**	***– 7 258***

The increase in co-financing in 2016 was related to the construction of the ArtLab building. The KCHF 5,000 decline in 2017 is due to the withdrawal of a sponsor for that same construction project.

22 CURRENT LIABILITIES

CHF 1000	31.12.2016	31.12.2017	*Change absolute*
Trade payables	52 705	21 937	*– 30 769*
Liabilities to social insurance institutions	1 870	8 560	*6 690*
Other current liabilities	77 861	38 134	*– 39 738*
Total current liabilities	132 437	68 631	*– 63 806*

Consolidated entities added KCHF 703 to current liabilities. The high level of current liabilities at 31 December 2016 was due to HBP funding that EPFL had received as that project's leading house, but had not yet distributed to project partners. Those funds were distributed in 2017.

23 FINANCIAL LIABILITIES

CHF 1000	31.12.2016	31.12.2017	*Change absolute*
Finance lease liabilities	–	8 301	*8 301*
Negative replacement values	291	919	*629*
Other financial liabilities	152	5 121	*4 969*
Total current financial liabilities	**443**	**14 342**	***13 899***
Finance lease liabilities	–	277 502	*277 502*
Other financial liabilities	23 374	75 647	*52 284*
Total non-current financial liabilities	**23 374**	**353 149**	***329 775***

Negative replacement values relate to currency hedges (forward contracts) that EPFL has in place for projects where revenue is received in EUR or USD.

Finance lease liabilities correspond to the offsetting entry for non-current assets obtained through finance leases.

Other financial liabilities correspond to the offsetting entry for the usage rights (services in-kind) for the Microcity building, and to mortgage liabilities.

Finance lease

CHF 1000	Future minimum leasing payments 2017	Future financial expenses 2017	Present value of future minimum leasing payments 2017
Due within 1 year	15 732	7 430	8 301
Due within 1 to 5 years	62 926	27 504	35 422
Due after more than 5 years	313 436	71 356	242 080
as of 31.12.	**392 094**	**106 291**	**285 803**

CHF 1000	2017
Leasing expenses	
Lease payments expensed in period	–
Additional details	
Future revenue from sublease (from non-cancellable contracts)	40 897

Finance leases relate to SQIE and SQNE, which were added to the scope of consolidation in 2017. The accounting method for finance leases is discussed in Note 2, while Note 4 gives the assumptions used to recognise those leases in the consolidated financial statements. Both finance leases include a clause linking rental payments to the Swiss consumer index. The present value of the minimum lease payments is KCHF 180,074 for the SQNE lease and KCHF 105,730 for the SQIE lease.

24 ACCRUED EXPENSES AND DEFERRED INCOME

CHF 1000	31.12.2016	31.12.2017	*Change absolute*
Interest	–	–	*–*
Deferred income	–	23 025	*23 025*
Other accrued expenses and deferred income	36 639	9 271	*– 27 368*
Total accrued expenses and deferred income	36 639	32 295	*– 4 343*

Consolidated entities added KCHF 3,804 to accrued expenses and deferred income.

At 31 December 2016, this line item included two non-recurring transactions for a total amount of KCHF 10,500 (a planned KCHF 2,500 repayment to a donor and a KCHF 8,000 advance payment received for the construction of a building).

Deferred income is listed in a separate line item for the first time in 2017.

25 PROVISIONS

Provisions – Summary

CHF 1000	31.12.2016	31.12.2017	*Change absolute*
Provisions for untaken leave and overtime	20 940	24 825	*3 885*
Other long-term employee benefits (IPSAS 39)	20 839	21 878	*1 039*
Dismantling	–	–	*–*
Guarantees and warranties	–	–	*–*
Litigations	620	1 008	*388*
Other provisions	–	3 761	*3 761*
Total provisions	42 399	51 472	*9 073*

Provisions for untaken leave and overtime

The KCHF 3,885 increase in these provisions stems from an increase in headcount and in the amount of untaken leave and overtime, as well as a KCHF 1,731 restatement at 1 January 2017 following the elimination of IPSAS exception 3 (see Note 2).

Other long-term employee benefits

These benefits consist of future jubilee benefits calculated under IPSAS 39.

Other provisions

The new provision in 2017 relates to compliance risk in managing EU-funded projects.

Provisions – Derivation 2017

CHF 1000	Provisions for untaken leave and overtime	Other long-term employee benefits (IPSAS 39)	Dismantling	Guarantees and warranties	Litigations	Other provisions	Total provisions
Changes from restatement as of 01.01.2017	1 897	–	–	–	–	–	1 897
as of 01.01.2017	**22 837**	**20 839**	–	–	**620**	–	**44 296**
Creation (incl. increase)	2 076	4 039	–	–	705	3 761	10 581
Reversal	– 88	–	–	–	– 317	–	– 405
Appropriation	–	– 3 000	–	–	–	–	– 3 000
Reclassifications	–	–	–	–	–	–	–
Increase in present value	–	–	–	–	–	–	–
as of 31.12.2017	**24 825**	**21 878**	–	–	**1 008**	**3 761**	**51 472**
of which current	24 825	–	–	–	1 008	3 761	29 594
of which non-current	–	21 878	–	–	–	–	21 878
as of 01.01.2016	**18 715**	**19 638**	–	–	**388**	**450**	**39 191**
Creation (incl. increase)	2 225	1 223	–	–	304	–	3 752
Reversal	–	– 22	–	–	– 72	– 450	– 544
Appropriation	–	–	–	–	–	–	–
Reclassifications	–	–	–	–	–	–	–
Increase in present value	–	–	–	–	–	–	–
as of 31.12.2016	**20 940**	**20 839**	–	–	**620**	–	**42 399**
of which current	20 940	–	–	–	620	–	21 560
of which non-current	–	20 839	–	–	–	–	20 839

26 NET DEFINED BENEFIT LIABILITIES

All employees and pensioners of EPFL are insured under the pension plan of the ETH Domain in the collective institution ''Swiss Federal Pension Fund'' (PUBLICA). There are no other significant pension plans within the controlled entities, which is why any further statements in the text refer to the pension plan of the ETH Domain with PUBLICA.

However, the balance for net defined benefit liabilities included obligations arising from other pension plans amounting to KCHF 3'525 as per 1 January 2017.

The standard IPSAS 39, Employee benefits, was implemented on 1 January 2017. The effects are shown in detail in section 2 of the notes. The previous year's figures are based on IPSAS 25 and have only been reclassified into the tables which have been adjusted in line with IPSAS 39 (not restated).

LEGAL FRAMEWORK AND RESPONSIBILITIES

Regulatory environment
Swiss plans need to be funded through a legally separate trustee administered pension fund. The law prescribes minimum benefits.

Organisation of the pension plan

PUBLICA is an independent, state-run institution under public law.

The Board of Directors (Kassenkommission) is the highest body of PUBLICA. Apart from the management, it is also responsible for the supervision and controlling of the executive board of PUBLICA. The parity commission has 16 members (eight representing the people insured and eight representing the employers from among all the affiliated pension plans). This means that the highest body of PUBLICA is made up in equal parts of representatives of employees and employers.

Each pension scheme has a separate parity commission. Among other things, it is involved in the conclusion of the affiliation contract and decides on the appropriation of any surpluses. Each parity commission is made up of nine people representing employers and nine representing employees, as well as representatives of the units.

Insurance plan

According to IPSAS 39, the insurance plans are classified as ''defined benefit'' plans.

The pension plan is defined in the pension policies for employees and professors of the ETH Domain's pension plan, which form part of the affiliation contract with PUBLICA. The pension plan provides in excess of the minimum benefits required by the law in the event of invalidity, death, old age and departure; i.e. it is what is known as an enveloping plan (obligatory and extraordinary benefits).

The savings contributions by the employer and by the employees are defined as a percentage of the insured wage. A risk premium is collected for the risks of death and invalidity. The administrative costs are paid by the employer.

The old-age pension is calculated from the credit balance in the retirement fund multiplied by the conversion rate specified in the policy. The employee has the option of drawing the retirement benefits as capital. There are pension plans for different groups of insured persons. In addition, the employee has the option of making additional savings contributions.

The risk benefits are determined depending on the projected savings capital, which attracts interest, and on the conversion rate.

Investment

Investments are made by PUBLICA collectively for all the pension plans (with the same investment profile).

As the highest body of PUBLICA, the Board of Directors bears overall responsibility for the management of the assets. It is responsible for issuing and amending the investment policy and determines the investment strategy. The Investment Committee advises the Board of Directors on investment-related issues and oversees compliance with the investment policy and strategy.

Responsibility for the implementation of investment strategy rests with the Asset Management of PUBLICA. Asset Management also makes tactical decisions to deviate temporarily from the weighting of the investment strategy in order to generate added value compared to the existing strategy. Where individual investment classes are built up or reduced over a number of years, a pro rata strategy is calculated so as to enable transactions to be diversified over the time axis.

RISKS FOR THE EMPLOYER

The parity commission of the ETH Domain's pension plan can change the financing system (contributions and future benefits) at any time. The parity commission may collect restructuring contributions from the employer during a period of under-cover within the meaning of pension law (S. 4 BVV 2 (Ordinance on the Swiss Occupational Pensions Act)). If this is to be used to finance extraordinary benefits, the employer must indicate that it is in agreement with this.

The definitive coverage ratio in accordance with the Occupational Pensions Act (BVG) had not been met by the time this Annual Report was published. The provisional regulatory coverage ratio for the ETH Domain's pension scheme at PUBLICA, in accordance with BVV 2 (Ordinance on the Swiss Occupational Pensions Act), amounted to 108.0 % at the end of the year (2016: 103.2 %, definitive). The provisional economic coverage ratio for the ETH Domain's pension scheme at PUBLICA was 89.5 % at the end of the year (2016: 84.9 %, definitive).

SPECIAL EVENTS

There were no settlements or changes in pension plans in 2017.

Net defined benefit liabilities

CHF 1000	31.12.2016	31.12.2017
Present value of defined benefit obligations	– 2 320 015	– 2 272 733
Fair value of plan assets	1 655 154	1 782 369
Recognised net defined benefit liabilities	**– 664 861**	**– 490 364**

The decrease in net defined benefit liabilities reflects a KCHF 45,995 restatement at 1 January 2017 and a change in actuarial assumptions for the increase in the discount rate, the expected salary development and the expected pension development. In 2017, KCHF 3,525 of net defined benefit liabilities related to pension plans other than the one with Publica (vs. zero in 2016).

Pension costs

CHF 1000	2016	2017
Current service cost (employer)	78 872	88 088
Past service cost	5 817	3 281
Gains (–) / losses (+) from plan settlements	–	–
Interest expense from defined benefit obligations	8 466	4 589
Interest income from plan assets	– 43 040	– 3 327
Administrative costs (excl. asset management costs)	–	1 314
Other	–	–
Total Net pension costs incl. interest expense recognised in statement of financial performance	**50 115**	**93 944**

Net pension costs totalled KCHF 93,944 in 2017 (vs. KCHF 50,115 in 2016), including KCHF 719 for pension plans other than the one with Publica (vs. zero in 2016).

The rise in net pension costs can be attributed in particular to the switch from IPSAS 25 to IPSAS 39. More specifically, under IPSAS 39, which introduces the concept of net interest, the expected return on plan assets is calculated using a discount rate. This new method decreased interest income from KCF 43,040 in 2016 to KCHF 3,327 in 2017 and increased the return on plan assets from KCHF 42,952 in 2016 to KCHF 113,334 in 2017, recognised in equity. The interest expense from defined benefit obligations fell from KCHF 8,466 in 2016 to KCHF 4,589 in 2017, as the discount rate declined from 0.4% to 0.2%.

The increase in the current service cost from KCHF 78,872 in 2016 to KCHF 88,088 in 2017 reflects a slight rise in the number of plan members. The past service cost includes KCHF 3,281 in purchases recognised in the faculty pension plan (vs. KCHF 5,817 in 2016), recorded for the first time last year.

The ETH Board paid KCHF 8,500 into the ETH Doman pension plan in 2017, including KCHF 2,444 for EPFL personnel. This corresponds to the difference between the amount recognised in the income statement and the amount in the table above.

For 2018, employer contributions are expected to total KCHF 62,847 and employee contributions are expected to reach KCHF 31,940.

Analysis of the amounts recognised in equity

CHF 1000	31.12.2016	31.12.2017
Actuarial gains (-) and losses (+)	–	–
from change in financial assumptions	37 173	– 83 702
from change in demographic assumptions	95 453	–
from experience adjustments	43 492	34 024
Return on plan assets excl. interest income	– 42 952	– 113 334
Other	–	–
Amount recognised in equity	133 166	– 163 012
Cumulative amount of gains (–) / losses (+) recognised in equity	**433 061**	**270 049**

Actuarial gains recognised in equity rose from a loss of KCHF 133,166 in 2016 to a gain of KCHF 163,012 in 2017, resulting in cumulative losses of KCHF 433,061 at 31 December 2016 and KCHF 270,049 at 31 December 2017. KCHF 595 of the 2017 amount relates to pension plans other than the one with Publica (vs. zero in 2016). Actuarial gains from changes in financial assumptions reflect an increase in the discount rate and a decrease in the expected salary development and expected pension development. There were no changes in demographic assumptions in 2017, whereas EPFL switched to the BGV 2015 actuarial tables in 2016.

Change in the present value of defined benefit obligations during the year

CHF 1000	2016	2017
Changes from restatement as of 01.01.2017	–	– 35 380
Present value of defined benefit obligations as of 01.01.	2 103 302	2 284 635
Current service cost (employer)	78 872	88 088
Interest expense from defined benefit obligations	8 466	4 589
Employee contributions	31 462	32 231
Benefits paid in (+) and paid out (-)	– 84 022	– 90 412
Past service cost	5 817	3 281
Gains (-) / losses (+) from plan settlements	–	–
Actuarial gains (-) / losses (+)	176 118	– 49 678
Other	–	–
Present value of defined benefit obligations as of 31.12.	2 320 015	2 272 733

The weighted average duration of defined benefit obligations for EPFL alone was 15.4 years at 31 December 2017 (vs. 16.1 years in 2016).

Change in the fair value of plan assets during the year

CHF 1000	2016	2017
Changes from restatement as of 01.01.2017	–	7 091
Fair value of plan assets as of 01.01.	**1 560 987**	**1 662 245**
Interest income from plan assets	43 040	3 327
Employer contributions	60 735	62 959
Employee contributions	31 462	32 231
Benefits paid in (+) and paid out (–)	– 84 022	– 90 412
Gains (+) / losses (–) from plan settlements	–	–
Administrative costs (excl. asset management costs)	–	– 1 314
Return on plan assets excl. interest income	42 952	113 334
Other	–	–
Fair value of plan assets as of 31.12.	**1 655 154**	**1 782 369**

Transition of net defined benefit liabilities

CHF 1000	2016	2017
Changes from restatement as of 01.01.2017		42 471
Net defined benefit liabilities as of 01.01.	**– 542 315**	**– 622 390**
Net pension costs incl. interest expense recognised in statement of financial performance	– 50 115	– 93 944
Amounts directly recognised in equity	– 133 166	163 012
Employer contributions	60 735	62 959
Obligations paid directly by the entity	–	–
Other	–	–
Net defined benefit liabilities as of 31.12.	**– 664 861**	**– 490 364**

Major categories of the plan assets

%	Listed	Not listed	31.12.2016	Listed	Not listed	31.12.2017
Liquidity	2	–	2	4	–	3
Bonds (in CHF) Confederation	6	–	6	6	–	6
Bonds (in CHF) ex. Confederation	12	–	11	12	–	11
Government bonds (in foreign currencies)	30	–	28	28	–	26
Corporate bonds (in foreign currencies)	16	–	15	15	–	14
Mortgages	–	–	–	–	–	–
Shares	32	–	30	33	–	31
Real estate	–	86	5	–	67	5
Commodities	2	–	2	2	–	2
Other	–	14	1	–	33	2
Total plan assets	**100**	**100**	**100**	**100**	**100**	**100**

Publica bears the actuarial risks and investment-specific risks. The investment strategy is designed so that the regulatory-required plan benefits can be paid out when they are due.

The employer does not use any real estate held by the pension plan.

Principal actuarial assumptions used as at the reporting date

%	2016	2017
Discount rate as of 01.01.	0.40	0.20
Discount rate as of 31.12.	0.20	0.30
Expected salary development	0.90	0.50
Expected pension development	0.00	0.00
Interest on retirement savings	1.00	0.50
Life expectancy at age 65 – women (no. of years)	24.32	24.43
Life expectancy at age 65 – men (no. of years)	22.26	22.38

The discount rate is based on the Swiss government's bond yield published by the Swiss National Bank each month and on the estimated cash flows of the ETH Domain's pension plan with Publica, using data from the previous financial year. The expected salary development is based on reference economic data; the expected pension development is based on forecasts of pension benefits for the average remaining duration, taking into account the pension plan's financial position. Life expectancies are based on the BVG 2015 actuarial tables.

Sensitivity analysis (change in present value of defined benefit obligations)

	2016		2017	
CHF 1000	Increase in assumption	Decrease in assumption	Increase in assumption	Decrease in assumption
Discount rate (change ± 0.25%)	– 89 994	96 303	– 84 371	90 342
Expected salary development (change ± 0.25%)	14 114	– 13 780	9 702	– 9 484
Expected pension development (change ± 0.25%)	70 627	– 67 035	68 861	– 65 149
Interest on retirement savings (change ± 0.25%)	15 303	– 15 061	14 720	– 14 374
Life expectancy (change ± 1 year)	74 003	– 74 905	72 392	– 73 286

Sensitivity analyses are carried out for the main assumptions used to calculate defined benefit obligations, and indicate how those obligations would change based on an increase or decrease in an assumed value (holding all other assumed values constant).

To carry out the analyses, the discount rate, expected interest on retirement savings, and expected salary development were each increased or decreased by a given number of percentage points. The sensitivity to life expectancy was calculated by increasing or decreasing it by one year for most age categories.

27 DEDICATED THIRD-PARTY FUNDS

CHF 1000	31.12.2016	31.12.2017	*Change absolute*
Swiss National Science Foundation (SNSF)	177 337	183 947	*6 610*
Commission for Technology and Innovation (CTI)	43 383	35 388	*– 7 995*
EU Framework Programmes for Research and Innovation (FP)	157 324	155 163	*– 2 161*
Special federal funding of applied research	21 521	15 225	*– 6 296*
Industry-oriented research (private sector)	29 077	109 059	*79 982*
Other project-oriented third-party funding	17 050	19 496	*2 446*
Donations and bequests	561	–	*– 561*
Total dedicated third-party funds	446 252	518 278	*72 026*

Dedicated third-party funds consist of funding to be received for research projects and mandates in progress under non-exchange transactions. These funds grew KCHF 72,026, or 16.1%, in 2017 due to an increase of the overall amount of third-party funds available for research at EPFL. Most of the growth comes from research contracts with three foundations for a total of KCHF 76,000.

28 FINANCIAL RISK MANAGEMENT AND ADDITIONAL INFORMATION ABOUT THE FINANCIAL INSTRUMENTS

GENERAL

Financial risk management is embedded in the general risk management of EPFL. Financial risk management particularly involves:

- credit risk (default risk),
- liquidity risk
- as well as market risk (interest, trading price and foreign currency risk).

The focus of risk management remains unchanged in credit risk. There are guidelines which control the investment of financial resources in order to reduce default and market risk. A large proportion of the receivables and claims arising from financial assets is against parties with a high credit rating and solvency. Cluster risks only exist in respect of those counterparties, which is why the credit risk is assessed as low.

Furthermore, there are receivables and financial assets in foreign currencies which are hedged according to prevailing factors in order to minimise the risk.

The compliance with and effectiveness of the guidelines are insured by the internal control system (ICS).

CREDIT AND DEFAULT RISK

Maximum default risk

CHF 1000	Total	Federation	European Commission FP *	SNSF, CTI, OASI social service, Suva	SNB and banks with government guarantee	Postfinance and other banks	Other counterparties
31.12.2017							
Cash and cash equivalents	218 002	140 538	–	–	–	77 462	3
Receivables from non-exchange transactions	470 086	22 977	134 010	160 294	–	–	152 805
Receivables from exchange transactions	12 912	524	7	–	–	307	12 074
Financial assets and loans	289 641	232 156	–	–	–	9 590	47 896
Prepaid expenses and accrued income	1 954	78	73	–	–	–	1 803
Total	**992 596**	**396 272**	**134 090**	**160 294**	–	**87 359**	**214 580**

* The remaining receivables due from the state (SERI) under the bridging programme for Horizon 2020 and the receivables from European universities arising from EU research framework programmes are shown in the column headed European Commission.

The maximum default risk corresponds to the book values on the balance sheet. The actual risk is very low based on the fact that a large proportion of the financial assets are held with the state and with other public sector institutions.

Pursuant to Article 34c(2) of the ETH Act (SR 414.110), the ETH Board issued an investment policy that went into effect on 1 January 2008, and that EPFL used to draft its own investment policy. The cash management agreement between the ETH Board and the Swiss Federal Finance Administration (dated 29 November 2007) spells out how cash can and should be invested.

LIQUIDITY RISK

EPFL has processes and principles which guarantee adequate liquidity for the settlement of ongoing and future obligations. This includes maintaining an adequate reserve of liquidity and tradeable securities.

CHF 1000	Total carrying amount	Total contract value	Up to 1 year	1 to 5 years	More than 5 years
31.12.2017					
Non-derivative financial liabilities	–	–	–	–	–
Current liabilities	68 631	68 631	68 631	–	–
Leasing liabilities	285 803	384 663	8 301	62 926	313 436
Financial liabilities	80 768	80 768	5 121	21 233	54 414
Accrued expenses and deferred income	9 031	9 031	9 031	–	–
Derivative financial liabilities	919	919	919	–	–
Total	**445 152**	**544 012**	**92 003**	**84 159**	**367 850**

Financial liabilities arise, most notably, from current operational liabilities. Under normal circumstances, expenses and investments are financed with funds generated internally. In some cases, investments are financed through lease agreements.

The units controlled by the institutions of EPFL may raise funds on the financial market.

All financial liabilities are covered by liquidity and by short-term deposits with the state. The liquidity risk is low.

MARKET RISK

Interest and trading price risk

The interest risk is not hedged. Any increase or decrease in the interest rate of about 1% would raise or lower profits by around KCHF 4'073.

The bonds contained in the asset management mandate are also taken into account in the analysis of the interest risk.

The other trade items (excluding bonds) largely consist of Swiss equities and funds. A reduction in price of around 10% would lower the profit by KCHF 737.

100% of the trading items which are exposed to a trading price risk are managed under asset management mandates with Swiss banks.

EPFL has outlined a strategic allocation for its asset management mandates. The tactical limits are checked every quarter.

Foreign currency risk

Most of the receivables in foreign currencies are in euros and US dollars; they are hedged with derivatives according to prevailing circumstances. Foreign currency risks in asset management mandates are hedged in principle. Any fluctuation in the exchange rate of these two currencies of ±10%, allowing for hedging transactions, would impact upon the income statement as follows.

CHF 1000	Total	CHF	EUR	USD	Others
31.12.2017					
Cash and cash equivalents	218 002	206 011	8 914	1 755	1 322
Receivables from non-exchange transactions	470 086	336 014	125 987	7 924	162
./. IPSAS 23 receivables with performance obligation component	– 398 966	– 268 770	– 123 167	– 7 002	– 26
Receivables from exchange transactions	12 912	11 814	645	363	90
Financial assets and loans	289 641	288 566	323	715	37
Prepaid expenses and accrued income	1 954	1 696	138	117	3
./. Contract volume hedges	– 11 037	–	– 10 885	– 153	–
Total	**582 592**	**575 331**	**1 955**	**3 719**	**1 588**
Current liabilities	68 631	56 336	11 732	421	142
Leasing liabilities	285 803	285 803	–	–	–
Financial liabilities	81 688	81 688	–	–	–
Accrued expenses and deferred income	9 031	8 046	695	257	32
./. Contract volume hedges	–	–	–	–	–
Total	**445 153**	**431 873**	**12 427**	**678**	**174**
Net currency balance	137 439	143 458	– 10 473	3 041	1 415
Sensitivity affecting financial performance ±10%			– 1 047	304	
Closing rate			1.17	0.97	

Capital management
Managed capital refers to equity without valuation reserves. EPFL is seeking to create a solid equity base. This base will enable the implementation of the performance mandate to be guaranteed. Statutory criteria prohibit the institutions of the ETH Domain and the ETH Board from raising funds in the capital market.

ESTIMATION OF FAIR VALUES

Based on short-term maturity, the book value of cash and cash equivalents, as well as the book values of current loans, fixed deposits and receivables, as well as current liabilities reflect a reasonable assessment of the fair value.

The fair value of non-current receivables from non-exchange transactions and of non-current loans is calculated on the basis of future payments which are due and which are discounted at market interest rates.

The fair value of the financial assets which are available for sale is based upon actual values, provided they can be determined reliably, or reflects purchase costs.

The fair value of fixed-interest financial liabilities which are not traded publicly is estimated on the basis of payments due in the future which are discounted at market interest rates. The fair value of fixed-interest financial assets and liabilities which are traded publicly is based upon stock market quotations on the reporting date.

The fair value of finance lease liabilities is estimated on the basis of payments due in the future which are discounted at market interest rates.

CLASSES AND CATEGORIES OF FINANCIAL INSTRUMENTS, BASED ON BOOK AND FAIR VALUES

CHF 1000	Loans and receivables	At fair value through surplus or deficit	Available for sale	Financial liabilities measured at amortised cost	Total carrying amount	Total fair value
31.12.2017						
Cash and cash equivalents	218 002	–	–	–	218 002	218 002
Receivables from non-exchange transactions	470 086	–	–	–	470 086	470 086
Receivables from exchange transactions	12 912	–	–	–	12 912	12 912
Financial assets and loans	232 412	50 863	6 366	–	289 641	289 641
Prepaid expenses and accrued income	1 954	–	–	–	1 954	1 954
Current liabilities	–	–	–	68 631	68 631	68 631
Finance lease liabilities	–	–	–	285 803	285 803	285 803
Other financial liabilities	–	919	–	80 768	81 687	81 688
Accrued expenses and deferred income	–	–	–	9 031	9 031	9 031

EPFL does not have any held-to-maturity investments.

HIERARCHY LEVELS OF THE FINANCIAL INSTRUMENTS VALUED AT FAIR VALUE

The financial instruments valued at fair value are to be disclosed within a three-level valuation hierarchy:

- **Level 1**. Stock market prices on an active market for identical assets and liabilities.
- **Level 2**. Valuation methodology in which important input parameters are based on evident market data.
- **Level 3**. Valuation methodology in which important input parameters are not based on evident market data.

CHF 1000	Level 1	Level 2	Level 3	Carrying amount / fair value
31.12.2017				
Financial assets	50 863	5 600	28	56 491
Financial liabilities	–	919	–	919

Fair value hierarchy levels

CHF 1000	Loans and receivables	At fair value through surplus or deficit	Available for sale	Financial liabilities
Interest income (+) / interest expense (-)	14	530	–	– 8 668
Income from investments	–	–	37	–
Change in fair value	–	788	–	–
Currency translation differences, net	– 99	– 629	–	–
Impairments	–	–	–	–
Reversal of impairment	–	–	–	–
Gains and losses reclassified from equity to the statement of financial performance	–	–	–	–
Net surplus or deficit recorded in the statement of financial performance	– 85	689	37	– 8 668
Net surplus or deficit recognised in equity	–	–	–	–
Total net surplus or deficit by category	**– 85**	**689**	**37**	**– 8 668**

The interest expense stems mainly from finance lease obligations, and to a lesser extent mortgage loans.

29 CONTINGENT LIABILITIES AND CONTINGENT ASSETS

Contingent liabilities

CHF 1000	31.12.2016	31.12.2017	*Change absolute*
Guarantees	–	–	–
Warranties	500	1 000	*500*
Litigations	–	–	–
Other	1 106 388	268 665	*– 837 723*
Total contingent liabilities	1 106 888	269 665	*– 837 223*

The KCHF 1,000 in warranties in 2017 relates to a commitment to cover any duties charged by foreign customs offices in cross-border transactions. This warranty does not have a time limit.

The sharp decline in other contingent liabilities stems mainly from the fact that the finance leases for the SQIE and SQNE buildings are recorded as liabilities as of 1 January 2017 (see Note 23). The remaining other contingent liabilities concern:

- Campus Biotech Geneva (KCHF 255,794) – This is a lease agreement between Campus Biotech Geneva Foundation, the University of Geneva and EPFL. The corresponding contingent liability is equal to the solidarity commitment remaining until the lease expires, including refurbishing;
- An audit by the European Commission, which may find that certain project costs are not eligible. The extrapolated maximum liability is KCHF 12,839.

EPFL also has contingent liabilities of an unspecified amount related to its membership in research consortiums.

Contingent assets

CHF 1000	31.12.2016	31.12.2017	*Change absolute*
Off-balance sheet receivables	–	422	*422*
Other	–	969	*969*
Total contingent assets	–	1 391	*1 391*

The KCHF 969 of other contingent assets relates to a payment that will probably be required following a court decision.

30 FINANCIAL COMMITMENTS

CHF 1000	31.12.2016	31.12.2017	*Change absolute*
Financial commitments ≤ 1 year	7 303	3 861	*– 3 442*
Financial commitments from 1 to 5 years	–	–	–
Financial commitments > 5 years	–	–	–
No due date / indefinite	–	–	–
Total financial commitments	7 303	3 861	*– 3 442*

Financial commitments less than one year relate to new orders of over KCHF 500 for research equipment.

EPFL has also committed to covering the following expenses:

- 40% of the costs for the Wyss Center for Bio and Neuroengineering in Geneva;
- Costs for major maintenance and renovation work for the operating equipment and interior of the Microcity building in Neuchatel.

31 OPERATING LEASE

CHF 1000	2016	2017	*Change absolute*
Due dates			
Due within 1 year	6 206	5 909	*– 297*
Due within 1 to 5 years	22 630	22 178	*– 452*
Due after more than 5 years	111 448	103 515	*– 7 933*
Future minimum payments for non-cancellable operating lease as of 31.12.	140 283	131 602	*– 8 681*
Leasing expenses			
Minimum lease payments	6 174	6 282	*108*
Payments from subleasing	–	–	*–*
Leasing payments of current period	6 174	6 282	*108*
Additional details			
Future revenue from sublease (from non-cancellable contracts)	–	–	*–*

32 REMUNERATION OF KEY MANAGEMENT PERSONNEL

CHF 1000	2016	2017	*Change absolute*
Directorate	2 024	2 551	*527*

33 EVENTS AFTER THE REPORTING DATE

No material events occurred after the reporting date.

34 LIST OF THE CONTROLLED AND ASSOCIATED ENTITIES (SCOPE OF CONSOLIDATION)

EPFL generally has no rights over the assets of controlled and associated entities. It cannot require that certain funds be transferred or access the entities' resources in any other way.

The scope of consolidation of the ETH Domain includes the following entities.

Controlled entities

	Legal form	Nature of collaboration / business activity	Domicile	Proportion of voting rights 31.12.2017	Proportion of participating share 31.12.2017	Reporting date used
Fondation pour les étudiants de l'EPFL	Foundation	It supports students registered at the EPFL, in particular when their financial situation makes it difficult for them to complete their studies	Ecublens (VD)	60 %	100 %	31.12.2017
Fondation EPFL Innovation Park	Foundation	Five buildings for major companies and promising start-ups	Ecublens (VD)	42 %	100 %	31.12.2017
SQIE – Société pour le quartier de l'innovation de l'EPFL	Simple Partnership	Six buildings for major companies and promising start-ups	Ecublens (VD)	100 %	100 %	31.12.2017
SQNE – Société pour le quartier nord de l'EPFL	Simple Partnership	Convention Center, student residence, shopping and hotel	Ecublens (VD)	75 %	100 %	31.12.2017

EPFL has a 100% stake in SQNE that consists of a direct 90% stake, an indirect 5% stake through Fondation EPFL Innovation Park (fully consolidated), and an indirect 5% stake through Fondation Les Bois Chamblard, an associated entity that EPFL fully owns. Due to the 100% stake in Fondation Les Bois Chamblard, SQNE is fully consolidated without considering or presenting non-controlling interests.

Associated entities

	Legal form	Nature of collaboration / business activity	Domicile	Proportion of voting rights 31.12.2017	Proportion of participating share 31.12.2017
Les Bois Chamblard	Foundation	It provides infrastructure in order to organize seminars and meetings	Buchillon	40 %	100 %
Fondation Campus Biotech Geneva	Foundation	It is a new centre of excellence in biotechnology and life science research	Genève	25 %	50 %
Fondation du Centre universitaire protestant de Lausanne	Foundation	It provides rooms for students of UNIL and EPFL	Lausanne	29 %	60 %
Fondation "Institut d'imagerie moléculaire translationnelle IIMT"	Foundation	It subsidises research projects and scholarships to researchers and academics of any nationality	Genève	50 %	50 %

Entities below materiality thresholds

The Ordinance on Finance and Accounting of the ETH Domain specifies the ownership thresholds to consider when establishing EPFL's scope of consolidation. Under Appendix 2 of the Ordinance, entities that otherwise meet the consolidation criteria but are below the thresholds are not included in the scope of consolidation and must be presented as follows.

	31.12.2017
Controlled entities	
Quantity	4
Total assets (CHF million)	13 502
Associated entities	
Quantity	4
Total assets (CHF million)	24 025

EIDGENÖSSISCHE FINANZKONTROLLE
CONTRÔLE FÉDÉRAL DES FINANCES
CONTROLLO FEDERALE DELLE FINANZE
SWISS FEDERAL AUDIT OFFICE

Reg. Nr. 1.18039.939.00125.002

Report of the statutory auditor

To the President of the Swiss Federal Institute of Technology in Lausanne

Report on the audit of the consolidated financial statements

Opinion

We have audited the consolidated financial statements of the Swiss Federal Institute of Technology in Lausanne (EPFL), which comprise the consolidated statement of financial performance 2017, the consolidated balance sheet as of 31 December 2017, the consolidated statement of changes in equity and the consolidated cash flow statement for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies (excluding foreword).

In our opinion the consolidated financial statements present fairly, in all material respects, the consolidated financial position of the EPFL as of December 31, 2017, and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with the International Public Sector Accounting Standards (IPSAS) and legal requirements and the Accounting Manual for the ETH Domain.

Basis for Opinion

We conducted our audit in accordance with Swiss Law, International Standards on Auditing (ISAs), Swiss Auditing Standards and article 35ater of the Federal Act on the Federal Institutes of Technology (SR 414.110). Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the consolidated financial statements section of our report. We are independent based on the Federal Auditing Act (SR 614.0), and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Other information in the Annual Report

The Executive Board of the EPFL is responsible for the other information in the annual report. The other information comprises all information included in the annual report, but does not include the consolidated financial statements and our auditor's report thereon.

Our opinion on the consolidated financial statements does not cover the other information in the annual report and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information in the annual report and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. In this context, please refer to the section Report on other legal and regulatory requirements at the end of this report.

Responsibilities of the Executive Board of the EPFL for the consolidated financial statements

The Executive Board of the EPFL is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with the International Public Sector Accounting Standards (IPSAS) and the legal requirements (Ordinance on the ETH Domain, SR 414.110.3; Ordinance on the Finance and Accounting of the ETH Domain, SR 414.123; Accounting Manual for the ETH Domain), and for such internal control as the Executive Board determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the Executive Board of the EPFL is responsible for assessing the EPFL's ability to continue as a going concern, disclosing, as applicable, matters related to going concern.

Auditor's responsibilities for the audit of the consolidated financial statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Swiss law, ISAs and Swiss Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with Swiss law, ISA's and Swiss Auditing Standards, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the EPFL's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made.
- Conclude on the appropriateness of the Executive Board of the EPFL's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the EPFL's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the notes to the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the EPFL to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the EPFL to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the audit of the consolidated financial statements. We remain solely responsible for our audit opinion.

We communicate with the Executive Board of the EPFL and the Audit Committee of the ETH Board regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Report on other legal and regulatory requirements

In accordance with the Federal Auditing Act and Swiss Auditing Standard 890, we confirm that an internal control system exists, which has been designed for the preparation of the consolidated financial statements according to the instructions of the ETH Board.

In accordance with Art. 21 par. 2 of the Ordinance on the Finance and Accounting of the ETH Domain, we confirm that no contradictions exist between the personnel reporting in the annual report (management report) and the consolidated financial statements. Likewise, we confirm that no contradictions exist between the financial figures in the annual report (management report) and the consolidated financial statements.

Furthermore, in accordance with Art. 21 par. 2 of the Ordinance on the Finance and Accounting of the ETH Domain, we confirm that risk management has been appropriately conducted according to the instructions of the ETH Board.

We recommend that the consolidated financial statements submitted to you be approved.

Berne, 27 February 2018 SWISS FEDERAL AUDIT OFFICE

Martin Köhli	Patrick Wegmann
Licensed audit expert	Licensed audit expert

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