



PANORAMA 016
ANNUAL FINANCIAL STATEMENTS



FOREWORD

The Ecole polytechnique fédérale de Lausanne (EPFL) is an independent, public-sector university recognised around the world. It carries out joint R&D projects with Swiss and foreign companies and collaborates with top-tier universities from across the globe. Its funding comes from government agencies in Switzerland, other European countries, America, and Asia, as well as from numerous foundations. The past ten years have seen major changes in the standards of governance that universities are expected to adhere to. These changes include the adoption of the IPSAS standards, which effectively convey the strength of EPFL's financial position as illustrated in the various tables.

INCOME STATEMENT

The federal contribution provided by the Swiss government accounted for nearly two-thirds of EPFL's revenue in 2016, the same proportion as in 2015. This contribution is intended to cover all of EPFL's operating expenses and basic infrastructure investments. Research contributions, donations and bequests, which make up one-third of the school's revenue, are intended to fund R&D projects carried out by its scientists and engineers – especially its PhD and post-doc students. The revenue as a whole rose 1.7% in 2016 to CHF 997 million. Breaking it down, the federal contribution increased 4.9%, or CHF 32 million, primarily as a result of a one-off CHF 25 million contribution for "exceptional results." Third-party funding decreased CHF 15.9 million, due mainly to a CHF 23.1 million drop in donations and bequests. Funds from two key donors – the Swiss National Science Foundation (SNSF) and two EU research programmes (FP7 and H2020) – grew an encouraging 5.9%, reflecting the excellence of EPFL researchers and their ability to raise funds.

Operating expenses rose 1.8%, slightly more than operating revenue. This can be attributed to two non-recurring factors. Firstly, a CHF 5.8 million provision for net defined benefit liabilities (calculated under IPSAS 25) that was recognised in personnel expenses (which make up 64.8% of operating expenses); and secondly, a CHF 7.5 million loss related to a receivable under a donation agreement.

The finance result improved in 2016, although it was still slightly negative due to losses with one of the two associates accounted for using the equity method: Société pour le quartier de l'innovation (gain) and Société du quartier nord (loss), which includes the SwissTech Convention Center. 2016 was only the third full year of operations at the SwissTech Convention Center, which EPFL opened to host international science and engineering conferences and other events, and to promote knowledge sharing on its campus.

The result for the financial year was CHF 38.3 million, or 3.8% of operating revenue. This result is due primarily to a level of donations that remains solid (mainly from the sponsoring of research chairs and infrastructure), but that can fluctuate in the medium term, as well as an increase in the federal contribution.

BALANCE SHEET

Cash and cash equivalents grew a sharp CHF 119 million, but this was offset by a CHF 54 million increase in current liabilities and a CHF 74 million increase in dedicated third-party funds. The rise in cash and cash equivalents reflects the large amount of pre-financing received for major projects like HBP (EUR 67 million), Nano-Tera (CHF 12 million), FET Hybrid Optomechanical Technologies (EUR 4.8 million), NCCR Marvel (CHF 4.2 million), NCCR Robotics (CHF 4.3 million) and SCCER Furies (CHF 3.7 million). EPFL is the leading house for these projects and still needs to transfer the funds to its project partners. Therefore about half of the increase in cash and cash equivalents is temporary.

The remaining financing for research projects is recorded under non-current receivables from non-exchange transactions. This line item rose 14% in 2016 on the back of new research projects funded by the Swiss Commission for Technology and Innovation (CTI), for energy research in particular, and the European Commission for the HBP and Excellent Science programmes. These new research contracts, signed in 2016, are also reflected in the increase in dedicated third-party funds and the associated rise in cash and cash equivalents mentioned earlier.

The net defined benefit liability was calculated in accordance with IPSAS 25. This method differs from that under Swiss GAAP for occupational pension plans, meaning that the amount recorded in this line item does not represent a genuine liability for EPFL. The increase in this line item is due to the persistently low returns on investments – which could eventually lead to remedial measures potentially affecting EPFL's pension costs. Because these estimates are not legally binding, most of the fluctuation in the net defined benefit liability does not impact the income statement but does affect the valuation reserve in the statement of changes in equity.

EPFL's financial statements show that the school has generally kept its costs under control, with expenses rising in line with operating revenue, and has maintained its capacity to make medium- and long-term investments. The marked increases in cash and cash equivalents and non-current receivables from non-exchange transactions illustrate that the school is able to effectively attract new funding, thereby enabling it to pursue its development strategy.

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Table of content

#001 ANNUAL FINANCIAL STATEMENTS	01
Income statement	01
Balance sheet	03
Statement of changes in equity	04
Cash flow statement	05
#002 APPENDIX TO THE FINANCIAL STATEMENTS	07
01 Business activity of EPFL	07
02 Basis of accounting	07
03 Accounting policies	09
04 Estimation uncertainty and management judgements	17
05 Revenues	18
06 Personnel expenses	20
07 Other operating expenses	21
08 Transfer expenses	21
09 Finance result	22
10 Cash and cash equivalents	22
11 Receivables	23
12 Inventories	23
13 Prepaid expenses and accrued income	23
14 Property, plant and equipment and intangible assets	24
15 Financial assets	26
16 Investments held	26
17 Co-financing	27
18 Current liabilities	27
19 Current and non-current financial liabilities	27
20 Accrued expenses and deferred income	28
21 Provisions – derivation	28
22 Net defined benefit liabilities	29
23 Dedicated third-party funds	32
24 Contingent liabilities	33
25 Financial commitments	34
26 Operating lease	34
27 Foreign exchange differences	35
28 Remuneration of key management personnel	35
#003 REPORT OF THE STATUTORY AUDITOR	37

Glossary

BCC	Building Cost Classification
BVV2	Ordinance on occupational retirement, survivors' and disability pension
CIBM	Centre d'imagerie biomédicale
CoC	Cost of Completion
CSEM	Centre suisse d'électronique et de microtechnique
CTI	Commission pour la technologie et l'innovation
DBO	Defined Benefit Obligation
ECAL	Ecole cantonale d'art de Lausanne
EPFL	Ecole polytechnique fédérale de Lausanne
EU	European Union
FFA	Federal Finance Administration
FIT Board	Federal Institutes of Technology Board
FPs	European Union Framework Programmes for Research
FTE	Full Time Equivalent
H2020	Horizon 2020
HBP	Human Brain Project
IPSAS	International Public Sector Accounting Standards
KCHF	Thousands of Swiss Francs
PUC	Projected Unit Credit
SCCER	Swiss Competence Center for Energy Research
SERI	The State Secretariat for Education, Research and Innovation
SNSF	Swiss National Science Foundation
SQIE	Société pour le quartier de l'innovation de l'EPFL
SQNE	Société pour le quartier nord de l'EPFL

ANNUAL FINANCIAL STATEMENTS

Income statement

CHF 1000	2015	2016	Deviation	Notes
Federal financial contribution	579 647	612 337	32 689	
Federal contribution to accommodation	69 213	68 570	- 643	
Total federal contribution	648 860	680 907	32 046	5
Tuition fees and other utilisation fees	10 115	11 827	1 712	5
Swiss National Science Foundation (SNSF)	86 790	90 700	3 910	
Commission for Technology and Innovation (CTI)	16 828	16 165	- 662	
Special federal funding of applied research	15 051	15 037	- 14	
EU Framework Programmes for Research and Innovation (FP)	58 419	63 015	4 596	
Industry-oriented research (private sector)	39 988	37 394	- 2 594	
Other project-oriented third-party funding (incl. cantons, municipalities, internat. organisations)	28 388	26 680	- 1 708	
Research contributions, mandates and scientific services	245 464	248 992	3 528	5
Donations and bequests	51 089	27 993	- 23 097	5
Other revenue	25 800	27 767	1 967	5
Operating revenue	981 328	997 485	16 156	
Personnel expenses	602 930	620 173	17 243	6
Other operating expenses	258 791	267 428	8 638	7
Depreciation	49 191	51 524	2 333	14, 17
Transfer expenses	29 173	18 203	- 10 970	8
Operating expenses	940 084	957 328	17 244	
Operating result	41 244	40 156	- 1 087	
Finance income	18 689	5 786	- 12 903	
Finance expense	28 746	7 608	- 21 138	
Finance result	- 10 057	- 1 822	8 235	9
Surplus (+) or deficit (-)	31 187	38 335	7 148	

The 1.7% rise in operating revenue can be attributed mainly to an increase in the Federal financial contribution. Do-nations and bequests fell 45%, which is not surprising given the fluctuating nature of this kind of revenue.

All of the increase in operating expenses is due to a rise in personnel expenses. Operating expenses on the whole grew in line with revenue. The decline in transfer expenses reflects the large

one-off contributions made to partner organizations in 2015, as well as a change in accounting method by which grants in the form of services are now recognized under other operating expenses.

Much of the increase in the surplus for the year comes from a sharp improvement in the finance result; the 2015 finance result was impacted by the recognition of a loan impairment.



Balance sheet

CHF 1000	31.12.2015	31.12.2016	Deviation	Notes
Cash and cash equivalents	90 562	209 830	119 267	10
Current receivables from non-exchange transactions	30 494	16 746	-13 748	11
Current receivables from exchange transactions	12 265	10 011	-2 254	11
Current financial assets	262 951	272 612	9 662	15
Inventories	2 075	2 039	-35	12
Prepaid expenses and accrued income	10 595	10 664	69	13
Total current assets	408 941	521 901	112 960	
Property, plant and equipment	186 381	199 323	12 942	14
Intangible assets	2 626	2 825	199	14
Non-current receivables from non-exchange transactions	339 669	388 668	49 000	11
Investments held	1 444	1 527	84	16
Non-current financial assets	20 161	23 927	3 766	15
Co-financing	72 538	74 755	2 217	17
Total non-current assets	622 818	691 025	68 207	
Total assets	1 031 759	1 212 927	181 167	
Current liabilities	78 056	132 437	54 381	18
Current financial liabilities	503	443	-60	19
Accrued expenses and deferred income	18 618	36 639	18 020	20
Short-term provisions	19 193	21 560	2 367	21
Short-term liabilities	116 370	191 078	74 709	
Dedicated third-party funds	371 963	446 252	74 289	23
Non-current financial liabilities	19 760	23 374	3 614	19
Net defined benefit liabilities	542 315	664 861	122 546	22
Long-term provisions	19 998	20 839	841	21
Long-term liabilities	954 037	1 155 326	201 290	
Total liabilities	1 070 406	1 346 405	275 998	
Valuation reserves	-299 895	-433 061	-133 166	
Dedicated reserves	161 870	170 002	8 132	
Free reserves	147 870	162 594	14 724	
Co-financing of state-owned real estate	72 538	74 755	2 217	17
Accumulated surplus (+)/deficit (-)	-121 030	-107 769	13 261	
Confederation's share of equity	-38 647	-133 478	-94 831	
Minority interests	-	-	-	
Total equity	-38 647	-133 478	-94 831	
Total liabilities and equity	1 031 759	1 212 927	181 167	

The increase in cash and cash equivalents can be attributed to a significant amount of re-search-project prefinancing that was received in 2016 and that has not been entirely paid out to the project partners (in particular for the HBP). This also temporarily increased current liabilities.

The marked rise in non-current receivables reflects two new projects: H2020 and SCCER.

The other notable balance sheet item in 2016 was the KCHF 122,546 increase in net defined benefit liabilities (also reflected in valuation reserves), which was calculated according to IPSAS 25 and which resulted in a negative equity position at the end of the year. This increase reflects a low return on capital, a decrease in the discount rate (based on the yield on Swiss government bonds) and a change in demographic assumptions (see Note 22). The regulatory coverage ratio, set forth in the Swiss Federal Act on BVV 2, for ETH Domain pension plans with Publica improved from 100.5% at end-2015 to 103.2% at end-2016.

Statement of changes in equity

CHF 1000	Valuation reserves	Dedicated reserves	Free reserves	Co-financing of state-owned real estate	Accumulated surplus (+) / deficit (-)	Total equity
2015						
As of 01.01.2015	- 127 781	144 607	144 036	58 824	- 117 406	102 280
Surplus (+) or deficit (-)					31 187	31 187
Change from defined benefit liability	- 172 114					- 172 114
Reclassifications in equity	-	17 264	3 834	13 714	- 34 811	-
Total changes in equity	- 172 114	17 264	3 834	13 714	- 3 624	- 140 927
As of 31.12.2015	- 299 895	161 870	147 870	72 538	- 121 030	- 38 647
2016						
As of 01.01.2016	- 299 895	161 870	147 870	72 538	- 121 030	- 38 647
Surplus (+) or deficit (-)					38 335	38 335
Change from defined benefit liability	- 133 166					- 133 166
Reclassifications in equity	-	8 132	14 724	2 217	- 25 074	-
Total changes in equity	- 133 166	8 132	14 724	2 217	13 261	- 94 831
As of 31.12.2016	- 433 061	170 002	162 594	74 755	- 107 769	- 133 478

Valuation reserves consist of defined benefit liabilities and are described in Note 22. The negative equity position at the start of the period is due to the recognition of a provision for defined benefit liabilities calculated under IPSAS 25. Changes since 1 January 2014 that affect equity have been recorded in valuation reserves. These defined benefit liabilities totalled KCHF 664,861.

Dedicated reserves mainly include remaining commitments under contracts with new professors (start-up funds) in the amount of KCHF 24,615 (vs KCHF 16,730 in 2015) and net contractual commitments with donors in the amount of KCHF 30,363 (vs KCHF 24,049 in 2015).

Cash flow statement

CHF 1000	2015	2016	Deviation
Surplus (+) or deficit (-)	31 187	38 335	7 148
Depreciation	49 191	51 524	2 333
Finance result (non-cash)	12 259	925	-11 334
Increase/decrease in net working capital	-9 926	88 491	98 417
Increase/decrease in net defined benefit liabilities	-17 386	-10 620	6 766
Increase/decrease in provisions	2 494	3 209	715
Increase/decrease in non-current receivables	1 482	-49 000	-50 482
Increase/decrease in dedicated third-party funds	-13 650	74 289	87 939
Reclassification and other (non-cash) income	856	476	-380
Cash flows from operating activities	56 506	197 628	141 122
Purchase of property, plant and equipment	-60 723	-63 048	-2 325
Purchase of intangible assets	-1 344	-708	636
Increase in co-financing	-16 190	-4 000	12 190
Increase in loans	-5 000	-3 500	1 500
Increase in current and non-current financial assets	-235 313	-22 051	213 262
Total investments	-318 570	-93 307	225 263
Disposal of property, plant and equipment	9 091	-	-9 091
Decrease in loans	750	750	-
Decrease in investments held	2 172	2 450	278
Decrease in current and non-current financial assets	4 549	11 746	7 197
Total divestments	16 562	14 946	-1 616
Cash flows from investing activities	-302 008	-78 361	223 647
Cash flows from financing activities	-	-	-
Total cash flow	-245 502	119 267	364 769
Cash and cash equivalents at the beginning of the period	336 064	90 562	-245 502
Total cash flow	-245 502	119 267	364 769
Cash and cash equivalents at the end of the period	90 562	209 830	119 268
Net effect of currency translation on cash and cash equivalents	-	-	-
Contained in the cash flows from operating activities are:			
Dividends received	1 444	1 432	-12
Interest received	452	640	188
Interest paid	-4	-3	1

The positive cash flow in 2016 primarily reflects a sharp increase in financing for research projects in which EPFL is the leading house (most notably the HBP) but has not yet distributed the funds to the project partners.

APPENDIX TO THE FINANCIAL STATEMENTS

01 BUSINESS ACTIVITY OF EPFL

EPFL is one of two Swiss Federal Institutes of Technology. With the status of a national 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.

Its main campus brings together some 14,000 people, including 10,000 students. 13 complete study programmes, from Bachelors to Masters, 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.

With over 350 laboratories and research groups on campus, EPFL is one of Europe's most innovative (#18 in the Reuters Top 100: The World's Most Innovative Universities – 2016) and productive scientific institutions (29th biggest contributor of articles to the prestigious journals published by Nature). Ranked in the top 3 in Europe (#2 in the Leiden ranking) and the top 20 worldwide in many scientific rankings (including #14 in the QS World University Rankings® 2016–2017), EPFL has attracted the best researchers in their fields. The School's unique structure fosters trans-disciplinary research and promotes partnerships with other institutions. It continuously combines fundamental research and engineering.

The campus also offers services and facilities to transform scientific excellence into economic competitiveness, jobs and quality of life. A breeding ground for new companies, coaching services, study programmes in entrepreneurship and innovation programmes foster relations between the laboratories and the companies.

02 BASIS OF ACCOUNTING

These financial statements are consolidated financial statements covering the reporting period from 1 January 2016 to 31 December 2016. The reporting date is 31 December 2016. The accounts in French are binding..

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 5.2)

Accounting standards

Since 1 January 2015 the consolidated financial statements of the EPFL have been produced 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).

Application of transitional provisions of the new IPSAS

For the accounting years 2015 and 2016, there are transitional periods for the implementation of IPSAS in the following areas, which lead to deviations from IPSAS.

Deviation 1

For investments held of 20% or more, IPSAS 6–8 are not applied (consolidated and separate financial statements, investments in associates, interests in joint ventures). Instead, these will be treated in a similar way to the former accounting method (based on the manual for accounting in the ETH Domain).

Reason: Under IPSAS 6–8 the accounting must be assessed at institutions outside the core ETH Domain. This assessment is time-consuming and resource-intensive.

Deviation 2

Based on the contractual provisions the receivables from non-exchange transactions (IPSAS 23) are not completely divided into a current and non-current portion.

Reason: Numerous contracts had to be evaluated for the 2014 restatement. To check the contractual terms of payment would require a considerable amount of additional work. As the corresponding performance obligations are presented within non-current liabilities, the overall presentation of the balance sheet is not materially distorted.

Deviation 3

The provisions stated in the accounting manual in the ETH Domain for “holiday and overtime provisions including already earned long service awards” are not fully implemented.

Reason: The manual prescribes that provisions for holiday and overtime are to be calculated using the effectively recorded holiday and overtime credit. These data are managed in a decentralised manner, and the procedural adjustments needed to procure the data are time-consuming. During the transitional period they will be processed using estimates as before.

Deviation 4

The provisions concerning disclosure of financial instruments (IPSAS 30) are not fully implemented.

Reason: The implementation of IPSAS 30 requires extensive adjustments to the processes and workflows. The implementation and the retroactive procurement of relevant data is time-consuming and resource-intensive.

Deviation 5

The provisions on finance leases (IPSAS 13) are not applied for EPFL. Instead, the previous accounting method applies (based on the manual for accounting in the ETH Domain), and any commitments made are disclosed in the Notes.

Reason: No IPSAS accounting provisions were in force at the time of signing the contract. Furthermore, individual finance leases already come under the transitional provisions because of the transitional regulations in the area of simple partnerships/consolidation. This ensures equal treatment.

Deviation 6

The provisions of IPSAS 23.76 ff. concerning the transfer of services in-kind and goods in-kind are not applied.

Reason: The complex issue must be assessed in detail in all the institutions and requires procedural adjustments, among other things. This assessment and the procedural adjustments are timeconsuming and labour-intensive.

IPSAS standards published but not yet applied

The following IPSAS had been published up to the reporting date. These only become effective later, and have not been applied, or applied early, in the present consolidated financial statements.

IPSAS 33	First-time adoption of accrual basis IPSAS
IPSAS 34	Separate financial statements
IPSAS 35	Consolidated financial statements
IPSAS 36	Investments in associates and joint ventures
IPSAS 37	Joint arrangements
IPSAS 38	Disclosure of interests in other entities
IPSAS 39	Employee benefits (supersedes IPSAS 25)

The standards listed previously come into effect on 1 January 2017, apart from IPSAS 39, which will become effective on 1 January 2018. Their impact on the consolidated financial statements will be analysed systematically and their implementation is planned for 1 January 2017. There are no further changes or interpretations which would not have to be applied and which would have a significant impact on EPFL.

03 ACCOUNTING POLICIES

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

The annual financial statements of EPFL are included in the consolidated financial statements of the ETH Domain.

Currency translation

The reporting is prepared in Swiss francs (CHF). All figures are shown in thousands of Swiss francs (CHF 1000) 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.

The main currencies and their exchange rates are:

Currency	Unit	closing rate as of 31.12.2015	closing rate as of 31.12.2016
EUR	1	1.0875	1.0717
USD	1	1.0014	1.0160
GBP	1	1.4722	1.2582
JPY	1000	8.3370	8.7080

Revenue recognition

Each inflow of funds into a unit 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 unit 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 institutions of EPFL. The accommodation expense is recognised as part of the other operating expense.

Tuition fees and other 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 the institutions of the 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.

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 actual amount can be measured reliably. If the recognition criteria cannot be met, information is disclosed under contingent assets.

Non-current receivables of over CHF 10m are stated at amortised cost using the effective interest method.

Current receivables from exchange transactions are stated at cost when the revenue is realised. Global value adjustments are usually recognised on receivables based on their age structure. In rare cases, specific value adjustments are also recognised if there are concrete indications that a default will occur.

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 retired 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.

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.

Other leases where EPFL 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

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 (e.g. investments held that do not entitle the holder to exert a significant influence). Changes in value are recognised in surplus or deficit.

Financial assets with a fixed maturity date, where there is the possibility and intention to hold them until their maturity date, are to be calculated in the balance sheet at their amortised cost using the effective interest method. The effective interest method allocates the difference between the acquisition cost and the repayment amount (premium/discount) over the period for which the corresponding investment runs, using the net present value method.

The other financial assets 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. Profits 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).

Loans granted are to be recognised in the balance sheet either at amortised cost (loans under CHF 10 million), or at amortised cost using the effective interest method (loans over CHF 10 million).

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 value. Any value adjustments are usually recognised in surplus or deficit. There is one exception here: for the derivative financial instruments designated as cash flow hedges, the value adjustment is recognised in equity.

Real estate held as a financial investment

EPFL does not own any real estate held as a financial investment.

Investments held

Under the transitional regulations, the valuation and disclosure of investments held are done in a similar way to the former accounting method (see No 2, Basis of Accounting). On principle, they are valued at cost minus any value adjustment.

Co-financing of state-owned real estate

Co-financing refers to third-party funding acquired by EPFL 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 decreases in proportion to the ongoing depreciation. Co-financing items are reported with the same amounts in both the assets and in 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 are monetary liabilities that result from financing activities. They are usually interest-bearing. Liabilities that are due for repayment within twelve months of the reporting date are current. They are valued at amortised cost.

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

The net defined benefit liabilities of EPFL show the obligations from the pension plans of the ETH Domain's pension fund in the PUBLICA collective institution, which provide benefits upon retirement, death and disability. Net defined benefit liabilities correspond to the defined benefit obligations calculated in accordance with the methods under IPSAS 25 less the fair value of the pension fund assets (if necessary, adjusted for a surplus in accordance with paragraph 69(b) or past service cost).

The defined benefit obligation (DBO) is calculated by external actuarial experts using the Projected Unit Credit method ("PUC method"). The DBO corresponds to the present value of accrued benefits as at the valuation date. The service cost is equal to the benefits under the applicable terms that will be earned in the following year.

The calculation is done using actuarial assumptions and reflects the information on the beneficiaries (salary, vested benefits, etc.). The assumptions include both demographic (retirement rates, disability rates, mortality rates, etc.) and financial ones (salary trends, pension trends, returns, etc.). The calculated values are discounted back to the valuation date. Changes in the assessment of the prevailing economic conditions may impact significantly upon defined benefit obligations.

The PUC method for this type of plan requires an even distribution of benefit accruals over the total years of service expected to be worked, instead of reflecting the actual distribution of retirement credits as defined in the ETH Domain's employee benefit scheme, which are graded and actually increase with age. The defined benefit obligation was valued based on the membership data of the ETH Domain's employee benefit scheme as at 31 October 2016, using actuarial assumptions as at 31 December 2016 (e.g. Occupational Pensions Act [BVG] 2015 actuarial tables),

and on the plan provisions of the ETH Domain's employee benefit scheme. The results were then adjusted to the 31 December 2016 reporting date using pro rata estimated cash flows.

The impacts of plan amendments (past service cost) that are deemed fully vested are recognised immediately in the surplus or deficit in the period in which they occur. Any additional effects are recognised in equity by attributing them evenly over the expected average remaining working life until employees are entitled to the benefits. Actuarial and investment gains and losses from 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 valued 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 shortterm 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.

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 the 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 able to be verified 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 recognized 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 full reserves have not yet been generated. 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 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 use.
- 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.
- Free reserves from the federal financial contribution. These show the funds that have not yet been used as at the reporting date. They are not subject to any specific conditions.

Co-financing of state-owned real estate

If third-party resources acquired by EPFL 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.

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.

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 recognizing 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.

04 ESTIMATION UNCERTAINTY AND MANAGEMENT JUDGEMENTS

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).

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 calculation of the net defined benefit liability is based on the long-term actuarial assumptions for the defined benefit liability and for the expected returns on the 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.

Discount 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.

05 REVENUES

Federal financial contribution

CHF 1000	2015	2016	Deviation
Federal financial contribution	579 647	612 337	32 689
Federal contribution to accommodation	69 213	68 570	- 643
Total financial contribution	648 860	680 907	32 047

The basic funding granted by the Swiss federal government, also called the federal contribution, accounts for two-thirds of EPFL's total revenue. This funding is intended primarily to cover the costs of teaching, research and over-heads. 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 5.6%, or KCHF 32,689, in 2016, whereas the federal contribution to accommodation was essentially unchanged.

Tuition fees and other utilisation fees

CHF 1000	2015	2016	Deviation
Tuition fees	9 199	8 649	- 550
Utilisation and administration fees (IPSAS 9)	916	3 178	2 262
Tuition fees and other utilisation fees	10 115	11 827	1 712

Tuition fees and other utilisation fees consist mainly of tuition from Bachelor, Master and PhD programmes, as well as income from continuing education classes.

The slight reduction in tuition fees is due to a change in accounting method whereby tuition fees for the spring semester in the following year are no longer recognised in the financial statements for the year under review.

The increase in other utilisation fees reflects a sharp rise in revenue from massive open online courses (MOOCs) and a change in accounting method in 2015 related to the recognition of fees from continuing education classes charged by Fondation pour la formation continue UNIL - EPFL.

Research contributions, mandates and scientific services

19

CHF 1000	2015	2016	of which revenues IPSAS 23	of which revenues IPSAS 9	Deviation
Swiss National Science Foundation (SNSF)	86 790	90 700	90 700	–	3 910
Commission for Technology and Innovation (CTI)	16 828	16 165	16 165	–	– 662
Special federal funding of applied research	15 051	15 037	13 183	1 854	– 14
EU Framework Programmes for Research and Innovation (FP)	58 419	63 015	63 015	–	4 596
Industry-oriented research (private sector)	39 988	37 394	16 862	20 532	– 2 594
Other project-oriented third-party funding (incl. cantons, municipalities, international organisations)	28 388	26 680	24 988	1 691	– 1 708
Total research contributions, mandates and scientific services	245 464	248 992	224 914	24 077	3 528
EU Framework Programmes for Research and Innovation (FP)					
of which financed by SERI	2991	7 935	7 935	–	7 935

#002 APPENDIX TO THE FINANCIAL STATEMENTS

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 recognized as revenue on a cost-of-completion basis during the accounting period in which the funding is used.

Research contributions, mandates and scientific services rose 1.4% in 2016 to KCHF 248,992. Revenue from Europe-an Union Framework Programmes for Research (FPs) grew thanks to an increase in financing from the Swiss State Secretariat for Education, Research and Innovation (SERI).

Donations and bequests

CHF 1000	2015	2016	Deviation
Donations and bequests	51 089	27 993	– 23 097

This line item consists of donations and bequests made to EPFL. These funds allow EPFL to implement strategic initiatives (such as creating new chairs) and acquire the necessary equipment to spur both research and teaching.

These funds can vary significantly from year to year, and fell in 2016 after the high levels of donations and bequests received in 2014 and 2015, primarily for the co-financing of buildings.

Other revenue

CHF 1000	2015	2016	Deviation
Licences and patents	5 170	5 050	-119
Sales	5 945	4 267	-1 678
Refunds	2 976	3 596	620
Other services	9 293	11 365	2 072
Real estate revenue	2 417	3 368	951
Profit from disposals (property, plant and equipment)	-	121	121
Total other revenue	25 800	27 767	1 967

Other revenue grew 7.6% in 2016. The increase in real estate revenue is mainly related to land rights that EPFL received for construction work at the Triaudes student housing complex.

06 PERSONNEL EXPENSES

CHF 1000	2015	2016	Deviation
Professors	75 301	77 695	2 394
Scientific personnel	263 198	263 601	403
Technical and administrative personnel, apprentices, trainees	166 494	171 662	5 168
IC, SUVA and other refunds	-2 084	-2 159	-75
Total salaries and wages	502 909	510 799	7 890
Social insurances OASI/DI/IC/MB	31 282	31 740	458
Net pension costs	39 337	49 180	9 844
Accident and sickness insurance SUVA (BU/NBU/KTG)	1 622	1 597	-25
Employer's contribution to family compensation fund (FAK/FamZG)	11 498	11 259	-239
Total social insurance schemes and pension expenses	83 739	93 776	10 037
Other employer contributions	1 916	193	-1 723
Temporary personnel	5 416	5 380	-36
Change in provisions for untaken leave and overtime	1 732	2 225	493
Change in provisions for contributions to long service awards	1 285	1 223	-62
Other personnel expenses	5 932	6 576	644
Total personnel expenses	602 930	620 173	17 243

Personnel expenses rose 2.9% in 2016. The number of full-time equivalents grew 1.9%, broken down as follows:

full-time equivalent	2015	2016	Deviation
Professors	312	322	10
Scientific personnel	3 356	3 429	73
Technical and administrative personnel, apprentices, trainees	1 675	1 694	19
Total Full Time Equivalent	5 343	5 445	102

Pension costs increased largely as a result of a change in accounting method in 2016 whereby purchases of new professors' vested pension benefits are now included in the calculation of defined benefit liabilities under IPSAS 25.

07 OTHER OPERATING EXPENSES

CHF 1000	2015	2016	Deviation
Expenses for goods and materials	37 551	39 332	1 781
Premises costs	99 250	97 573	-1 678
Other operating costs	121 990	130 524	8 535
Total other operating expenses	258 791	267 428	8 638

Expenses for goods and materials include KCHF 30,266 of supplies (vs KCHF 28,531 in 2015) and KCHF 9,066 of capital goods (vs KCHF 9,020 in 2015) not recognized as assets (value of less than CHF 10,000).

Premises costs include rent for buildings owned by the Swiss federal government (this rent is the same amount as the federal contribution to accommodation, see Note 5) and by third parties. These costs also include maintenance, repair, cleaning and surveillance costs.

Other operating costs consist of IT, telecom, electricity, water and waste management costs, as well as library-related expenses, professional fees, travel expenses and impairment charges on receivables. These impairment charges related to two contracts totalling KCHF 7,500 that were not fully paid, and were the main factor pushing up other operating expenses in 2016.

08 TRANSFER EXPENSES

CHF 1000	2015	2016	Deviation
Scholarships and grants to students and doctoral students	7 211	7 346	135
Other transfer expenses	21 962	10 857	-11 105
Total transfer expenses	29 173	18 203	-10 970

The decrease in transfer expenses primarily reflects a change in accounting method (KCHF 2,758 were reclassified under premises costs and KCHF 1,780 were reclassified under other operating expenses) as well as the large one-off contributions in 2015.

09 FINANCE RESULT

CHF 1000	2015	2016	Deviation
Interest income	452	981	529
Income from investments	1 444	2 534	1 090
Changes in fair value of financial assets	1 166	582	-584
Foreign currency gains	15 239	1 538	-13 701
Other finance income	388	151	-237
Total Finance income	18 689	5 786	-12 902
Interest expense	4	601	598
Changes in fair value and impairment of financial assets	15 071	3 881	-11 190
Foreign currency losses	13 524	2 835	-10 689
Other finance expense	147	291	144
Total Finance expense	28 746	7 608	-21 137
Total Finance result	-10 057	-1 822	8 235

Other finance income and expense include currency translation differences on non-current receivables and liabilities in foreign currencies (mainly related to EU research programmes). In 2016, currency translation differences on non-current receivables and liabilities under IPSAS 23 were offset, resulting in a sharp decline in these two line items.

Income from investments includes KCHF 1,516 from EPFL's share (95%) of SQIE's net profit for 2016, as well as KCHF 1,018 of proceeds from the sale of an investment.

The decrease in the finance expense mainly reflects a fair value adjustment recognised in 2015 (but not 2016) on a non-current receivable from SQNE.

10 CASH AND CASH EQUIVALENTS

CHF 1000	31.12.15	31.12.16	Deviation
Cash	73	66	-7
Swiss Post	46 806	88 321	41 515
Bank	12 994	20 958	7 963
Short-term deposits (<90 days)	30 689	100 485	69 796
Total cash and cash equivalents	90 562	209 830	119 267

The positive cash flow in 2016 primarily reflects a sharp increase in financing for research projects in which EPFL is the leading house (most notably the HBP) but has not yet distributed the funds to the project partners.

11 RECEIVABLES

CHF 1000	31.12.15	31.12.16	Deviation
Receivables from project contracts and donations	365 687	401 274	35 587
Other receivables	4 713	4 572	- 141
Value adjustments	- 238	- 433	- 195
Receivables from non-exchange transactions	370 162	405 414	35 251
of which current	30 494	16 746	- 13 748
of which non-current	339 668	388 668	48 999
Trade accounts receivable	13 268	10 800	- 2 469
Other receivables	243	177	- 66
Value adjustments	- 1 246	- 966	281
Receivables from exchange transactions	12 265	10 011	- 2 254
of which current	12 265	10 011	- 2 254
of which non-current	-	-	-

Starting in 2016, receivables from exchange and non-exchange transactions are broken down into current and non-current receivables. The 2015 figures have been restated accordingly.

Non-current receivables include the net remaining funding for contractually-agreed projects, and are mainly related to contributions and non-exchange contracts. Contractually-agreed donations are also treated as non-current receivables until the funds have been received. Offsetting entries for non-current receivables are discussed under dedicated third-party funds (Note 23) and revenues (Note 5). The increase in non-current receivables is due in part to new financing received for the H2020 and SCCER projects.

Other receivables include deposits and warranties with a retention of title clause in the amount of KCHF 161 (vs KCHF 179 in 2015).

12 INVENTORIES

CHF 1000	31.12.15	31.12.16	Deviation
Inventories purchased	2 002	1 974	- 28
Inventories self-produced	72	65	- 7
Total inventories	2 075	2 039	- 35

Inventories of purchased goods are measured at cost. Inventories of self-produced goods are measured at production cost.

13 PREPAID EXPENSES AND ACCRUED INCOME

CHF 1000	31.12.15	31.12.16	Deviation
Interest	73	26	- 46
Other prepaid expenses and accrued income	10 522	10 638	115
Total prepaid expenses and accrued income	10 595	10 664	69

Prepaid expenses totalled KCHF 8,685 in 2016 (vs KCHF 8,392 in 2015) and accrued income amounted to KCHF 1,953 (vs KCHF 2,130 in 2015). Prepaid expenses relate mainly to subscriptions to online journals.

14 PROPERTY, PLANS 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				
as of 01.01.2015	346 099	110 803	8 915	465 818
Additions	28 299	3 180	17 570	49 049
Reclassifications	1 625	399	- 2 024	-
Disposals	- 313	-	- 67	- 380
as of 31.12.2015	375 711	114 382	24 395	514 488
Accumulated depreciation				
as of 01.01.2015	219 675	94 338	-	314 013
Depreciation	31 860	9 796	-	41 656
Impairments	1 323	66	-	1 390
Disposals value adjustments	- 105	-	-	- 105
as of 31.12.2015	252 754	104 200	-	356 953
Balance sheet value as of 31.12.2015	122 957	10 182	24 395	157 534
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
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				-

Fixed assets are divided into three categories:

- **Movable assets**, which consist mainly of equipment and, to a lesser extent, vehicles, furnishings and IT hardware.
- **Immovable assets**, which consist mainly of fixtures and fittings installed by tenants (BCC 3) in buildings owned by the Swiss federal government.
- **Intangible assets**, which consist of software and programmes under development.

Property, buildings	Assets under construction	Total immovable assets	Total property, plant and equipment	Total intangible assets
32 014	13 073	45 086	510 904	5 759
1 093	10 631	11 725	60 774	1 397
870	- 870	-	-	-
- 220	- 9 024	- 9 243	- 9 623	-
33 758	13 810	47 568	562 055	7 155
15 475	-	15 475	329 487	4 107
3 246	-	3 246	44 902	423
-	-	-	1 390	-
-	-	-	- 105	-
18 721	-	18 721	375 674	4 530
15 037	13 810	28 847	186 381	2 626
-	-	-	-	-
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
-	-	-	-	-

Almost all the buildings that EPFL uses are owned by the Swiss federal government, and are therefore recognized as assets in the Swiss government's balance sheet rather than EPFL's.

The KCHF 63,207 reflect major investments in new equipment and the fitting out of a new building.

None of EPFL's property, plant, equipment and intangible assets has been pledged as collateral or is subject to a reservation of ownership clause or any sort of restriction.

15 FINANCIAL ASSETS

CHF 1000	31.12.15	31.12.16	Deviation
Securities, discounted papers and fixed deposits	30 045	40 457	10 412
Loans	750	–	– 750
Other financial assets	232 156	232 156	–
Total current financial assets	262 951	272 612	9 662
Loans	14 533	18 299	3 766
Other financial assets	5 628	5 628	–
Total non-current financial assets	20 161	23 927	3 766

Current financial assets include third-party funding that is available in the short term. These funds are invested in the money market or deposited with the FFA, in accordance with the cash management agreement between the FFA and the FIT Board and the ETH Board's investment guidelines.

The increase in current financial assets reflects a temporary change in the term structure of the portfolio. Other current financial assets consist of deposits with the FFA with terms of over 90 days, in the amount of KCHF 232,156 (same as in 2015).

Non-current financial assets consist of the KCHF 18,299 (vs KCHF 14,533 in 2015) long-term loan granted to SQNE, a simple partnership that is majority controlled by EPFL. The valuation allowance recognized on this loan was a cumulative KCHF 5,969 at end-2016 (vs KCHF 6,331 at end-2015).

Other non-current financial assets consist of EPFL's KCHF 5,600 investment in Neuchâtel-based CSEM SA (same value as at end-2015), which EPFL holds in a fiduciary capacity for the ETH Domain.

16 INVESTMENTS HELD

CHF 1000	31.12.2015	31.12.2016	Interest
SQIE, Société pour le Quartier de l'Innovation (Based in Ecublens)	1 444	1 527	95%
Total investments held	1 444	1 527	

EPFL has had a 95% interest in SQIE, a simple partnership, since 2010. The value of this interest is measured using the equity method.

EPFL's interest in SQNE is discussed under financial liabilities (Note 19).

17 CO-FINANCING

27

CHF 1000	2015	2016	Deviation
Purchase value			
as of 01.01.	71 693	87 883	16 190
Additions	16 190	4 000	-12 190
as of 31.12.	87 883	91 883	4 000
Accumulated depreciation			
as of 01.01.	12 869	15 345	2 476
Depreciation	2 476	1 783	-693
as of 31.12.	15 345	17 128	1 783
Balance sheet value as of 31.12.	72 538	74 755	2 217

The increase in co-financing in 2016 reflects third-party funding received for the ArtLab building construction project at EPFL.

18 CURRENT LIABILITIES

CHF 1000	31.12.15	31.12.16	Deviation
Trade payables	47 204	52 705	5 501
Liabilities to social insurance institutions	547	1 870	1 323
Other current liabilities	30 305	77 861	47 556
Total current liabilities	78 056	132 437	54 381

The increases in trade payables and other current liabilities are related to payments to be made to HBP partners.

19 CURRENT AND NON-CURRENT FINANCIAL LIABILITIES

CHF 1000	31.12.15	31.12.16	Deviation
Negative replacement values	354	291	-63
Other financial liabilities	149	152	3
Total current financial liabilities	503	443	-60
Other financial liabilities	19 760	23 374	3 614
Total non-current financial liabilities	19 760	23 374	3 614

The negative replacement values relate to currency hedging transactions (forward sales) carried out for projects with revenue in USD.

The increase in other non-current financial liabilities is due to a rise in the provision on EPFL's interest in SQNE (i.e., 90% of SQNE's loss in 2016).

20 ACCRUED EXPENSES AND DEFERRED INCOME

CHF 1000	31.12.15	31.12.16	Deviation
Other accrued expenses and deferred income	18 618	36 639	18 020
Total accrued expenses and deferred income	18 618	36 639	18 020

The increase in accrued expenses and deferred income can be attributed mainly to a planned KCHF 2,500 refund to a donor and a KCHF 8,000 advance payment received to finance a new nursery.

Accrued expenses totalled KCHF 13,575 at end-2016 (vs KCHF 7,773 at end-2015), and deferred income stood at KCHF 23,064 (vs KCHF 10,845 at end-2015).

21 PROVISIONS – DERIVATION

CHF 1000	Provisions for untaken leave and overtime	Other long-term employee benefits (IPSAS 25)	Litigations	Other provisions	Total provisions
as of 01.01.2015	16 983	18 334	1 380	–	36 696
Creation (incl. increase)	1 732	1 285	28	450	3 495
Reversal	–	19	–1 020	–	–1 001
as of 31.12.2015	18 715	19 638	388	450	39 191
of which short-term	18 715	–	28	450	19 193
of which long-term	–	19 638	360	–	19 998
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
as of 31.12.2016	20 940	20 839	620	–	42 399
of which short-term	20 940	–	620	–	21 560
of which long-term	–	20 839	–	–	20 839

Other long-term employee benefits at end-2016 included KCHF 20,808 of future jubilee benefits calculated under IPSAS 25 (vs KCHF 19,585 at end-2015).

Out of the KCHF 450 provision recognized at 31 December 2015, KCHF 433 was used in 2016 and the remainder was reversed.

The pension fund that EPFL pays into, called Publica, has three pension plans for employees and a separate pension plan for professors. Employees are assigned to one of the three pension plans depending on their category. Under IPSAS 25, provisions are measured using a dynamic calculation of defined benefit obligations (DBO).

The regulatory coverage ratio, set forth in the Swiss Federal Act on BVV 2, for ETH Domain pension plans with Publica was 103.2% at end-2016 and 100.5% at end-2015. The coverage ratio calculated using the economic approach in IPSAS 25 was 84.5% at end-2016 and 72.7% at end-2015.

Net defined benefit liabilities

CHF 1000	31.12.2015	31.12.2016
Present value of defined benefit obligation from funded plans	- 2 103 302	- 2 314 198
Fair value of plan assets	1 560 987	1 655 154
Surplus (+) / deficit (-)	- 542 315	- 659 044
Present value of defined benefit obligation from unfunded plans	-	- 5 817
Net defined benefit liabilities	- 542 315	- 664 861

Changes in the net defined benefit liability from one year to the next reflect changes in actuarial assumptions, such as in the discount rate and capital gains and losses on pension assets.

Although this liability does not affect EPFL's pension-plan funding, changes in this line item from one year to the next give an indication of the macroeconomic climate and the potential medium- and long-term ramifications.

Pension costs

CHF 1000	2015	2016
Current service cost (employer)	71 026	78 872
Interest expense	15 286	8 466
Expected return on plan assets	- 46 965	- 43 040
Past service cost	-	5 817
Pension costs	39 347	50 115

Pension costs totalled KCHF 50,115 in 2016 (vs KCHF 39,347 in 2015). Pension costs are expected to be KCHF 63,625 in 2017. Employer contributions are calculated as required by regulations, bearing in mind that the savings component is adjusted according to employees' age and consequently increases over time. Vested benefits are calculated so that the funding of defined benefit liabilities is spread evenly over the corresponding period of employment with EPFL, in accordance with IPSAS 25. That can lead to differences between employer contributions and the cost of vested benefits.

Employer contributions totalled KCHF 60,735 in 2016 (vs 56,733 in 2015) and should amount to KCHF 60,097 in 2017.

Change in present value of defined benefit obligation during year

CHF 1000	2015	2016
Present value of defined benefit obligation as of 01.01.	1 968 525	2 103 302
Past service cost	–	5 817
Current service cost (employer)	71 026	78 872
Interest expense	15 286	8 466
Contributions by plan participants	30 300	31 462
Benefits paid	– 66 446	– 84 022
Actuarial gains (-) / losses (+) arising from experience adjustments	19 224	43 492
Actuarial gains (-) / losses (+) arising from changes in assumptions	65 387	132 626
Present value of defined benefit obligation as of 31.12.	2 103 302	2 320 015

Change in fair value of plan assets during year

CHF 1000	2015	2016
Fair value of plan assets as of 01.01.	1 580 938	1 560 987
Contributions by the employer	56 733	60 735
Contributions by plan participants	30 300	31 462
Benefits paid	– 66 446	– 84 022
Expected return on plan assets	46 965	43 040
Actuarial gains (+) / losses (-) on plan assets	– 87 503	42 952
Fair value of plan assets as of 31.12.	1 560 987	1 655 154

Analysis of amounts recognised in equity

CHF 1000	2015	2016
Actuarial gains (-) / losses (+) on plan liabilities arising from changes in assumptions	65 387	132 626
Experience adjustments on plan liabilities	19 224	43 492
Actuarial gains (-) / losses (+) on plan assets	87 503	– 42 952
Total amount recognised in equity	172 114	133 166
Cumulative amount of gains (-) / losses (+) recognised in equity	299 895	433 061

Major categories of plan assets

share	2015	2016
Liquidity	2.24 %	2.38 %
Shares	30.44 %	29.89 %
Bonds	58.21 %	60.40 %
Mortgages	0.46 %	0.39 %
Real estate	5.00 %	4.99 %
Commodities	3.65 %	1.95 %
Total	100.00 %	100.00 %

ETH Domain pension plans do not hold any investments in the employer. By the same token, the employer does not use any of the real estate held by ETH Domain pension plans.

The expected return on plan assets is calculated based on the asset allocation used for ETH Domain pension plans.

Actual return on plan assets

CHF 1000	2015	2016
Expected return on plan assets	46 965	43 040
Actuarial gains (+) / losses (-) on plan assets	- 87 503	42 952
Actual return on plan assets	- 40 538	85 992

Key assumptions and history of plan assets

The present value of defined benefit obligations is calculated every year by independent actuaries using the projected unit credit method and the following assumptions.

Principal actuarial assumptions used as at the reporting date

share	2015	2016
Discount rate	0.40 %	0.20 %
Underlying Consumer Price Inflation	0.60 %	0.50 %
Expected rate of salary increases	0.90 %	0.90 %
Expected rate of pension increases	0.00 %	0.00 %
Expected rate of return on plan assets	2.75 %	2.00 %

The 0.2% discount rate is based on the yield on Swiss government bonds.

Key actuarial assumptions used to determine the net pension costs recognised during the year

share	2015	2016
Discount rate	0.80 %	0.40 %
Underlying Consumer Price Inflation	0.80 %	0.60 %
Expected rate of salary increases	1.15 %	0.90 %
Expected rate of pension increases	0.10 %	0.00 %
Expected rate of return on plan assets	3.00 %	2.75 %

History of asset values, obligations, surplus(+)/deficit(-) and experience adjustments

CHF 1000	2014	2015	2016
Fair value of plan assets as of 31.12.	1 580 938	1 560 987	1 655 154
Present value of defined benefit obligation from funded plans as of 31.12.	-1 968 525	-2 103 302	-2 314 198
Surplus (+) / deficit (-)	-387 587	-542 315	-659 044
Present value of defined benefit obligation from unfunded plans	-	-	-5 817
Experience adjustments on plan assets	43 131	-87 503	42 952
Experience adjustments on plan liabilities	-1 016	-19 224	-43 492

23 DEDICATED THIRD-PARTY FUNDS

CHF 1000	31.12.2015	31.12.2016	Deviation
Swiss National Science Foundation (SNSF)	180 694	177 337	-3 358
Commission for Technology and Innovation (CTI)	17 797	43 383	25 586
EU Framework Programmes for Research and Innovation (FP)	111 075	157 324	46 248
Special federal funding of applied research	20 540	21 521	980
Industry-oriented research (private sector)	18 684	29 077	10 393
Other project-oriented third-party funding (incl. cantons, municipalities, international organisations)	22 611	17 050	-5 561
Donations and bequests	561	561	-
Total dedicated third-party funds	371 963	446 252	74 289

Dedicated third-party funds are the unused portion of funding to be paid (revenue from non-exchange transactions). These line items consist of expected funding, CoC adjustment, accrual entries for overheads and reclassifications in current liabilities.

The increase in Commission for Technology and Innovation mainly reflects financing for the SCCER project.

The increase in EU Framework Programmes for Research and Innovation is due primarily to the second phase of the HBP project.

The increase in industry-oriented research reflects the offsetting entry for major new financing (including KCHF 2,000 from a private foundation) and a KCHF 4,500 increase in funds not yet used.

The decrease in other project-oriented third-party funding can be attributed mainly to greater use of funding for projects financed by the cantons of Valais and Fribourg.

24 CONTINGENT LIABILITIES

CHF 1000	2015	2016
Warranties	500	500
Other	1 105 390	1 106 388
Total contingent liabilities	1 105 890	1 106 888

The KCHF 500 warranty 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.

Other contingent liabilities consist of the following:

- SQNE (KCHF 512,750). This amount covers the remaining joint and several liability on the lease as well as the purchase value of the buildings set forth in the lease agreement.
- SQIE (KCHF 301,705). This amount covers the remaining joint and several liability on the lease as well as the purchase value of the buildings set forth in the lease agreement.
- Campus Biotech (KCHF 253,287) and refurbishing (KCHF 8,645). This is a lease agreement between Campus Biotech Geneva Foundation, the University of Geneva and EPFL. The corresponding contingent liability is equal to the joint and several liability remaining until the lease expires.
- An audit by the European Commission found that certain costs on two projects are not eligible. This finding could possibly be extended to other projects. For the moment, it is not possible to calculate the amount of the required adjustment.

EPFL also has contingent liabilities of an unspecified amount on its investments in simple partnerships (e.g., CIBM).

2015 figures provided for comparison purposes have been restated following a 2016 review of EPFL's agreements (increase of KCHF 138,417).

25 FINANCIAL COMMITMENTS

CHF 1000	2015	2016
Financial commitments ≤ 1 year	598	7 303
Financial commitments from 1 to 5 years	–	–
Financial commitments > 5 years	–	–
No due date / indefinite	8 976	–
Total financial commitments	9 574	7 303

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

Financial commitments were not broken down by maturity in 2015; for 2016, those commitments have been classified under less than one year.

EPFL has also committed to covering the following expenses:

- 40% of the costs for the Wyss Center for Bio and Neuroengineering in Geneva (commitment made to the Wyss Center foundation).
- Costs for major maintenance and renovation work for the operating equipment and interior of the Microcity building in Neuchâtel.

26 OPERATING LEASE

CHF 1000	2015	2016	Deviation
Due dates			
Due within 1 year	3 416	6 206	2 790
Due within 1 to 5 years	12 242	22 630	10 388
Due after more than 5 years	54 608	111 448	56 840
Future minimum payments for non-cancellable operating lease as of 31.12.	70 266	140 284	70 018
Leasing expenses			
Minimum lease payments	3 590	6 174	2 584
Leasing payments of current period	3 590	6 174	2 584

EPFL has not taken out any operating leases to finance its equipment, machines or vehicles.

The operating leases that EPFL has taken out consist of:

- A lease with ECAL in the amount of KCHF 547 and expiring on 1 August 2017, renewed automatically every year with a 12-month notice period. At 31 December 2016, the term remaining on the lease extended until 1 August 2018.
- A lease for student housing, in the amount of KCHF 806 and expiring on 30 September 2019;
- A lease for EPFL offices and laboratories in Saint-Sulpice, in the amount of KCHF 1,563 and expiring on 31 January 2021.
- A lease for the B1, B3, B4, H4, and H8/G6 buildings on Campus Biotech in Geneva, in the amount of KCHF 137,366 and expiring on 30 June 2043.
- A lease for the B2 building on Campus Biotech in Geneva, provided for free and expiring on 31 December 2019.

2015 figures provided for comparison purposes have been restated following a 2016 review of EPFL's leases (a decrease of KCHF 2,692).

27 FOREIGN EXCHANGE DIFFERENCES

Foreign exchange differences result from the revaluation of receivables and liabilities arising from non-exchange transactions (IPSAS 23) in foreign currencies. They relate mainly to EU research programmes. Any income is offset by a corresponding expense entry.

28 REMUNERATION OF KEY MANAGEMENT PERSONNEL

Remuneration of the five key members of EPFL management. No other remuneration is paid to them or members of their families, and they have not been granted any loans.

CHF 1000	2015	2016
Direction (5 FTE)	2 400	2 024

2015 figures provided for comparison purposes have been restated due to an error in entering the figures in the 2015 report.



Reg. Nr. 1.17033.939.00125.002

Report of the Statutory Auditor

***to the President of the Swiss Federal Institute of Technology in
Lausanne***

Report of the Statutory Auditor on the Financial Statements

As statutory auditor, and in application of article 35*abis* of the Federal Act on the Federal Institutes of Technology (SR 414.110), we have audited the financial statements of the Swiss Federal Institute of Technology in Lausanne (EPFL) which comprise the balance sheet, statement of financial performance, cash flow statement, statement of changes in equity and notes (Financial Report excluding the Foreword) for the year ended on 31 December 2016.

Responsibility of the Executive Board of the EPFL

The Executive Board of the EPFL is responsible for the preparation of the financial statements in accordance with 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). This responsibility includes designing, implementing and maintaining an internal control system relevant to the preparation of financial statements that are free from material misstatement, whether due to fraud or error. The Executive Board of the EPFL is further responsible for selecting and applying appropriate accounting policies and making accounting estimates that are reasonable in the circumstances.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Swiss law and the Swiss Auditing Standards. These standards require that we plan and perform the audit to obtain reasonable assurance as to whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor's consider the internal control system relevant to the entity's preparation of the financial statements 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 entity's internal control system. An audit also includes evaluating the appropriateness of the accounting policies used and the reasonableness of accounting estimates made, as well as evaluating

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

Audit Opinion

In our opinion, the financial statements of the EPFL for the year ended on 31 December 2016 comply with legal requirements and the Accounting Manual for the ETH Domain. We recommend that the financial statements submitted to you be approved.

Report on Other Requirements

The Swiss Federal Audit Office is independent based on the Federal Auditing Act (SR 614.0) and there are no facts incompatible with its independence.

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 financial statements according to the instructions of the ETH Board.

Berne, 3 March 2017

SWISS FEDERAL AUDIT OFFICE



Martin Köhli
Licensed Audit Expert



Patrick Wegmann
Licensed Audit Expert



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