ETH BOARD

FINANCIAL REPORT OF THE ETH BOARD ON THE ETH DOMAIN 2020

Rounding differences: The figures presented in this document may not correspond precisely to the total amounts presented in the tables. Changes are calculated on unrounded amounts and may differ from a figure that is based on the rounded amounts presented in the tables.

Financial Report of the ETH Board on the ETH Domain 2020

Report on the 2020 financial year of the ETH Domain

Principles of and remarks to the consolidated financial statements

Basis of accounting

The consolidated financial statements of the ETH Domain comprise the statement of financial performance, balance sheet, cash flow statement, statement of changes in equity and the Notes. They have been prepared and audited in accordance with the International Public Sector Accounting Standards (IPSAS).

Relationship between the consolidated financial statements and the financial overview

The consolidated financial statements below are based on the concept of consumption of resources: the revenue and expenses are accrued to the period to which they belong. In addition to the financial performance, the financial statements also show the financial position and the net assets.

The situation is different with the financial overview, which can be found from page 103 of the Annual Report. Receipts and expenditure are shown there and allocated to the period in which the funds flow.

Ownership arrangements of the ETH Domain's real estate

The consolidated financial statements reflect the actual legal ownership of the ETH Domain's real estate: The vast majority of the real estate used by the ETH Domain is owned by the Federal Government and is, therefore, not included in these financial statements.

The Federal Government has transferred the management of the state-owned real estate used to the ETH Domain. Investments triggered and monitored by the ETH Domain in the state-owned real estate concerned are explained in the Annual Report from page 75 onwards. The investment credit for the real estate owned by the Federal Government and the federal financial contribution are shown in the financial overview under "Total federal contribution from the expenditure ceiling". Therefore, the financial overview of the ETH Domain comprehensively reflects the political control exercised by the Federal Government.

In contrast, in the consolidated financial statements of the ETH Domain, total federal contribution (see Note 7) is made up of the federal financial contribution and the federal contribution to accommodation. Premises costs, i.e. a rent, for the use of this real estate owned by the Federal Government are recognised under operating expenses to the same extent, so that these two items cancel each other out in the surplus or deficit.

Investments in real estate possessed by the ETH Domain are financed from the federal financial contribution and form part of the consolidated financial statements.

Comparability with previous years

The 2020 financial statements are directly comparable with the previous years of 2017 to 2019, with the exception of the net defined benefit liabilities. In 2020, extended risk sharing was introduced in accordance with IPSAS standard 39 for net defined benefit liabilities and the actuarial assumptions were adjusted. The impact on the balance sheet was considerable and is explained on page 5 in the section on net defined benefit liabilities.

Since 1 January 2017, all the entities have been included which are controlled by or can be significantly influenced by the institutions of the ETH Domain or by the ETH Board. ETH Zurich and EPFL control fully consolidated entities (quantity: 6). The two universities and the PSI include the investment values of the significantly influenced entities or associated entities in their financial statements (quantity: 10). The amount of entities that are controlled or can be significantly influenced has remained unchanged since 2017.

Key developments in 2020 at a glance

The ETH Domain uses the funds received prudently, and with great cost awareness.

The ETH Domain was able to very successfully fulfil its core mandate even under pandemic conditions. In line with the Federal Council's strategic objectives for the ETH Domain, the 2020 consolidated financial statements show the following significant developments that were directly influenced by the ETH Domain:

– Revenue from third-party funding exceeded the level of the high volume seen in the previous year.
– There was a rise in personnel expenses, while other operating expenses were down.
– Depreciation remained at a high level due to the investments made in previous years.

In view of the high revenue from donations and the much lower operating expenses due to the pandemic, an almost balanced operating result of –CHF 3m was achieved. The total federal contribution declined, primarily due to the shift of funds to the investment credit owing to the increased construction activity at ETH real estate owned by the Federal Government (see page 4, Ownership arrangements of the ETH Domain's real estate). The annual surplus of CHF 41m (2019: CHF 140m) was mainly due to the positive net finance income and the share of surplus of the associated entities.

Net defined benefit liabilities

The net defined benefit liabilities of the ETH Domain show the obligations from the pension plans of the ETH Domain, which provide benefits upon retirement, death and disability. The majority of insured persons and pensioners from the ETH Domain are insured with PUBLICA in the ETH Domain pension scheme.

In contrast to static accounting under Swiss pension law, the annual calculation of net defined benefit liabilities under IPSAS 39 is based, among other things, on actuarial assumptions that take account of future developments. Their change leads to annual fluctuations in equity, and the impact on personnel expenses as well as on the surplus or deficit is not so pronounced. The annual return on plan assets at PUBLICA is for the most part not recognised in surplus or deficit in the consolidated financial statements of the ETH Domain, but rather directly in equity. Therefore, some developments in the 2020 annual financial statements can only be understood if these effects are taken into consideration:

1. On 31 December 2020, the valuation was for the first time carried out taking account of the risk sharing between the employer and employee. This led to a revaluation gain in equity and a reduction in the liability of CHF 336m.
2. Further significant revaluation gains also resulted from the adjustment of the discount rate (CHF 618m) and demographic assumptions (CHF 301m).
3. Plan assets increased primarily due to the positive investment return, with CHF 361m being recognised in equity.
4. Overall, the changes led to a revaluation gain recognised in equity of CHF 1,442m (total amount of negative valuation reserves as at 31 December 2020: CHF 31m). The net defined benefit liabilities themselves fell by CHF 1,336 m.

As the pension costs in accordance with IPSAS 39 are based on the assumptions of the previous year in each case, the consideration of risk-sharing characteristics will only lead to a reduction in pension costs in 2021.

Consolidated statement of financial performance

CHF millions	2020	2019	2018	2017
Operating revenue	**3,680**	**3,676**	**3,714**	**3,698**
Changes to previous year	0%	−1%	0%	3%
Operating expenses	**3,682**	**3,637**	**3,631**	**3,515**
Changes to previous year	1%	0%	3%	6%
NET FINANCE INCOME / EXPENSE	**11**	**28**	**−22**	**13**
SURPLUS (+) OR DEFICIT (–)	**41**	**140**	**50**	**209**
Third-party funds relative to operating revenue	29%	29%	29%	28%
Personnel expenses relative to operating revenue	68%	65%	63%	62%

Operating revenue

The ETH Domain is expanding its financing base gradually. It raises third-party funding successfully and in line with its strategic objectives.

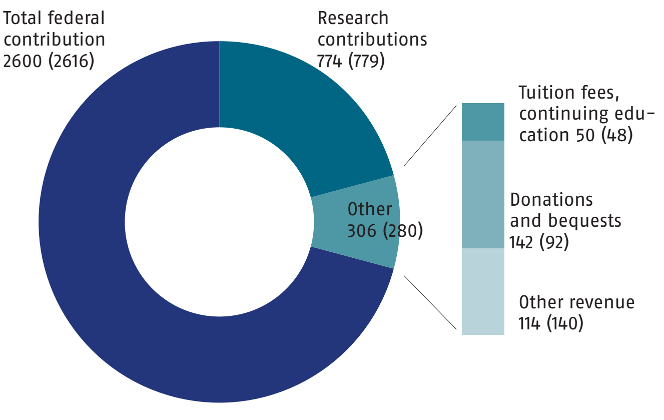
At CHF 3,680m, operating revenue remained virtually balanced compared to the previous year (+CHF 4m).

Federal financing, the total **federal contribution** (see Note 7), accounted for 71% of the operating revenue, as it had done in the previous year. It consisted of the federal financial contribution of CHF 2,355m (2019: CHF 2,373m) and the federal contribution to accommodation of CHF 244m (2019: CHF 244m). Compared to the previous year, the total federal contribution declined by CHF 17m.

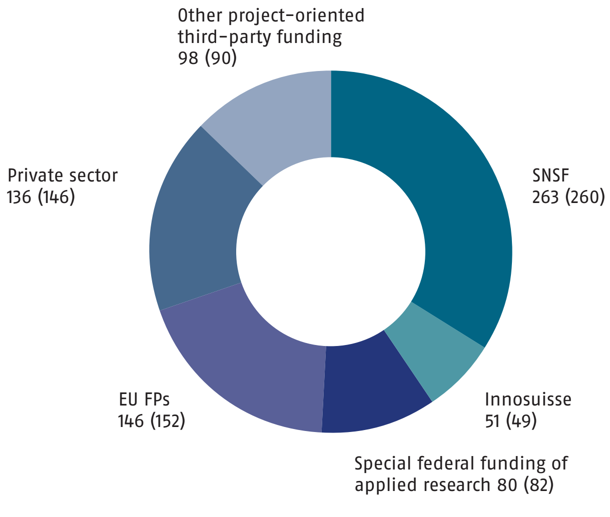
In contrast, **revenue from third-party funding** (see Notes 8, 9, 10, 11) increased by CHF 21m or 2%. It totalled CHF 1,080m in absolute terms, accounting for 29% of operating revenue in the reporting period, as was also the case in the previous year. The increase in income from third-party funding is related to the significantly higher income from donations and bequests.

Revenue from research contributions, mandates and scientific services remained slightly under the prior-year level at CHF 774m (2019: CHF 779m). With a share of 21%, which is in line with the level seen in previous years, it is the second most important component of the operating revenue. These are mainly multi-year research projects. Revenue is recognised on the basis of the work completed. It is determined on the basis of the actual project costs incurred (cost-of-completion method) and can, therefore, vary widely.

Operating revenue in 2020 in CHF m
CHF 3,680m (previous year: CHF 3,676m)



Research contributions in 2020 in CHF m
CHF 774m (previous year: CHF 779m)



While revenue from projects with cantons, public-law institutions and international organisations increased and revenue from projects with the private sector declined, revenue from national and European research funding remained at the level of the previous year.

The increase in revenue from **other project-oriented third-party funding** (+CHF 8m, +9%) is related to greater project progress and a higher project volume, especially at ETH Zurich, the PSI and Empa. On the one hand, the lower revenue from **cooperation with the private sector** (–CHF 10m, –7%) reflects the conclusion of major projects. On the other, this decrease in revenue can be attributed to the decline in mandates from scientific services at Empa due to the coronavirus pandemic.

In terms of revenue, the funding of research projects of the **Swiss National Science Foundation (SNSF)**, one of the Federal Government's funding agencies, was CHF 3m above the previous year's high value. Researchers from the ETH Domain are involved, among other things, in research activities in the National Research Programmes (NRPs), the National Centres of Competence in Research (NCCRs), in Sinergia, the programme for collaborative and interdisciplinary research, and the special calls for COVID-19 research.

In the projects of **Innosuisse**, a further Federal Government funding agency, the level of implementation remained at the prior-year level (+CHF 1m). On the one hand, the eight Swiss Competence Centers for Energy Research (SCCERs) reached completion as part of the action plan "Coordinated Energy Research Switzerland". The ETH Domain was involved in all of them, and in a leading capacity in seven. On the other hand, good progress was achieved for ongoing projects after grants obtained for new projects recovered in the previous year.

A decline of CHF 5m was recorded in revenue from the **EU Framework Programmes for Research and Innovation (EU FPs)**. The current Horizon 2020 projects (2014–2020) at ETH Zurich are well under way, while modest progress has been made at the PSI, not least due to the lockdown during the coronavirus pandemic, and there have been delays for major projects at EPFL.

Special federal funding of applied research showed varying trends in revenue, with overall revenue for the ETH Domain CHF 2m below the previous year's level. While project progress at the PSI led to higher revenue, revenue weakened at ETH Zurich, in particular, due to the completion of projects in the previous year.

Third-party funding also includes the following components of operating revenue. They have developed as follows:

Revenue from **donations and bequests** was pleasing at CHF 142m (2019: CHF 92m), with donations of more than CHF 13m being obtained for COVID-19 research, especially from Fondation Botnar and the Werner Siemens Foundation in favour of EPFL. The growth in the number of students and the gradual increase in tuition fees was reflected, among other things, in higher revenue from **tuition fees, continuing education** (2020: CHF 50m; 2019: CHF 48m). The impact of the coronavirus pandemic was the primary contributor to the decline in **other revenue** (2020: CHF 114m, 2019: CHF 140m).

Obtained grants

The analysis of the balance sheet, which is explained in more detail below, and the diagram on page 8 show that receivables and dedicated third-party funds increased in 2020 compared with previous years. From this it can be deduced that the revenue from research contributions will remain at a high level or even tend to rise. This trend can also be supported by the grants obtained in the reporting period and in the previous years by the SNSF, the EU FPs and Innosuisse. In 2020, obtained grants* totalled CHF 468m, with almost CHF 9m of this figure specifically for COVID-19 research (total in 2019: CHF 443m, 2018: CHF 512m, 2017: CHF 422m). The SNSF committed CHF 238m to the ETH Domain, 9% down on the previous year. In contrast, it was possible to competitively obtain an increase of CHF 38m in funds from the EU FPs (total of CHF 189m). The upward trend in funding committed by Innosuisse continued, with an increase of CHF 10m to CHF 41m.

* It should be noted that double counting is possible for these values due to the structure of the leading house contracts contained therein.

The commitment shown by the ETH Domain in teaching and research costs money. It leads to excellence and takes Switzerland and science a step further.

Operating expenses

Operating expenses increased by CHF 45m to CHF 3,682m in the reporting period. Research and teaching are personnel-intensive and require continuous investment.

Personnel expenses is the largest item of expense (2020: 68%; 2019: 66%). Compared to the previous year, it rose by a total of CHF 104m to CHF 2,490m.

The increase in salaries and wages of CHF 70m reflects the compensation measures decided upon by the ETH Board for 2020 and the increase in the percentage of FTEs. The average headcount in the whole ETH Domain in 2020 was 19,361 full-time equivalents (FTEs), excluding apprentices. This is a good 2% up on the previous year's figure of 18,915 FTEs*. Net pension costs also increased, reflecting effects from the actuarial calculation of net defined benefit liabilities (+CHF 35m compared to previous year, see explanations above in the section on net defined benefit liabilities).

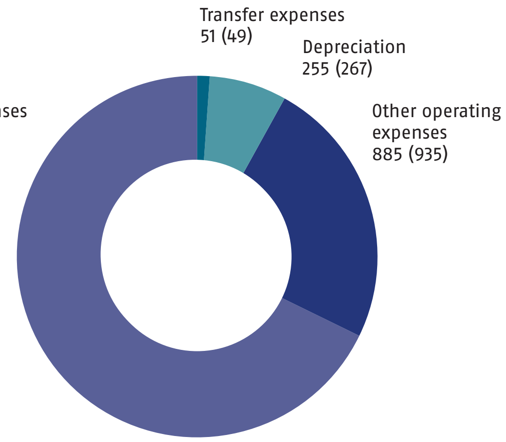
The decline in **other operating expenses** of CHF 50m can be attributed to the effects of the coronavirus pandemic (2020: CHF 885m; 2019: CHF 935m). Travel expenses, fees for guest lecturers, spending for conferences and administrative costs declined significantly. In contrast, costs for the non-capitalisable IT infrastructure and cleaning increased. Since 2018, a portion of the revenue from the transfer of use of real estate owned by the Federal Government has had to be paid to the Federal Government. As in the previous year, this amounted to CHF 2m and is included in other operating expenses.

At CHF 255m, **depreciation** remained high, but did fall compared to the previous year (2019: CHF 267m) due to lower depreciation on information and communication technology equipment. The volume of depreciation continues to be determined by the extensive investments in strategically relevant large-scale research facilities and technical equipment made in previous years as well as this year.

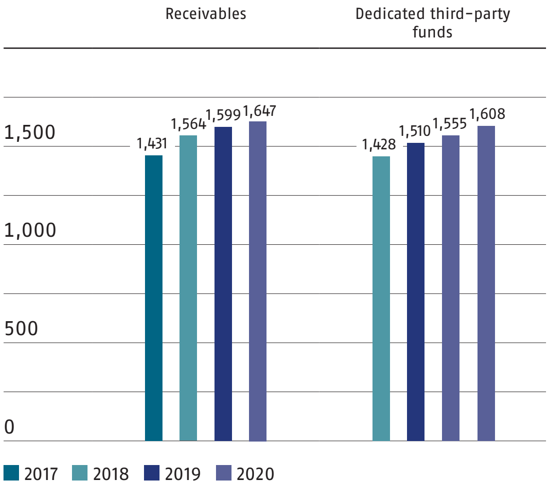
Transfer expenses rose due to the higher contributions for collaborative research projects (2020: CHF 51m; 2019: CHF 49m).

* The Annual Report does not show the annual average value but the year-end figure. This is 20,108 FTEs (including apprentices). The figure in the Annual Report also excludes the FTEs of the controlled entities.

Operating expenses in 2020 in CHF m
CHF 3,682m (previous year: CHF 3,637m)



Receivables and dedicated third-party funds



Consolidated balance sheet

CHF millions	31.12.2020	31.12.2019	31.12.2018	31.12.2017
Current assets	**3,181**	**3,099**	**2,913**	**2,771**
Non-current assets	**3,412**	**3,272**	**3,354**	**3,066**
TOTAL ASSETS	**6,592**	**6,371**	**6,267**	**5,837**
Liabilities	**4,106**	**5,370**	**5,261**	**4,626**
Valuation reserves	–27	–1,470	–1,364	–1,109
Dedicated reserves	1,468	1,365	1,123	949
Free reserves	778	856	967	965
Other equity	267	249	280	407
Equity	**2,486**	**1,001**	**1,006**	**1,212**
TOTAL LIABILITIES AND EQUITY	**6,592**	**6,371**	**6,267**	**5,837**

The total assets for the ETH Domain were up CHF 221m or 3% on the previous year. The increase is mainly due to the higher level of cash and cash equivalents and the increase in property, plant and equipment as well as investments in associated entities.

Receivables and dedicated third-party funds

As in the previous year, receivables from non-exchange transactions and dedicated third-party funds in liabilities each accounted for around one quarter of total assets.

These third-party funds flow from funding organisations, the public sector, industry and donors. This enables the ETH Domain to finance and promote some of its project and research activities. With each payment made to finance the progress of a project, these receivables decrease over the course of the year; newly concluded contracts and obtained grants increase them. Therefore, the balance of receivables reflects the outstanding financing framework for current projects and granted donations. The balance of dedicated third-party funds, however, corresponds to the outstanding performance obligations from current research projects and orders.

The diagram for "Receivables and dedicated third-party funds" in the bottom right of page 8 illustrates how these variables have developed. By the end of 2020, receivables irrespective of maturity amounted to CHF 1,647m (2019: CHF 1,599m). Receivables from the SNSF, receivables from EU FPs research projects as well as receivables from donations made up the largest share of them.

The receivables from project transactions still outstanding at the end of 2020 were matched by dedicated third-party funds of CHF 1,608m (2019: CHF 1,555m). The rise of CHF 53m or 3% shows that at the end of 2020 there was a higher volume of projects or research available for which services still have to be provided in the coming years.

Property, plant and equipment

The balance sheet value of property, plant and equipment stood at CHF 1,967m at the end of 2020, up CHF 69m. A gross figure of CHF 306m was invested in property, plant and equipment in 2020 (see cash flow statement), CHF 53m more than in the previous year. The property, plant and equipment were paid for from the ETH Domain's own resources, i.e. from the total federal contribution and from third-party funding. The property, plant and equipment account for almost one-third of the total assets.

Investments held in associated entities

The increase of CHF 34m reflects the aggregated, proportionate surplus / deficit of the associated entities in the reporting period. It was mainly due to a bequest at the ETH Zurich Foundation.

Financial assets

Financial assets with a balance of CHF 516m (2019: CHF 1,472m) include third-party funds received that are not used immediately. The marked decline primarily reflects the transfer to deposit accounts with the Federal Government with a term of less than three months in order to increase financial flexibility.

On the basis of the prevailing treasury agreement between the FFA and the ETH Domain, these funds are placed with the Federal Government or on the market. CHF 161m of the total financial assets were invested with the Federal Government, and CHF 339m with financial institutions. CHF 10m net was paid into the long-term deposit accounts with the Federal Government in the reporting period. Third-party funds placed on the market rose by CHF 55m as asset management mandates were increased in 2020 and benefited from the good performance on the financial markets.

Provisions

Provisions totalling CHF 718m (2019: CHF 723m) include provisions set aside for the dismantling of the accelerator facilities and the disposal of radioactive waste at the PSI amounting to CHF 542m (2019: CHF 543m).

Equity and reserves

The ETH Domain's sustainable financing strengthens Switzerland as a centre of research.

The enormous increase in equity in the reporting period is primarily attributable to the addition to the revaluation reserve from the net defined benefit liabilities of CHF 1,442m, as already explained above on page 5 in the section on net defined benefit liabilities. The increase in the annual surplus stood at CHF 41m, meaning that equity in the reporting period ultimately amounted to CHF 2,486m, CHF 1,485m more than in the previous year.

Dedicated reserves increased by CHF 103m to CHF 1,468m. Free reserves decreased by CHF 78m to CHF 778m.

The reduction in free reserves was related to the promotion of strategic initiatives and projects by management bodies and as well their use for and the coverage of operating activities. During this year, a significantly higher share of the total federal contribution was invested in real estate and property, plant and equipment, meaning that fewer funds were available for operating activities, contributing to the decline in free reserves.

Three main effects contributed to the increase in dedicated reserves:
(1) the high net revenue from donation contracts; (2) federal funds received but not yet used for the strategic focus areas (SFAs) and research infrastructures; and (3) financial commitments made by the governing bodies for strategic projects and plans. Examples here include the Future Cities Laboratory (FCL) of the Singapore-ETH Centre, ETH+/Open ETH and the EXTREMES programme of WSL. Election commitments to newly appointed professors also increased.

These effects and the increase were offset by the use of reserves, including for the Digitalisation Action Plan, expenses for SFAs and other projects as well as acquisitions, such as a new high-performance computer for the EPFL's Blue Brain Project, for the national Higher Performance Computing and Networking Strategy (HPCN Strategy) at the CSCS of ETH Zurich as well as the ATHOS beamline of the SwissFEL large-scale research facility at the PSI.

Adequate free reserves provide the necessary room for manoeuvre in order to assume responsibility for teaching and research autonomously. For example, they make it possible to respond quickly when national or international development opportunities arise for which financing is to be secured. The ETH Domain uses the available funds in line with its strategy and cost-effectively.

Consolidated cash flow statement

In the 2020 reporting period, the total **cash flow from operating activities** amounted to CHF 354m (2019: CHF 368m) and was composed of the surplus of CHF 41m adjusted for non-cash expenses and revenues in the statement of financial performance (depreciation, etc.), as well as the relevant changes from the balance sheet.

Total investments in 2020 amounted to CHF 394m (2019: CHF 345m). At CHF 306m (2019: CHF 253m), the majority of investments flowed into movable and immovable property, plant and equipment. The entire cash flow from investing activities (investments / divestments) is shown in the consolidated cash flow statement (Table 4 of the consolidated financial statements).

Particular mention should be made of the following from the 2020 investment programme:

- ETH Zurich: Major investments were made in the area of moveable property, plant and equipment for the Krios G4 and Helios 5 microscopes (total CHF 5m) and the 1,100 MHZ WB Spectrometer (CHF 4m). CHF 3m was spent on the expansion of the Euler Cluster (Euler VII) at the CSCS. Further major investments in the area of information technology hardware were made for server systems (CHF 10m). For the new location of the Infrastructure, Personnel Development and Leadership Executive Board domains in Oerlikon, ETH Zurich invested CHF 17m in leasehold improvements. This was also the case for the new building on Gloriastrasse (health sciences and medical technology, CHF 8m), the new BSS building in Basel (systems biology and synthetic biology, CHF 8m), the renovation and expansion of the HIF building (civil engineering, CHF 4 m) and the renovation of the machine laboratory (Department of Mechanical and Process Engineering, CHF 3m).
- EPFL: The largest acquisitions in the area of movable property, plant and equipment related to specific technical-scientific equipment, including the upgrade of the "TCV Auxiliary Heating system", an etching system and equipment for the AGORA Center. In terms of IT procurement, EPFL invested CHF 10m in servers (Blue Brain Project) and CHF 1m in catalyst switches (financed with third-party funds). Leasehold improvements were also made to various buildings (one project of CHF 2m, otherwise projects of less than CHF 1m each).
- PSI: The greater part was invested in technical facilities such as the user-specific expansion of the ATHOS / SwissFEL beamline (CHF 13m), the SINQ upgrade (CHF 3m) and SLS 2.0.
- WSL: Laser spectrometer and laser scanner for a total of CHF 1m.
- Empa: A further unit for the NEST research and innovation building amounting to CHF 1m (HiLo building), financed with third-party funds. Investments were also made in electron microscopes (CHF 2m) and IT networks (CHF 1m).
- Eawag: Procurement of various pieces of scientific equipment. Leasehold improvements for the interior fittings of the new "Flux" laboratory and office building in an amount of CHF 3m were also carried out.

The **cash flow from financing activities** was used for payments from finance leases of around CHF 10m, in particular.

Cash and cash equivalents increased by CHF 1,019m compared to the previous year. This change, however, includes a reallocation of funds invested with the Federal Government from current financial assets to short-term deposits in an amount of CHF 977m. On a net basis, cash and cash equivalents increased by CHF 42m.

Consolidated financial statements

Consolidated statement of financial performance

Table 1: Statement of financial performance of the ETH Domain (consolidated)

CHF millions	Notes	Budget 2020	Actual 2020	Actual 2019	Change to Actual absolute
Federal financial contribution		2,355	2,355	2,373	−17
Federal contribution to accommodation		244	244	244	1
Total federal contribution	7	**2,600**	**2,600**	**2,616**	**−17**
Tuition fees, continuing education	8	**48**	**50**	**48**	**2**
Swiss National Science Foundation (SNSF)		271	263	260	3
Swiss Innovation Agency (Innosuisse)		57	51	49	1
Special federal funding of applied research		79	80	82	−2
EU Framework Programmes for Research and Innovation (EU FPs)		153	146	152	−5
Industry-oriented research (private sector)		140	136	146	−10
Other project-oriented third-party funding (incl. cantons, municipalities, international organisations)		74	98	90	8
Research contributions, mandates and scientific services	9	**773**	**774**	**779**	**−5**
Donations and bequests	10	**100**	**142**	**92**	**50**
Other revenue	11	**122**	**114**	**140**	**−26**
Operating revenue		**3,643**	**3,680**	**3,676**	**4**
Personnel expenses	12, 28	2,445	2,490	2,386	104
Other operating expenses	13	1,008	885	935	−50
Depreciation	21, 23	234	255	267	−11
Transfer expenses	14	73	51	49	2
Operating expenses		**3,759**	**3,682**	**3,637**	**45**
OPERATING RESULT		**−116**	**−3**	**39**	**−41**
NET FINANCE INCOME / EXPENSE	15	**3**	**11**	**28**	**−16**
Share of surplus / deficit of associated entities and joint ventures	20	–	32	74	−42
SURPLUS (+) OR DEFICIT (−)		**−113**	**41**	**140**	**−100**

Consolidated balance sheet

Table 2: Balance sheet of the ETH Domain (consolidated)

CHF millions	Notes	31.12.2020	31.12.2019	Change absolute
CURRENT ASSETS				
Cash and cash equivalents	16	1,968	950	1,018
Current receivables from non-exchange transactions	17	616	612	4
Current receivables from exchange transactions	17	60	48	12
Current financial assets and loans	22	464	1,430	−967
Inventories	18	10	10	–
Prepaid expenses and accrued income	19	63	49	14
Total current assets		**3,181**	**3,099**	**81**
NON-CURRENT ASSETS				
Property, plant and equipment	21	1,967	1,898	69
Intangible assets	21	62	63	−1
Non-current receivables from non-exchange transactions	17	971	939	32
Non-current receivables from exchange transactions	17	–	–	–
Investments in associated entities and joint ventures	20	242	208	34
Non-current financial assets and loans	22	52	42	11
Co-financing	23	118	123	−5
Total non-current assets		**3,412**	**3,272**	**140**
TOTAL ASSETS		**6,592**	**6,371**	**221**
LIABILITIES				
Current liabilities	24	189	154	35
Current financial liabilities	25	19	15	4
Accrued expenses and deferred income	26	151	150	1
Short-term provisions	27	108	102	6
Short-term liabilities		**467**	**421**	**46**
Dedicated third-party funds	29	1,608	1,555	53
Non-current financial liabilities	25	335	350	−15
Net defined benefit liabilities	28	1,087	2,423	−1,336
Long-term provisions	27	610	621	−12
Long-term liabilities		**3,640**	**4,950**	**−1,310**
Total liabilities		**4,106**	**5,370**	**−1,264**
EQUITY				
Valuation reserves		−27	−1,470	1,442
Dedicated reserves		1,468	1,365	103
Free reserves		778	856	−78
Co-financing	23	118	123	−5
Reserves from associated entities	20	242	208	34
Accumulated surplus (+) / deficit (–)		−93	−82	−11
Total equity		**2,486**	**1,001**	**1,485**
TOTAL LIABILITIES AND EQUITY		**6,592**	**6,371**	**221**

Consolidated statement of changes in equity

Table 3: Statement of changes in equity for the ETH Domain (consolidated)

CHF millions	**Valuation reserves**	Donations and bequests	Teaching and research reserves	Infrastructure and administration reserves	**Dedicated reserves**	**Free reserves**	**Co-financing**	**Reserves from associated entities**	**Accumulated surplus (+)/deficit (–)**	**Total equity**
2019										
Changes from restatement as of 01.01.	**–**	–	–	–	**–**	**–**	**–**	**–**	**–39**	**–39**
Value as of 01.01.2019	**–1,364**	**603**	**432**	**88**	**1,123**	**967**	**128**	**135**	**–21**	**967**
Surplus (+) or deficit (–)									**140**	**140**
Items directly recognised in equity:										
Revaluation of financial assets	**1**									**1**
Revaluation of defined benefit liability	**–107**									**–107**
Hedging transactions	**–**									**–**
Total items directly recognised in equity	**–106**									**–106**
Changes in investments in associated entities directly recognised in equity								**–1**	**–**	**–1**
Increase (+)/decrease (–) in reserves	**–**	–20	240	22	**242**	**–110**	**–4**	**74**	**–201**	**–**
Currency translations									**–**	**–**
Total changes	**–106**	**–20**	**240**	**22**	**242**	**–110**	**–4**	**73**	**–60**	**33**
Value as of 31.12.2019	**–1,470**	**583**	**673**	**110**	**1,365**	**856**	**123**	**208**	**–82**	**1,001**
2020										
Value as of 01.01.2020	**–1,470**	**583**	**673**	**110**	**1,365**	**856**	**123**	**208**	**–82**	**1,001**
Surplus (+) or deficit (–)									**41**	**41**
Items directly recognised in equity:										
Revaluation of financial assets	**1**									**1**
Revaluation of defined benefit liability	**1,442**									**1,442**
Hedging transactions	**–**									**–**
Total items directly recognised in equity	**1,442**									**1,442**
Changes in investments in associated entities directly recognised in equity								**2**	**–**	**2**
Increase (+)/decrease (–) in reserves		42	40	21	**103**	**–78**	**–5**	**32**	**–52**	**–**
Currency translations									**–**	**–**
Total changes	**1,442**	**42**	**40**	**21**	**103**	**–78**	**–5**	**34**	**–11**	**1,485**
Value as of 31.12.2020	**–27**	**625**	**713**	**131**	**1,468**	**778**	**118**	**242**	**–93**	**2,486**

Equity more than doubled in the reporting period (2020: CHF 2,487m, 2019: CHF 1,001m). The enormous increase can primarily be attributed to the addition to the revaluation reserve from the net defined benefit liabilities of CHF 1,442m (see following section). The increase due to the annual surplus stood at CHF 41m.

Valuation reserves

The main components of negative valuation reserves comprise the accumulated actuarial and investment net losses on defined benefit pension plans (–CHF 31m). The revaluation gain of CHF 1,442m recorded during the reporting period can be attributed to changes in financial (discount rate and introduction of risk sharing) and demographic assumptions as well as a positive investment return. Details can be found in Note 28 Net defined benefit liabilities.

The revaluation reserves for financial assets according to IPSAS 29 have risen by CHF 1m to CHF 4m. As hedge accounting is not applied in the ETH Domain, there are also no items recognised under the reserves from hedging transactions.

Dedicated reserves

The dedicated reserve for donations and bequests was up by CHF 42m, as more new donation contracts were concluded than funds consumed.

The dedicated teaching and research reserves contain "election commitments" of CHF 155m in the total figure at the end of 2020 (2019: CHF 142m). The increase in this reserve category totalled CHF 50m, partly due to federal funds received but not yet used for the strategic focus areas and research infrastructures, and partly due to financial awards by the governing bodies (ETH Board, Executive Boards, directorates) to promote strategic initiatives and projects. ETH Zurich was awarded grants for, among others, the strategic initiative ETH+/Open ETH, within the framework of national research priorities and for the Future Cities Laboratory (FCL) research programme of the Singapore-ETH Centre. At WSL, funds were allocated for the EXTREMES programme. In contrast, the dedicated reserves were used for project expenditure (including SFAs and the Digitalisation Action Plan) and acquisitions, such as a new high-performance computer for the EPFL's Blue Brain Project, for the national Higher Performance Computing and Networking Strategy (HPCN Strategy) at the CSCS of ETH Zurich as well as the ATHOS beamline of the SwissFEL large research facility at the PSI.

Free reserves

The free reserves were down by CHF 78m in the reporting period. The reduction in free reserves was related to the promotion of strategic initiatives and projects by management bodies and as well their use for and the coverage of operating activities. During 2020, a significantly higher share of the total federal contribution was invested in real estate and property, plant and equipment (ETH Zurich, Eawag, WSL). As a result, there were fewer funds available for operating activities, which contributed to the decline in free reserves. The increase at the ETH Board comprises strategic funds that have not yet been allocated, while the rise at the EPFL results from the pandemic-related delay in project expenditure and investments.

Co-financing

The institutions of the ETH Domain use co-financing as a means of becoming involved in construction projects for state-owned real estate through the provision of third-party funding. Details can be found in Note 23 Co-financing.

Accumulated surplus / deficit

The accumulated deficit of CHF 93m as of 31 December 2020 is the residual amount of total equity less the reserve items shown separately. It includes the undistributed earnings (surplus) from previous years, the negative restatement from the transition and adjustments to IPSAS, as well as the increase or decrease in reserves in the equity.

Consolidated cash flow statement

Table 4: Cash flow statement of the ETH Domain (consolidated)

CHF millions	Notes	2020	2019	Change absolute
CASH FLOWS FROM OPERATING ACTIVITIES				
Surplus (+) or deficit (–)		**41**	**140**	**–100**
Depreciation	21, 23	255	267	–11
Share of surplus / deficit of associated entities and joint ventures	20	–32	–74	42
Net finance income / expense (non-cash)	15	–29	–26	–3
Increase / decrease in net working capital		6	–84	90
Increase / decrease in net defined benefit liabilities	28	106	78	28
Increase / decrease in provisions	27	–5	–89	84
Increase / decrease in non-current receivables	17	–46	17	–63
Increase / decrease in dedicated third-party funds	29	71	63	8
Reclassification and other (non-cash) income		–13	78	–91
Cash flows from operating activities		**354**	**368**	**–14**
CASH FLOWS FROM INVESTING ACTIVITIES				
Investments				
Purchase of property, plant and equipment	21	–306	–253	–53
Purchase of intangible assets	21	–5	–2	–3
Increase in co-financing	23	–	–	–
Increase in loans	22	–	–1	–
Increase in current and non-current financial assets	22	–83	–89	7
Total investments		**–394**	**–345**	**–49**
Divestments				
Disposal of property, plant and equipment	21	1	–	1
Disposal of intangible assets	21	–	–	–
Decrease in co-financing	23	–	–	–
Decrease in loans	22	–	–	–
Decrease in current and non-current financial assets	22	1,066	84	982
Total divestments		**1,067**	**84**	**983**
Dividends received from associated entities and Joint Ventures	20	–	–	–
Cash flows from investing activities		**674**	**–261**	**934**
CASH FLOWS FROM FINANCING ACTIVITIES				
Increase in short-term and long-term financial liabilities	25	1	1	–
Decrease in short-term and long-term financial liabilities	25	–10	–10	–
Cash flows from financing activities		**–9**	**–9**	**–**
Total cash flow		**1,019**	**98**	**920**
Cash and cash equivalents at the beginning of the period	16	**950**	**852**	**98**
Total cash flow		**1,019**	**98**	
Cash and cash equivalents at the end of the period	16	**1,968**	**950**	**1,018**
Net effect of currency translation on cash and cash equivalents		–	–	–
Contained in the cash flows from operating activities:				
Dividends received		4	4	–
Interest received		–	–	–
Interest paid		–8	–9	–

Notes to the consolidated financial statements

1 Business activity

The ETH Domain includes the two Federal Institutes of Technology ETH Zurich and EPFL, and the four research institutes Paul Scherrer Institute (PSI), the Swiss Federal Institute for Forest, Snow and Landscape Research (WSL), Swiss Federal Laboratories for Materials Testing and Research (Empa), and the Swiss Federal Institute of Aquatic Science and Technology (Eawag). The six institutions are public law organisations of the Swiss Confederation with a legal personality. The ETH Domain also includes the Board of the Swiss Federal Institutes of Technology (ETH Board) as the strategic governing and regulatory body, and the Internal Appeals Commission of the ETH.

Detailed information on the business activity, management and reporting of the ETH Domain is provided in the chapter on Governance (see Annual Report, p. 35 ff.).

2 Basis of accounting

These financial statements are consolidated financial statements covering the reporting period from 1 January 2020 to 31 December 2020. The reporting date is 31 December 2020. The report is prepared in Swiss francs (CHF). All figures are shown in millions of Swiss francs (CHF million) unless indicated otherwise.

Legal basis

The legal basis of ETH Domain's accounting is formed of the version of the following (including directives and regulations) in effect in the reporting period:

- Federal Act on the Federal Institutes of Technology of 4 October 1991 (ETH Act; SR 414.110) (Systematische Rechtssammlung, SR; classified compilation of the Swiss federal law)
- Ordinance on the Domain of the Swiss Federal Institutes of Technology of 19 November 2003 (Ordinance on the ETH Domain; SR 414.110.3)
- Ordinance on the Finance and Accounting of the ETH Domain of 5 December 2014 (SR 414.123)
- Accounting Manual for the ETH Domain (version 6.5)

Accounting standards

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

No new standards were applied during the reporting period.

IPSAS issued but not yet applied

The following IPSAS was issued before the reporting date.

Standard	Titel	Effective Date
Various	Improvements to IPSAS, 2019	01.01.2021 / 01.01.2023
IPSAS 41	Financial Instruments (replaces IPSAS 29)	01.01.2023
IPSAS 42	Social Benefits	01.01.2023

The above-mentioned standards and improvements to the IPSAS have not been applied early in these annual consolidated financial statements. The ETH Domain systematically analyses the effects on its annual consolidated financial statements. No material impact on the consolidated financial statements is currently expected. There are no further changes or interpretations which are not yet compulsory to apply and which would have a significant impact on the ETH Domain.

First-time inclusion of risk sharing for the evaluation of net defined benefit liabilities and switch to corporate bonds as a basis for the discount rate

The ETH Domain annual consolidated financial statements include risk sharing between employer and employee for the first time in calculating net defined benefit liabilities. This reflects the fact that in Swiss pension law for pension plan financing and in the event of restructuring, the employee and employer both contribute. This risk distribution between employer and employee has previously been inadequately accounted for when evaluating defined benefit obligations. Now, instead of the total net liabilities from the pension scheme, only the share of net liabilities presumed to be borne by the employer are included in the balance sheet. As a result, the liability on the balance sheet corresponds more closely to the actual situation.

The adjustment applies exclusively to net defined benefit liabilities in the ETH Domain's annual consolidated financial statements. The switch does not entail any changes to the pension plan or the regulations of the ETH Domain pension scheme or to the PUBLICA annual consolidated financial statements.

The valuation adjustment applies as of 31 December 2020. This resulted in a one-off conversion effect of CHF 336 million (reduction in liability), which was entered directly into equity as a change in the accounting estimate as per IPSAS 3.

Furthermore, the discount rate as at 31 December 2020 was linked to the yield from fixed-interest high-quality corporate bonds for the first time. This adjustment leads to a basis of calculation as in the federal environment, which increases the comparability. This adjustment was also entered directly into equity as a change in the accounting estimate.

Detailed explanations are included under Note 28 Net defined benefit liabilities.

3 Accounting policies

The accounting policies are derived from the basis of accounting. The annual consolidated financial statements present a true and fair view of ETH Domain's financial position, financial performance and cash flows.

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

Consolidation

The annual consolidated financial statements of the ETH Domain comprise the financial statements of the two Federal Institutes of Technology, the four research institutes, the ETH Board, as well as the financial statements of all the entities over which the aforementioned institutions or the ETH Board exercise direct or indirect control. The carrying amounts of investments in associated entities are also included in the consolidated financial statements.

Control means that, through its involvement with the entity, the institution or the ETH Board has the power to direct the relevant activities of the entity and thus the ability to affect the nature and amount of benefits. At the same time, the controlling entity is exposed, or has rights, to variable benefits. The institution or the ETH Board normally has control if it directly or indirectly holds more than 50% of the voting rights or potential voting rights of the entity. These entities are fully consolidated.

Entities are consolidated on the basis of the single-entity financial statements of the institutions, the ETH Board and the controlled entities. Receivables, liabilities, revenue and expenses from transactions between the consolidated entities as well as ownership interests and unrealised intra-economic entity surpluses are eliminated on consolidation. All financial statements are prepared in accordance with uniform policies and normally at the same reporting date. Due to time constraints, it is sometimes necessary to use prior-year financial statements for controlled entities rather than the financial statements as at 31 December of the reporting period. The prior-year financial statements used make up an insignificant portion of the consolidated financial statements of ETH Domain and are adjusted for significant transactions between the prior-year reporting date and 31 December of the reporting period.

Investments in entities newly acquired in the course of the reporting period are included in the annual consolidated financial statements if they meet the consolidation criteria and exceed the thresholds defined in the Ordinance on the Finance and Accounting of the ETH Domain two years in succession. Entities which are sold are included up until the date on which control is lost, which is usually the date of disposal.

There are no non-controlling interests to consider or report in the ETH Domain.

Associated entities are entities where the institution or the ETH Board has significant influence, but not control. The institution or the ETH Board normally has significant influence over an associated entity if it holds a 20% to 50% share of the voting rights. These investments are not consolidated, but are instead accounted for using the equity method and recognised as investments in associated entities. Under the equity method, the value of the investment corresponds to the acquisition value, which is subsequently adjusted for any changes in the net assets of the associated entity.

An overview of the controlled and associated entities can be found in section 35 Relationships with controlled and associated entities.

Currency translation

Transactions in a currency other than the functional currency are translated using the exchange rate at the transaction date.

At the reporting date, monetary items in foreign currencies are translated at the closing rate and non-monetary items using the exchange rate at the transaction date. The resulting currency translation differences are recognised as finance income or finance expense.

Assets and liabilities of controlled entities with a different functional currency are translated at the closing rate, and the statement of financial performance and cash flow statement at the average rate. Translation differences arising on the translation of net assets and statements of financial performance are recognised in equity.

The principal currencies and their exchange rates are:

Table 5: Principal currencies

		Closing rate as of		Average rate	
Currency	Unit	31.12.2020	31.12.2019	2020	2019
EUR	1	1.0817	1.0866	1.0705	1.1125
USD	1	0.8840	0.9676	0.9381	0.9937
GBP	1	1.2097	1.2828	1.2039	1.2683
JPY	1,000	8.5680	8.9080	8.7890	9.1190
SGD	1	0.6698	0.7190	0.6802	0.7284

Revenue recognition

Each inflow of funds is assessed to determine whether it is an exchange transaction (IPSAS 9) or a non-exchange transaction (IPSAS 23). In the case of an exchange transaction (IPSAS 9), the revenue is generally recognised when the goods are delivered or the services rendered. For project agreements, the performance obligation not yet performed is allocated to liabilities. The revenue is recorded and reported by reference to the stage of completion of the project, based on the costs incurred in the reporting period.

In the case of a non-exchange transaction (IPSAS 23), a distinction is made between whether or not there is a performance or repayment obligation. If there is such an obligation, the corresponding amount is recognised as a liability at inception of the agreement and released to surplus or deficit according to the stage of completion based on the resources consumed.

If there is neither an exchange nor a performance or repayment obligation in accordance with IPSAS 23, revenue is recognised in surplus or deficit in full in the reporting period and net assets / equity increased accordingly. This is usually the case with donations.

Revenue and costs for construction contracts (IPSAS 11) are booked as at the reporting date as income and expenses corresponding to the project's progress. Income is valued at the actual value of the received or pending exchange transaction. The cost calculation for expenses is based on systematic and appropriate methods. Construction contracts with a negative balance are displayed as debt, those with a positive balance as assets.

Revenue is structured as follows:

Total federal contribution

The contributions granted by the Federal Government to the ETH Domain include the federal financial contribution (in the narrower sense) and the federal contribution to accommodation. Both types of revenue are classified as non-exchange transactions (IPSAS 23). Federal contributions are recognised in the year in which they are paid. Unused funds from federal financial contributions result in reserves under equity.

The contribution to accommodation is equal to the accommodation expense, which is equal in amount to an imputed rent for the buildings owned by the Federal Government and used by the institutions of the ETH Domain. Accommodation expense is reported within other operating expenses.

Tuition fees, continuing education

Revenue from tuition fees, cost contributions to continuing education and further training as well as administration fees is classified as an exchange transaction (IPSAS 9). As a rule, revenue is accounted for on an accrual basis when the goods are delivered or the services rendered.

Research contributions, mandates and scientific services

Project-related contributions are given to the institutions of the ETH Domain by various donors with the aim of promoting teaching and research. Project financing primarily relates to multi-year projects. Depending on the nature of the contributions, they are classified as either an exchange or a non-exchange transaction.

Donations and bequests

Revenue from donations and bequests is classified as a non-exchange transaction (IPSAS 23). Such grants where there is no conditional repayment risk are usually recognised as revenue in full when the agreement is signed.

Donations also include goods and services in-kind, which are distinguished as follows:
- **Goods In-kind** are recognised as assets in accordance with the applicable provisions when the agreement is signed.
- **Donated rights** to use assets in the sense of an operating lease are recognised as revenue and

expense. Donated rights to use assets in the sense of a finance lease are measured at their fair value at inception of the agreement, if this is known, and depreciated over their useful life. If a performance obligation exists, it is stated as a liability and revenue recognised annually according to the services received. If there is no performance obligation, revenue is recognised upon recognition of the asset as a whole.
- **Services In-kind** received are not recognised but are instead disclosed and commented upon in the Notes if they are material.

Due to the high number and the difficulty in elicitation, separability and measurement 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
Among other items, other revenue includes other service revenue and real estate revenue. This revenue is classified as an exchange transaction (IPSAS 9). As a rule, revenue is accounted for on an accrual basis when the goods are delivered or the services rendered.

Cash and cash equivalents

Cash and cash equivalents comprise cash-in-hand, demand and term deposits with financial institutions and funds invested with the Federal Government if their total term or the remaining term to maturity at the time of acquisition is less than 90 days. Cash and cash equivalents are measured at their nominal amount.

Receivables

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

In the case of receivables from non-exchange transactions (IPSAS 23), such as on SNSF and EU projects and from other donors, it is probable that there will be an inflow of funds in relation to the total contractual project volume. 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 10m are stated at amortised cost using the effective interest method. Current receivables are stated at cost.

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

Inventories

Inventories are measured at the lower of cost and net realisable value. Cost is calculated using the weighted average cost method. Appropriate value adjustments are recognised for slow-moving inventories.

Property, plant and equipment

Items of property, plant and equipment are stated at cost less accumulated depreciation. They are depreciated over their estimated useful life using the straight-line method. The estimated useful lives are as follows:

Table 6: Useful life of the asset categories

Asset category	Useful life ETH Zurich / EPFL	Useful life Research Institute and ETH Boards
Immovable assets		
Property	unrestricted	unrestricted
Leasehold improvements <= CHF 1 million	10 years	10 years
Leasehold improvements > CHF 1 million	according to components[1]	according to components[1]
Buildings and structures	according to components[2]	according to components[2]
Biotopes and geotopes	unrestricted	unrestricted
Movable assets		
Machinery, equipment, tools, devices	5 years	5–10 years
Passenger vehicles, delivery vehicles, trucks, aircraft, ships, etc.	5 years	4–7 years
Furnishings	5 years	5–10 years
IT and communication	3 years	3–7 years
Large scale research plants and equipment	–	10–40 years[3]

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 depreciated.

3 This practice is deviated from in exceptional cases.

Capitalised leasehold improvements and installations in leased premises are depreciated over the estimated useful life or over the term of the lease if shorter.

In the event of additions to property, plant and equipment, checks are made as to 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).

Investments that have future economic benefits or are of public interest over several years and can be measured reliably are recognised as assets and depreciated over the estimated useful life.

The residual value of property, plant and equipment that is scrapped 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 are not recognised as assets. An inventory of these items is kept.

Intangible assets

Intangible assets are recognised at cost. Standard software is amortised over three years using the straight-line method. Other intangible assets with an amortisation period required to be determined individually are amortised over their estimated useful life using the straight-line method.

Impairments (property, plant and equipment and intangible assets)

Property, plant and equipment and intangible assets are reviewed annually for indications of impairment. If specific indications are identified, an impairment test is performed. If the carrying amount permanently exceeds the value in use or net realisable value, an impairment is recognised in surplus or deficit in the amount of the difference. 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.

Leases

Leases for real estate, equipment, other movable assets and vehicles where the ETH Domain substantially assumes all the risks and rewards incidental to ownership are treated as finance leases. At inception of the lease, the assets and liabilities under a finance lease are recognised at the fair value of the leased property or, if lower, the present value of the minimum lease payments. Each lease payment is apportioned between the reduction of the outstanding liability and the finance charge. The reduction is deducted from the recognised lease liability. The depreciation of the leased goods occurs over whichever is 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 or lessor are recognised as operating leases. They are not carried in the balance sheet, but instead recognised as an expense in the statement of financial performance on an accrual basis.

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 acquired with the intention of generating a profit from short-term fluctuations in price or if they are designated as financial assets at fair value (e.g. investments held without significant influence). Changes in value are recognised in surplus or deficit.

Other non-current financial assets that are held for an indefinite period and may be sold at any time for liquidity reasons or in response to changes in market conditions are classified as available for sale and stated at fair value or at cost if the fair value cannot be determined reliably. Unrealised gains and losses are recognised in equity and only transferred to surplus or deficit when the financial asset is sold or an impairment occurs. For instance, investments where there is neither control nor significant influence are recognised as available for sale.

Originated loans and fixed deposits are stated either at amortised cost (nominal value of less than CHF 10m, and current loans and fixed deposits of over CHF 10m) or at amortised cost using the effective interest method (non-current loans and fixed deposits of over CHF 10m). The effective interest method allocates the difference between the acquisition cost and the repayment amount (premium / discount) over the term of the asset, using the net present value method. Impairment losses are recognised based on a case-by-case assessment.

Derivative financial instruments are used primarily for hedging or as a strategic position. Without exception, they are measured at fair value. Changes in value are usually recognised in surplus or deficit.

Investment property

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

Co-financing

Co-financing is third-party funding acquired by the ETH Domain that is used to finance construction projects in property owned by the Federal Government.

Co-financing is measured based on the valuation of the underlying property, which the Federal Government recognises at cost less accumulated depreciation. A property's ongoing depreciation reduces the value of the co-financing to the same degree as the underlying property.

Co-financing is reported with the same amounts on both the assets and the equity and liabilities side (in equity) of the balance sheet.

Current liabilities

Current liabilities are usually recognised on receipt of the invoice. This item also includes current accounts with third parties (including social insurance institutions). Current liabilities are measured at their nominal amount.

Financial liabilities

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

Provisions

Provisions are recognised when a past event gives rise to a present obligation, an outflow of resources is probable and the amount can be estimated reliably.

Net defined benefit liabilities

Net defined benefit liabilities presented in the balance sheet are measured in accordance with IPSAS 39. They correspond to the present value of the defined benefit obligations (DBO), less the fair value of the plan assets. A description of the pension scheme and the insured persons of the ETH Domain can be found in Note 28 Net defined benefit liabilities.

The defined benefit obligations and the service costs are determined annually by external experts using the actuarial valuation method Projected Unit Credit-method. The calculation is made based on information about the beneficiaries (salary, vested benefits, etc.) and using both demographic (retirement rates, disability rates, mortality rates, etc.) and financial (salary or pension trends, returns, etc.) assumptions. The amounts calculated are discounted to the valuation date by applying a discount rate. Changes in estimates of economic conditions can significantly affect defined benefit obligations.

The defined benefit obligations were measured based on the current membership base of the ETH Domain's pension scheme as of 31 October 2020, using actuarial assumptions as of 31 December 2020 (e.g. BVG 2015 actuarial tables), and the plan provisions of the ETH Domain pension scheme. The results were then adjusted using estimated pro rata cash flows as of 31 December 2020. The fair value of the plan assets is used including estimated performance as of 31 December 2020.

Current service cost, past service cost resulting from plan amendments, gains and losses on settlement, administrative costs and interest on the net defined benefit liabilities are presented in the statement of financial performance within personnel expenses.

Plan amendments and settlements are recognised immediately in surplus or deficit in the period in which they occur provided they result in vested benefits.

Actuarial and investment gains and losses on defined benefit plans are recognised directly in equity in the reporting period in which they occur.

The inclusion of risk sharing in the valuation of pension liability occurs in two steps and requires additional assumptions. As with the other financial and demographic assumptions, these assumptions are from the employer's perspective. As a first step it is assumed that the Board of Directors of the pension scheme will also continue to take measures to keep the pension scheme in financial equilibrium and to counter the systematic redistribution between active insured and retired members. The most likely risk-mitigating measure is taken to be a lowering of the conversion rate to an actuarially correct level. Assuming a technical interest rate of 1.3% when using period tables gives a conversion rate reduction to 4.7%. Allowing for the assumption of a future benefit reduction (due to the lower conversion rate accompanied by experience-based compensation measures), there is still a structural financing shortfall split between employer and employee as a second step. The assumption is that the employer's share of the financial shortfall is limited to 64% as per the current scale for regulatory savings contributions. The employee share is distributed according to the past and future expected service years at a flat rate in an acquired and outstanding share. The part that has already been acquired reduces the cash value of the employer's pension liability while the outstanding part reduces the future service costs of the employer.

Effects from plan amendments that relate to risk-sharing assumptions are no longer recognised on the statement of financial performance after the time of introduction of risk sharing, but rather are recognised directly in equity as part of the revaluation of the liability.

Dedicated third-party funds

Liabilities from dedicated projects that arise from non-exchange transactions (IPSAS 23) are presented in the balance sheet as dedicated third-party funds. They are allocated solely to non-current liabilities because the projects usually last for several years and the current portion of the liability cannot be determined in most cases due to the nature of the projects.

They are measured based on the outstanding performance obligations at the reporting date, which are calculated from the total contractual project volume less services performed up to the reporting date.

Equity

Net assets / equity is the residual interest in the assets of an entity after deducting all its liabilities. In the ETH Domain, equity is structured as follows:

Valuation reserves (recognition in equity):

– **Revaluation reserves for available-for-sale financial assets:** recognised at fair value. Fair value changes are recognised in equity until the financial assets are sold.
– **Revaluation reserves for net defined benefit liabilities:** actuarial and investment gains and losses on defined benefit obligations or plan assets are recognised in equity.
– **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 when the underlying hedged transaction affects surplus or deficit.

Dedicated reserves

– **Donations and bequests:** this item includes unused funds from donations and bequests that have certain conditions attached, but are not required to be classified as liabilities.
– T**eaching and research reserves:** this item indicates that various internal and external commitments exist and appropriate reserves were recognised to cover them. They comprise reserves for teaching and research projects as well as "election commitments", i.e. funds granted to newly elected professors under contractual arrangements for the purpose of setting up their professorship.
– **Infrastructure and administration reserves (value fluctuations, construction projects):** these include reserves for fluctuations in the value of the securities portfolio (risk capital) and for delayed construction projects.

Dedicated reserves must (with the exception of election / appointment commitments) have been generated. They are recognised and released within the equity.

Free reserves

Unused funds for which there are no contractual or internal provisions in accordance with IPSASs are presented as free reserves. They are not restricted in terms of time or purpose.

Reserves from associated entities

This position contains reserves from the inclusion of the proportional equity from the associated entities valued according to the equity method. These reserves cannot be accessed directly and they are dedicated.

Accumulated surplus / deficit

The accumulated surplus or deficit shows the cumulative results at the reporting date. It comprises the surplus / deficit carried forward, the surplus / deficit for the period and increases or decreases in reserves.

The surplus / deficit carried forward is accumulated annually as part of the appropriation of surplus / deficit. The surplus / deficit for the period includes the portion of the result not yet distributed. If currency translation differences arise on foreign, fully consolidated entities on consolidation, they are recognised in equity, without affecting 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 a possible asset 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.

Financial commitments

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

Cash flow statement

The cash flow statement shows the cash flows from operating activities, investing activities and financing activities. It is presented using the indirect method, i.e. cash flows from operating activities are based on the surplus or deficit for the period, adjusted for the effects of transactions of a non-cash nature. Total cash flow represents the change in the balance sheet item Cash and cash equivalents.

Segment reporting

The two sub-consolidated Federal Institutes of Technology, the four research institutes and the ETH Board are defined as segments in the ETH Domain. The segments reflect the operational independence of the institutions. The ETH Board includes eliminations and unallocated transactions. The intersegment transfers are based on the cost structure.

4 Estimation uncertainty and management judgements

Estimation uncertainty in the application of accounting policies Preparation of the annual consolidated financial statements is dependent on assumptions and estimates in connection with accounting principles, where management has a certain margin of discretion. Although these estimates are based on management's best knowledge, actual results may differ from those estimates.

This applies to the following items in particular:

Useful life and impairment of plant, property and equipment
The useful life of plant, property and equipment is defined and periodically reviewed bearing in mind the current technical environment and past experience. A change in the estimate may affect the future amount of the depreciation charges and the carrying amount.

Estimates that could lead to a reduction in the carrying amount (impairment) are likewise made in the course of the regular impairment test.

Provisions
These involve a higher degree of estimation than other balance sheet items and therefore may lead to a higher or lower cash outflow depending on the actual outcome of a past event.

Net defined benefit liabilities
The net defined benefit liabilities are calculated based on long-term actuarial assumptions for the defined benefit obligations and for the expected returns on plan assets. These assumptions may differ from actual future developments. The determination of the discount rate and future salary and pension trends and demographic development (future life expectancy, disability, likelihood of the employee leaving) and assumptions about risk sharing between employer and employee are an important component of the actuarial valuation.

Recognition of donations
The ETH Domain regularly receives donations in the form of assets. Under IPSASs, donations must be recognised initially at fair value. The determination of that fair value requires management to make estimates.

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

Management judgements in the application of accounting policies

Finance lease

When accounting for two long-term lease contracts, EPFL applied the following significant management judgements in 2017, which remain unchanged:

- Both leases are classified as finance leases because the main risks and rewards incidental to ownership have been transferred to EPFL.
- Termination of the lease after 30 years is currently seen as the most likely scenario. This hypothesis does not impose any formal obligation upon the EPFL to terminate the leases.

Property, plant and equipment

A review of the effective useful life of the accelerator facilities at the PSI in 2019 revealed a value of 45 years. Large scale research plants and equipment is generally depreciated over a period of between 10 and 40 years. In exceptional cases, however, this can be deviated from. From a technological point of view and based on experience to date, a longer useful life is appropriate in this case.

Provisions

Provisions set aside at the PSI for dismantling the accelerator facilities and the disposal of the radioactive waste amounting to CHF 542m (previous year: CHF 543m, see Note 27 Provisions) are based on the discussion paper entitled "Financing the disposal of radioactive waste within the responsibility of the Federal Government", the decision adopted by the Swiss Federal Council in April 2015.

The amount is based on estimates of the Federal Government's and the ETH Domain's disposal costs on the basis of the cost study for deep geological disposal issued by Swissnuclear in 2016 (KS16). It was duly noted by the Federal Council on 30 November 2018. This amount corresponds to the current estimate of the total costs to be expected up to and including storage in the deep geological repository at today's value.

In accordance with IFRIC 1 (Changes in existing decommissioning, restoration and similar liabilities), provisions and movable fixed assets were reduced in the previous year by the included additional payment made to the National Cooperative for the Disposal of Radioactive Waste (Nagra) in the amount of CHF 84m. With the approval of the 2020 budget in December 2019, the credit for the subsequent payment of the Federal Government's cooperative contributions to Nagra was increased in order to balance the accumulated debts and adjust the annual contribution of the Federal Government. A chargeback of the non-recurring additional payment to the ETH Domain was excluded.

No inflation rate is taken into account, nor is a simultaneous discounting of the provisions being considered, as this would not allow a more reliable statement to be made. Both inflation and the expected cash outflow depend to a large extent on when final storage takes place.

The assessment of the total cost for the radioactive waste of the Federal Government is updated every five years.

5 Comparison with the budget

Table 7: Statement of financial performance for the ETH Domain (consolidated) – Comparison between the 2020 statement and the final 2020 budget

CHF millions	Budget 2020			Actual 2020	Changes to B2020 Final absolute
	Approved	Reconciliation of federal financial contribution / IPSAS effects	Final		
Federal financial contribution	2,415	−60	2,355	2,355	–
Federal contribution to accommodation	244	–	244	244	–
Total federal contribution	**2,660**	**−60**	**2,600**	**2,600**	**–**
Tuition fees, continuing education	**48**	**–**	**48**	**50**	**2**
Swiss National Science Foundation (SNSF)	271	–	271	263	−8
Swiss Innovation Agency (Innosuisse)	57	–	57	51	−6
Special federal funding of applied research	79	–	79	80	1
EU Framework Programmes for Research and Innovation (EU FPs)	153	–	153	146	−6
Industry-oriented research (private sector)	140	–	140	136	−4
Other project-oriented third-party funding (incl. cantons, municipalities, international organisations)	74	–	74	98	24
Research contributions, mandates and scientific services	**773**	**–**	**773**	**774**	**1**
Donations and bequests	**100**	**–**	**100**	**142**	**42**
Other revenue	**122**	**–**	**122**	**114**	**−8**
Operating revenue	**3,703**	**−60**	**3,643**	**3,680**	**36**
Personnel expenses	2,346	99	2,445	2,490	45
Other operating expenses	1,008	–	1,008	885	−122
Depreciation	234	–	234	255	22
Transfer expenses	133	−60	73	51	−21
Operating expenses	**3,720**	**39**	**3,759**	**3,682**	**−77**
OPERATING RESULT	**−17**	**−99**	**−116**	**−3**	**113**
NET FINANCE INCOME / EXPENSE	**3**	**–**	**3**	**11**	**8**
Share of surplus / deficit of associated entities and joint ventures	–	–	–	32	32
SURPLUS (+) OR DEFICIT (−)	**−14**	**−99**	**−113**	**41**	**153**

Table 8: Reallocation of funds ETH Domain, Budget 2020

CHF millions	ETH Board	ETH Zurich	EPFL	PSI	WSL	Empa	Eawag	Total Credit
Status as at 01.01.2020 (federal decree Ia as of 12.12.2019)	**73.2**	**1,194.9**	**637.9**	**300.3**	**54.6**	**103.8**	**50.5**	**2,415.1**
Changes:								
Credit reallocation: flexibility								
Credit reallocation in favour of Credit A202.0134 constructions of ETH Domain in acc. with FHV Art. 20 para. 5	–	−40.3	3.0	−0.4	1.9	−0.8	0.6	−36.0
Credit adjustment: Compensation of a supplementary credit in favour of Credit A202.0134 constructions of ETH Domain in supplement IIb	–	−24.0	–	–	–	–	–	−24.0
Assignments by ETH Board:								
Strategic Proposals Teaching and Research	−17.1	6.2	4.4	–	0.9	5.0	0.6	–
Credit allocation ETH Board: increased Base Budget	–	–	–	–	–	–	–	–
Credit reallocations within Strategic Focus Areas								**–**
Personalized Health and Related Technologies	−14.0	8.7	4.1	0.7		0.5		–
Advanced Manufacturing	−2.5	0.7	0.7	0.4		0.7		–
Data Science	−8.4	5.0	2.5	0.3	0.3	0.1	0.3	−0.0
Various credit reallocations	**–**	**−0.5**	**0.1**	**0.3**	**0.2**	**0.1**	**−0.2**	**–**
Status as of 31.12.2020	**31.3**	**1,150.6**	**652.7**	**301.5**	**57.9**	**109.2**	**51.8**	**2,355.1**

The consolidated surplus or deficit of the proposed budget for 2020, according to the ETH Board's 2020 Budget Report for the ETH Domain (June 2019) amounted to −CHF 14m. The approved 2020 budget contains the increase in the federal financial contribution by +CHF 30m to CHF 2,415m authorised by federal decree Ia on the 2020 budget (Volume 3 of the federal decrees).

The final budget for 2020 shows an adjustment compared to the approved budget for 2020, which led to the budgeted annual deficit of −CHF 113m for 2020. This relates to the recognition of net pension costs of CHF 99m under personnel expenses in accordance with IPSAS 39.

By contrast, the following adjustments had no effect on the budgeted surplus or deficit for 2020, as revenue and expenses also decreased to the same extent:

- Reallocation of funds within the ETH Domain;
- Credit reallocation of CHF 36m from the ETH Domain's financial contribution (credit A202.0181, AU 701 EO-EAER) to the investment credit for ETH Domain buildings (credit A202.0134, AU 620 FOBL) in accordance with Art. 4(4) of FedD Ia on the 2020 budget (2019: CHF 7m from the investment credit for ETH Domain buildings to the ETH Domain's financial contribution). The reallocation was carried out within the framework of the flexibility between the two credits, taking into account the expenditure ceiling of the ETH Domain for 2017–2020.
- Compensation of a supplementary credit in favour of the investment credit for ETH Domain buildings in the amount of CHF 24m in amendment IIb.

In the budgeting process, those entities controlled or significantly influenced by ETH Zurich, EPFL and the PSI are not included in the consolidated financial statements. This leads to one of the discrepancies between the annual financial statement and the budget for 2020.

The other figures in the final 2020 budget reflect the approved budget in accordance with the 2020 Budget Report issued by the ETH Board for the ETH Domain.

6 Segment reporting

In the ETH Domain, the two sub-consolidated ETH Institutes of Technology and the four research institutes are defined as segments.

Statement of financial performance by segments

Table 9: Statement of financial performance 2020 by segments

	2020							
CHF millions	ETH Zurich	EPFL	PSI	WSL	Empa	Eawag	ETH Board	ETH Domain*
Federal financial contribution	1,151	653	302	58	109	52	31	2,355
Federal contribution to accommodation	142	61	20	4	13	4	1	244
Total federal contribution	**1,293**	**713**	**321**	**62**	**123**	**56**	**32**	**2,600**
Tuition fees, continuing education	**31**	**17**	**2**	**–**	**–**	**–**	**–**	**50**
Swiss National Science Foundation (SNSF)	129	95	18	7	9	5	–	263
Swiss Innovation Agency (Innosuisse)	22	15	4	1	10	–	–	51
Special federal funding of applied research	25	14	15	15	7	5	–	80
EU Framework Programmes for Research and Innovation (EU FPs)	72	59	7	1	6	–	–	146
Industry-oriented research (private sector)	60	47	16	–	13	1	–	136
Other project-oriented third-party funding (incl. cantons, municipalities, international organisations)	49	32	14	3	4	2	–	98
Research contributions, mandates and scientific services	**356**	**261**	**74**	**28**	**49**	**14**	**–**	**774**
Donations and bequests	**120**	**23**	**1**	**–**	**1**	**–**	**–**	**142**
Other revenue	**36**	**49**	**41**	**2**	**8**	**1**	**–**	**114**
Operating revenue	**1,835**	**1,063**	**438**	**92**	**180**	**70**	**32**	**3,680**
Personnel expenses	1,226	724	277	73	126	56	10	2,490
Other operating expenses	489	239	89	18	41	18	4	885
Depreciation	95	76	66	2	12	4	–	255
Transfer expenses	27	21	1	1	3	–	14	51
Operating expenses	**1,837**	**1,061**	**433**	**94**	**181**	**78**	**28**	**3,682**
OPERATING RESULT	**–2**	**2**	**5**	**–2**	**–1**	**–8**	**4**	**–3**
NET FINANCE INCOME / EXPENSE	**20**	**–8**	**–**	**–**	**–**	**–**	**–**	**11**
Share of surplus / deficit of associated entities and joint ventures	33	–1	–	–	–	–	–	32
SURPLUS (+) OR DEFICIT (–)	**51**	**–8**	**5**	**–2**	**–1**	**–8**	**4**	**41**

* Including consolidation entries (Research contributions, mandates and scientific services: –CHF 7m; donations and bequests: –CHF 3m; other revenue: –CHF 21m; personnel expenses: –CHF 3m; other operating expenses: –CHF 12m; transfer expenses: –CHF 17m)

Table 10: Statement of financial performance 2019 by segments

	2019							
CHF millions	ETH Zurich	EPFL	PSI	WSL	Empa	Eawag	ETH Board**	ETH Domain*
Federal financial contribution	1,158	625	300	55	111	50	75	2,373
Federal contribution to accommodation	140	61	21	4	13	4	1	244
Total federal contribution	**1,298**	**686**	**321**	**59**	**124**	**54**	**75**	**2,616**
Tuition fees, continuing education	**28**	**16**	**4**	**–**	**–**	**–**	**–**	**48**
Swiss National Science Foundation (SNSF)	125	94	20	6	8	5	–	260
Swiss Innovation Agency (Innosuisse)	21	14	4	–	9	–	–	49
Special federal funding of applied research	36	12	8	15	7	5	–	82
EU Framework Programmes for Research and Innovation (EU FPs)	67	62	11	3	7	1	–	152
Industry-oriented research (private sector)	61	56	15	–	15	1	–	146
Other project-oriented third-party funding (incl. cantons, municipalities, international organisations)	46	31	9	2	3	3	–	90
Research contributions, mandates and scientific services	**357**	**271**	**67**	**27**	**49**	**16**	**–**	**779**
Donations and bequests	**64**	**26**	**1**	**–**	**–**	**–**	**–**	**92**
Other revenue	**42**	**58**	**50**	**2**	**8**	**1**	**2**	**140**
Operating revenue	**1,789**	**1,056**	**442**	**88**	**182**	**71**	**78**	**3,676**
Personnel expenses	1,172	688	272	68	121	55	13	2,386
Other operating expenses	496	263	99	20	43	19	5	935
Depreciation	110	76	64	2	12	4	–	267
Transfer expenses	27	22	1	1	1	–	12	49
Operating expenses	**1,804**	**1,049**	**436**	**91**	**177**	**78**	**30**	**3,637**
OPERATING RESULT	**–15**	**7**	**6**	**–3**	**4**	**–8**	**48**	**39**
NET FINANCE INCOME / EXPENSE	**33**	**–6**	**–**	**–**	**–**	**–**	**–**	**28**
Share of surplus / deficit of associated entities and joint ventures	75	–2	1	–	–	–	–	74
SURPLUS (+) OR DEFICIT (–)	**93**	**–1**	**7**	**–3**	**4**	**–8**	**48**	**140**

* Including consolidation entries (Research contributions, mandates and scientific services: –CHF 7m; other revenue: –CHF 22m; personnel expenses: –CHF 4m; other operating expenses: –CHF 11m; transfer expenses: –CHF 15m)

** In the financial report 2019, the figures in the "ETH Board" column included consolidation entries and are therefore not comparable with the figures in this table.

Balance sheet by segments

Table 11: Balance sheet as of 31 December 2020 by segments

CHF millions	ETH Zurich	EPFL	PSI	WSL	Empa	Eawag	ETH Board	ETH Domain*
	31.12.2020							
CURRENT ASSETS								
Cash and cash equivalents	914	619	105	49	112	55	114	1,968
Current receivables from non-exchange transactions	305	207	42	20	36	7	–	616
Current receivables from exchange transactions	34	14	10	1	3	1	–	60
Current financial assets and loans	323	16	21	38	41	25	–	464
Inventories	6	3	2	–	–	–	–	10
Prepaid expenses and accrued income	32	15	13	–	2	3	–	63
Total current assets	**1,614**	**873**	**191**	**108**	**193**	**92**	**114**	**3,181**
NON-CURRENT ASSETS								
Property, plant and equipment	572	394	908	10	61	22	–	1,967
Intangible assets	3	56	2	–	–	–	–	62
Non-current receivables from non-exchange transactions	648	225	89	23	19	5	–	971
Non-current receivables from exchange transactions	–	–	–	–	–	–	–	–
Investments in associated entities and joint ventures	202	34	6	–	–	–	–	242
Non-current financial assets and loans	6	7	1	–	–	–	43	52
Co-financing	45	67	–	–	7	–	–	118
Total non-current assets	**1,476**	**783**	**1,006**	**33**	**88**	**26**	**43**	**3,412**
TOTAL ASSETS	**3,091**	**1,656**	**1,197**	**141**	**281**	**118**	**158**	**6,592**
LIABILITIES								
Current liabilities	113	53	10	6	8	4	1	189
Current financial liabilities	–	18	–	–	–	–	–	19
Accrued expenses and deferred income	86	38	18	2	5	2	–	151
Short-term provisions	49	31	13	5	6	3	1	108
Short-term liabilities	**248**	**140**	**41**	**13**	**19**	**9**	**2**	**467**
Dedicated third-party funds	815	547	107	59	64	17	–	1,608
Non-current financial liabilities	19	322	–	–	–	–	37	335
Net defined benefit liabilities	515	287	146	36	69	26	8	1,087
Long-term provisions	27	16	558	3	5	2	–	610
Long-term liabilities	**1,375**	**1,171**	**811**	**98**	**138**	**45**	**45**	**3,640**
Total liabilities	**1,623**	**1,311**	**851**	**111**	**157**	**54**	**47**	**4,106**
EQUITY								
Valuation reserves	–16	12	–14	1	–8	–1	–1	–27
Dedicated reserves	1,085	244	53	30	40	15	2	1,468
Free reserves	202	239	54	36	93	56	98	778
Co-financing	45	67	–	–	7	–	–	118
Reserves from associated entities	202	34	6	–	–	–	–	242
Accumulated surplus (+) / deficit (–)	–50	–251	247	–37	–7	–5	11	–93
Total equity	**1,467**	**345**	**345**	**30**	**124**	**64**	**110**	**2,486**
TOTAL LIABILITIES AND EQUITY	**3,091**	**1,656**	**1,197**	**141**	**281**	**118**	**158**	**6,592**

* Including consolidation entries (current assets: –CHF 6m, non-current assets: –CHF 43m, liabilities: –CHF 49m)

Table 12: Balance sheet as of 31 December 2019 by segments

	31.12.2019							
CHF millions	ETH Zurich	EPFL	PSI	WSL	Empa	Eawag	ETH Board**	ETH Domain*
CURRENT ASSETS								
Cash and cash equivalents	168	349	103	51	106	63	110	950
Current receivables from non-exchange transactions	306	206	37	23	33	8	–	612
Current receivables from exchange transactions	24	16	8	1	5	1	–	48
Current financial assets and loans	1,063	248	21	33	41	25	–	1,430
Inventories	6	2	2	–	–	–	–	10
Prepaid expenses and accrued income	22	13	10	–	1	2	–	49
Total current assets	**1,588**	**834**	**182**	**109**	**186**	**98**	**110**	**3,099**
NON-CURRENT ASSETS								
Property, plant and equipment	477	406	926	10	59	20	–	1,898
Intangible assets	4	57	1	–	–	–	–	63
Non-current receivables from non-exchange transactions	604	229	74	36	19	4	–	939
Non-current receivables from exchange transactions	–	–	–	–	–	–	–	–
Investments in associated entities and joint ventures	168	35	5	–	–	–	–	208
Non-current financial assets and loans	5	7	2	–	1	–	33	42
Co-financing	47	70	–	–	7	–	–	123
Total non-current assets	**1,304**	**804**	**1,007**	**45**	**86**	**25**	**33**	**3,272**
TOTAL ASSETS	**2,893**	**1,638**	**1,188**	**154**	**272**	**123**	**143**	**6,371**
LIABILITIES								
Current liabilities	68	64	14	5	5	5	1	154
Current financial liabilities	–	14	–	–	–	–	–	15
Accrued expenses and deferred income	74	39	28	2	6	2	–	150
Short-term provisions	48	26	14	5	6	3	1	102
Short-term liabilities	**190**	**144**	**56**	**11**	**17**	**9**	**2**	**421**
Dedicated third-party funds	776	530	97	75	61	16	–	1,555
Non-current financial liabilities	19	337	–	–	–	–	27	350
Net defined benefit liabilities	1,145	631	337	82	153	56	19	2,423
Long-term provisions	31	18	563	3	5	2	–	621
Long-term liabilities	**1,970**	**1,515**	**998**	**160**	**219**	**74**	**46**	**4,950**
Total liabilities	**2,160**	**1,659**	**1,053**	**171**	**236**	**83**	**48**	**5,370**
EQUITY								
Valuation reserves	−699	−361	−219	−49	−98	−33	−12	−1,470
Dedicated reserves	978	247	45	16	33	21	25	1,365
Free reserves	331	210	42	49	97	57	71	856
Co-financing	47	70	–	–	7	–	–	123
Reserves from associated entities	168	35	5	–	–	–	–	208
Accumulated surplus (+) / deficit (–)	−92	−221	262	−33	−4	−5	11	−82
Total equity	**733**	**−21**	**135**	**−17**	**36**	**40**	**95**	**1,001**
TOTAL LIABILITIES AND EQUITY	**2,893**	**1,638**	**1,188**	**154**	**272**	**123**	**143**	**6,371**

* Including consolidation entries (current assets: –CHF 8m, non-current assets: –CHF 33m, liabilities: –CHF 41m)
** In the financial report 2019, the figures in the "ETH Board" column included consolidation entries and are therefore not comparable with the figures in this table.

Cash flow statement by segments

Table 13: Cash flow statement 2020 by segments

CHF millions	2020 ETH Zurich	EPFL	PSI	WSL	Empa	Eawag	ETH Board	ETH Domain*
CASH FLOWS FROM OPERATING ACTIVITIES								
Surplus (+) or deficit (–)	**51**	**–8**	**5**	**–2**	**–1**	**–8**	**4**	**41**
Depreciation	95	76	66	2	12	4	–	255
Share of surplus / deficit of associated entities and joint ventures	–33	1	–	–	–	–	–	–32
Net finance income / expense (non-cash)	–29	–	–	–	–	–	–	–29
Increase / decrease in net working capital	37	–13	–23	5	–	–1	–	6
Increase / decrease in net defined benefit liabilities	52	29	13	3	5	3	–	106
Increase / decrease in provisions	–2	3	–6	–	–	–	–	–5
Increase / decrease in non-current receivables	–39	–13	–15	13	–	–	–	–46
Increase / decrease in dedicated third-party funds	40	35	10	–16	3	–	–	71
Reclassification and other (non-cash) income	–14	–	1	–	–	–	–	–13
Cash flows from operating activities	**158**	**110**	**51**	**5**	**19**	**–2**	**4**	**354**
CASH FLOWS FROM INVESTING ACTIVITIES								
Investments								
Purchase of property, plant and equipment	–176	–60	–50	–2	–13	–5	–	–306
Purchase of intangible assets	–1	–2	–1	–	–	–	–	–5
Increase in co-financing	–	–	–	–	–	–	–	–
Increase in loans	–	–	–	–	–	–	–	–
Increase in current and non-current financial assets	–67	–	–	–5	–	–	–11	–83
Total investments	**–244**	**–63**	**–51**	**–7**	**–14**	**–5**	**–11**	**–394**
Divestments								
Disposal of property, plant and equipment	–	–	1	–	–	–	–	1
Disposal of intangible assets	–	–	–	–	–	–	–	–
Decrease in co-financing	–	–	–	–	–	–	–	–
Decrease in loans	–	–	–	–	–	–	–	–
Decrease in current and non-current financial assets	833	232	–	–	–	–	1	1,066
Total divestments	**833**	**232**	**1**	**–**	**–**	**–**	**1**	**1,067**
Dividends received from associated entities and Joint Ventures	–	–	–	–	–	–	–	–
Cash flows from investing activities	**589**	**169**	**–50**	**–7**	**–14**	**–5**	**–10**	**674**
CASH FLOWS FROM FINANCING ACTIVITIES								
Increase in short-term and long-term financial liabilities	–	1	–	–	–	–	11	1
Decrease in short-term and long-term financial liabilities	–	–10	–	–	–	–	–1	–10
Cash flows from financing activities	**–**	**–9**	**–**	**–**	**–**	**–**	**10**	**–9**

Continuation of Table 13: Cash flow statement 2020 by segments

	2020							
CHF millions	ETH Zurich	EPFL	PSI	WSL	Empa	Eawag	ETH Board	ETH Domain*
Total cash flow	**747**	**270**	**1**	**–2**	**5**	**–7**	**4**	**1,019**
Cash and cash equivalents at the beginning of the period	**168**	**349**	**103**	**51**	**106**	**63**	**110**	**950**
Total cash flow	**747**	**270**	**1**	**–2**	**5**	**–7**	**4**	**1,019**
Cash and cash equivalents at the end of the period	**914**	**619**	**105**	**49**	**112**	**55**	**114**	**1,968**
Net effect of currency translation on cash and cash equivalents	–	–	–	–	–	–	–	–
Contained in the cash flows from operating activities:								
Dividends received	4	–	–	–	–	–	–	4
Interest received	–	–	–	–	–	–	–	–
Interest paid	–1	–7	–	–	–	–	–	–8

* Including consolidation entries (Increase / decrease in non-current receivables: CHF 10m, cash flows from financing activities: CHF –10m)

Table 14: Cash flow statement 2019 by segments

	2019							
CHF millions	ETH Zurich	EPFL	PSI	WSL	Empa	Eawag	ETH Board**	ETH Domain*
CASH FLOWS FROM OPERATING ACTIVITIES								
Surplus (+) or deficit (–)	**93**	**–1**	**7**	**–3**	**4**	**–8**	**48**	**140**
Depreciation	110	76	64	2	12	4	–	267
Share of surplus / deficit of associated entities and joint ventures	–75	2	–1	–	–	–	–	–74
Net finance income / expense (non-cash)	–25	–1	–	–	–	–	–	–26
Increase / decrease in net working capital	–60	–41	13	–2	1	6	–	–84
Increase / decrease in net defined benefit liabilities	39	21	9	2	4	2	–	78
Increase / decrease in provisions	1	–4	–86	1	–1	–	–	–89
Increase / decrease in non-current receivables	27	–1	–24	–2	7	2	–	17
Increase / decrease in dedicated third-party funds	50	9	9	7	–7	–5	–	63
Reclassification and other (non-cash) income	–6	–	83	–	–	–	–	78
Cash flows from operating activities	**153**	**59**	**74**	**4**	**21**	**1**	**48**	**368**
CASH FLOWS FROM INVESTING ACTIVITIES								
Investments								
Purchase of property, plant and equipment	–138	–52	–50	–2	–10	–2	–	–253
Purchase of intangible assets	–1	–	–1	–	–	–	–	–2
Increase in co-financing	–	–	–	–	–	–	–	–
Increase in loans	–	–	–	–	–	–	–	–1
Increase in current and non-current financial assets	–76	–	–	–2	–	–	–11	–89
Total investments	**–215**	**–52**	**–51**	**–4**	**–11**	**–2**	**–11**	**–345**
Divestments								
Disposal of property, plant and equipment	–	–	–	–	–	–	–	–
Disposal of intangible assets	–	–	–	–	–	–	–	–
Decrease in co-financing	–	–	–	–	–	–	–	–
Decrease in loans	–	–	–	–	–	–	–	–
Decrease in current and non-current financial assets	47	35	–	–	–	–	3	84
Total divestments	**47**	**35**	**–**	**–**	**–**	**–**	**3**	**84**
Dividends received from associated entities and Joint Ventures	–	–	–	–	–	–	–	–
Cash flows from investing activities	**–168**	**–17**	**–51**	**–4**	**–10**	**–2**	**–8**	**–261**
CASH FLOWS FROM FINANCING ACTIVITIES								
Increase in short-term and long-term financial liabilities	–	1	–	–	–	–	11	1
Decrease in short-term and long-term financial liabilities	–	–9	–1	–	–	–	–3	–10

Continuation of Table 14: Cash flow statement 2019 by segments

	2019							
CHF millions	ETH Zurich	EPFL	PSI	WSL	Empa	Eawag	ETH Board**	ETH Domain*
Cash flows from financing activities	**–**	**–8**	**–1**	**–**	**–**	**–**	**8**	**–9**
Total cash flow	**–15**	**34**	**22**	**–**	**10**	**–1**	**48**	**98**
Cash and cash equivalents at the beginning of the period	**183**	**315**	**81**	**51**	**96**	**64**	**62**	**852**
Total cash flow	**–15**	**34**	**22**	**–**	**10**	**–1**	**48**	**98**
Cash and cash equivalents at the end of the period	**168**	**349**	**103**	**51**	**106**	**63**	**110**	**950**
Net effect of currency translation on cash and cash equivalents	–	–	–	–	–	–	–	–
Contained in the cash flows from operating activities:								
Dividends received	4	–	–	–	–	–	–	4
Interest received	–	–	–	–	–	–	–	–
Interest paid	–1	–7	–	–	–	–	–	–9

* Including consolidation entries (Increase / decrease in non-current receivables: CHF 8m, cash flows from financing activities: CHF –8m)

** In the financial report 2019, the figures in the "ETH Board" column included consolidation entries and are therefore not comparable with the figures in this table.

7 Total federal contribution

Federal financial contribution

Table 15: Federal financial contribution

CHF millions	2020	2019	Change absolute
Federal financial contribution	**2,355**	**2,373**	**–17**

The available funds from the approved expenditure ceiling of the ETH Domain for the years 2017–2020 are processed via the two credit items, federal financial contribution and investment credit for ETH Domain buildings. The federal financial contribution credit is allocated to the Federal Department of Economic Affairs, Education and Research (EAER) (AU 701 EO EAER). The investment credit for building ETH Domain is allocated by the Federal Department of Finance (FFA) (AU 620 FOBL).

In contrast to investment credit for building ETH Domain (Confederation as parent), the federal financial contribution forms part of the consolidated financial statements of the ETH Domain.

The financial contribution is used for the strategic objectives set by the Swiss Federal Council in accordance with ERI Dispatch for 2017–2020 (FCD dated 5 April 2017 / 25 April 2018) and amounted to CHF 2,355m in 2020. The decline compared to 2019 (–CHF 17m, –1%) is largely due to the reallocation of funds to investment credit in favour of increased construction activity in ETH real estate owned by the Federal Government.

The federal financial contribution allocated to the entities is largely comprised of the base budget and strategic funds (incentive and seed capital funding) for projects in teaching and research.

The base budget for 2020 amounted to CHF 2,230m (2019: CHF 2,229m). The ETH Board also used funds from the reserves in an amount of CHF 9m in order to cover the expenditure surplus. The funds available for the strategic initiatives were as follows:

- the strategic focus areas in research:
  CHF 25m for “Personalized Health and Related Technologies”, “Data Science” as well as “Advanced Manufacturing” (2019: CHF 24m)
- CHF 15m for the implementation of the Digitalisation Action Plan (2019: CHF 14m)
- the major research infrastructure of national and international importance in accordance with Objective 3 of the strategic objectives (Notes on ERI Dispatch for 2017–2020):
  - CHF 23m for the “Sustained scientific user lab for simulation based science” at the CSCS in Lugano (ETH Zurich) (2019: CHF 23m);
  - CHF 21m for the “Blue Brain Project” at EPFL (2019: CHF 21m) which is the Swiss contribution to the European “Future and Emerging Technologies” (FET) flagship initiative Human Brain Project (HBP);
  - CHF 13m for the ATHOS / SwissFEL beamline at the PSI (2019: CHF 16m);
  - CHF 4m on the upgrade of the CMS detectors at CERN (2019: CHF 3m)
- as well as the contribution of CHF 3m to the Swiss Plasma Center (2019: CHF 3m)
- and a total of CHF 19m for incentive and seed capital funding for strategic proposals for teaching and research (2019: CHF 25m).

The Federal Government is also financing the dismantling of the accelerator facilities and the disposal of radioactive components at the PSI. According to the most up-to-date cost estimate by the Federal Government of 2018, the total costs shall amount to CHF 542m for the PSI (for activities up to and including deep geological disposal). As was the case in the previous year, the annual savings contribution in 2020 was CHF 11m (see Note 27 Provisions).

Federal contribution to accommodation

Table 16: Federal contribution to accommodation for the ETH Domain

CHF millions	2020	2019	Change absolute
Federal contribution to accommodation	**244**	**244**	**1**

The federal contribution to accommodation is used to cover the expenses for the rental of real estate owned by the government. The credit is not part of the credits taking into account the expenditure ceiling of the ETH Domain. It affects financing, but not expenditure (no cash flow as a result of it). The calculations are based on the depreciation and capital costs for state-owned real estate.

The credit is considered as an expense in the EAER and as a revenue in the Federal Office for Buildings and Logistics (FOBL).

There was no significant change compared to 2019. As was the case in the previous year, the underlying imputed rate of return on average capital invested was 1.5%.

8 Tuition fees, continuing education

Table 17: Tuition fees, continuing education

CHF millions	2020	2019	Change absolute
Tuition fees, continuing education	**50**	**48**	**2**

Tuition fees and attendance fees for studies and continuing education programmes as well as other fees are regulated in the Ordinance on Fees in the Domain of Federal Institutes of Technology (SR 414.131.7 of 31 May 1995; as amended on 1 September 2018).

The item Tuition fees and continuing education contains all revenue received by the ETH Domain for its educational services. In the reporting period, CHF 31m (2019: CHF 28m) was attributable to ETH Zurich, CHF 17m (2019: CHF 16m) to EPFL and CHF 2m (2019: CHF 4m) to the PSI.

Revenue from tuition fees for Bachelor's and Master's programmes amounted to CHF 33m (ETH Zurich CHF 21m; EPFL CHF 11m) in the reporting period and CHF 27m in the previous year. The increase of CHF 5m compared to 2019 is related to the growth in the number of students and the moderate increase in tuition fees. The number of Bachelor's and Master's students rose compared to 2019, as did the number of doctoral students (see Annual Report, Monitoring Table, p. 86 et seq.). The annual tuition fees increased gradually by a total of CHF 300 from autumn 2019 onwards (Pt. 1 Tuition Fees Notes to the Fee Ordinance, +CHF 80 for the 2019 autumn semester and 2020 spring semester; a further +CHF 70 from the 2020 autumn semester onwards).

Revenue from the PSI came from the PSI training centre, consisting of the school of radiation protection and the PSI academy. As the reactor school was handed over in 2020, revenue was CHF 1m lower.

The total revenue also includes administration fees, in particular registration and examination fees or fees for the use of the libraries. They amounted to CHF 5m in the reporting period.

Tuition fees and revenue from continuing education at both ETH Zurich and EPFL equate to just under 2% of the respective operating revenue in 2020.

9 Research contributions, mandates and scientific services

The change in revenue categories from research contributions, mandates and scientific services shows a differentiated picture in the reporting period. While revenue from other project-oriented third-party funds increased by 9%, revenue from projects with the private sector declined (–7%). The other revenue categories were in line with the previous year, as was the total across all revenue categories (–CHF 5m or less than 1% relative to the previous year).

Of the total revenue volume, CHF 623m or 80% was attributable to non-exchange transactions (IPSAS 23), generally research grants, and CHF 151m or 20% to exchange transactions (IPSAS 9), generally contract research and scientific services. The two shares have behaved the same over the years.

The trend in the individual categories is as follows:

The level of implementation with respect to the projects of the **Swiss National Sciences Foundation (SNSF)** is high; compared to the previous year the revenue increased by CHF 3m to CHF 263m. A good 85% of the revenue was once again allocated to the two Federal Institutes of Technology (ETH Zurich: CHF 129m; EPFL: CHF 95m).

Until the end of 2020, **Innosuisse** financed and regulated, among other things, the operation of networked inter-university research centres for energy research, i.e. Swiss Competence Centres for Energy Research (SCCER), as part of the action plan "Coordinated Energy Research Switzerland". The ETH Domain participated in projects on all eight SCCER programmes, seven of them in a leading capacity. The revenue in 2020 from projects funded by Innosuisse was slightly above the prior-year level. The highest shares were once again recognised by ETH Zurich (2020: CHF 22m; 2019: CHF 21m), EPFL (2020: CHF 15m; 2019: CHF 14m) and Empa (2020: CHF 10m; 2019: CHF 9m).

The implementation of projects and mandates for **special federal funding of applied research** progressed positively during the reporting period, especially at the PSI (+CHF 6m). In contrast, revenue from research mandates of the Federal Government declined at ETH Zurich (–CHF 11m). The reduction was due to the fact that a higher number of contracts were concluded in the previous year for which the entire contract amount was recognised as revenue in 2019. WSL generates a significant proportion (CHF 15m or a share of 16% in 2020) of its operating revenue from applied research mandates from government agencies. They include large projects with the FOEN on a variety of topics such as forestry and climate change, as well as projects within the scope of the continual data collection for the Swiss National Forest Inventory (NFI).

Table 18: Research contributions, mandates and scientific services

CHF millions	2020	of which revenues (IPSAS 23)	of which revenues (IPSAS 9)	2019	of which revenues (IPSAS 23)	of which revenues (IPSAS 9)	Change absolute
Swiss National Science Foundation (SNSF)	263	263	–	260	260	–	3
Swiss Innovation Agency (Innosuisse)	51	51	–	49	49	–	1
Special federal funding of applied research	80	48	33	82	58	24	–2
EU Framework Programmes for Research and Innovation (EU FPs)	146	146	–	152	152	–	–5
Industry-oriented research (private sector)	136	53	83	146	47	99	–10
Other project-oriented third-party funding (incl. cantons, municipalities, international organisations)	98	63	36	90	66	25	8
Total research contributions, mandates and scientific services	**774**	**623**	**151**	**779**	**631**	**148**	**–5**

The high project revenue of the **EU Framework Programmes for Research and Innovation (EU FPs)** declined by CHF 5m compared to the previous year (2020: CHF 146m; 2019: CHF 152m). The progress of the Horizon 2020 projects (2014–2020) was especially reflected in the revenue in 2020. While a higher level of project implementation than in the previous year was observed at ETH Zurich, there were delays for major projects at EPFL. At the PSI, project work advanced modestly not least due to the lockdown during the coronavirus pandemic. Various projects at EPFL are linked to the FET flagship Human Brain Project (HBP).

Although Switzerland has been a full associate of Horizon 2020 since the beginning of 2017, the total revenue for the reporting period still includes revenue from the implementation of projects which had been financed in previous years via the SERI from federal funding (2020: CHF 4m; 2019: CHF 19m).

Revenue from cooperation with the private sector was down CHF 10m compared to 2019. The decline could primarily be attributed to EPFL, which had included several large projects in its high prior-year revenue that have now been completed. At Empa, revenue from scientific services declined due to the coronavirus pandemic. The other entities also recorded slightly lower revenue, with the exception of the PSI. Research projects which are mainly based on projects with exchange transactions (IPSAS 9) have proved to be very volatile in a long-term comparison with corresponding fluctuations in revenue.

The other project-oriented third-party funding are contributions from the cooperation with cantons, municipalities, public-law institutions and international organisations. As a result of the progress of ongoing projects at ETH Zurich, the PSI and Empa, revenue was up by CHF 8m compared to 2019.

Information on receivables from non-exchange transactions and their development, as well as on dedicated third-party funds in connection with the projects financed by the relevant third-party funding category, can be found in Notes 17 and 29.

10 Donations and bequests

Table 19: Donations and bequests

CHF millions	2020	2019	Change absolute
Donations and bequests	**142**	**92**	**50**

During the reporting period, a pleasing development in the volume of revenue from donations was observed, with more donation agreements being concluded than in the previous year. At ETH Zurich, revenue from donations increased from CHF 63m in the previous year to a current figure of CHF 117m. EPFL recorded revenue of CHF 17m (2019: CHF 22m). While charitable organisations made comparatively more donations during the reporting period, fewer were made by commercial companies, a fact that is reflected in the decline in revenue.

These donation agreements concluded in 2020 were recognised almost exclusively in the surplus or deficit in the year the contract was concluded.

The research institutes also benefited from donations. Their volume stood at CHF 1m in the reporting period after having been at CHF 2m in the previous year.

As in the previous year, CHF 4m of the revenue from in-kind contributions of CHF 8m arising from the donated rights concerns EPFL for the "Microcity" building in Neuchâtel as well as "Industry 17" in Sion. A further CHF 3m relates to ETH Zurich, chiefly in the form of donated rights (previous year: CHF 1m).

Table 20: In-kind contributions

CHF millions	2020	2019	Change absolute
Goods in-kind	–	–	–
Donated rights	8	5	3
Total in-kind contributions recognised as revenue	**8**	**5**	**2**
Services in-kind	–	–	–
Total in-kind contributions not recognised as revenue	**–**	**–**	**–**
Total in-kind contributions received	**8**	**5**	**2**

11 Other revenue

Table 21: Other revenue

CHF millions	2020	2019	Change absolute
Licences and patents	9	8	–
Sales	11	18	–7
Refunds	2	6	–4
Other services	40	47	–8
Real estate revenue	30	34	–4
Revenue from real estate owned by the Federal Government left for use	4	4	–
Profit from disposals (property, plant and equipment)	–	–	–
Own work capitalised	1	1	–
Other miscellaneous revenue	17	21	–4
Total other revenue	**114**	**140**	**–26**

The decline in other revenue compared to 2019 was influenced by both the impact of the coronavirus pandemic and one-off transactions in the previous year. This double effect is reflected, in particular, in the lower revenue from sales (–CHF 7m; in addition to the temporary closure of partner organisations, for example those undergoing restoration, it was not possible to repeat last year's sale of detectors at the PSI). Coronavirus-related effects were also observed in other services (–CHF 8m; primarily due to the decline owing to cancelled or postponed events at the SwissTech Convention Center at EPFL as well as lower charges for non-scientific services), in refunds from third parties (–CHF 4m; due to the marked decline in travel activities among seminar participants) as well as in real estate revenue (–CHF 4m; owing to reduced income from the rental of real estate).

The revenue from real estate owned by the Federal Government left for use has been separated in the above table since 2018. This is in accordance with Section 2b (Transfer for Use) of the Ordinance on the Finance and Accounting of the ETH Domain (SR 414.123), with validity until 31 December 2020. The associated charge to the Federal Government is included in Other operating expenses (see Note 13).

About CHF 28m of other revenue is attributable to the entities fully consolidated since 2017 (EPFL sub-consolidation), in particular Société du Quartier Nord de l'EPFL (SQNE), Société du Quartier de l'Innovation (SQIE) and EPFL Innovation Park Foundation (FEIP).

12 Personnel expenses

Table 22: Personnel expenses

CHF millions	2020	2019	Change absolute
Professors	217	209	8
Scientific personnel	952	923	29
Technical and administrative personnel, apprentices, trainees	801	769	33
IC, Suva and other refunds	−9	−10	1
Total salaries and wages	**1,961**	**1,891**	**70**
Social insurances OASI / DI / IC / MB	126	118	7
Net pension costs	343	309	35
Accident and sickness insurance Suva (BU / NBU / KTG)	8	7	1
Employer’s contribution to Family Compensation Fund (FAK / FamZG)	30	30	–
Total social insurance schemes and pension expenses	**507**	**464**	**43**
Other employer contributions	–	–	–
Temporary personnel	8	9	−1
Change in provisions for untaken leave and overtime	1	−2	4
Change in provisions for contributions to long-service awards	−7	5	−12
Other personnel expenses	20	19	1
Total personnel expenses	**2,490**	**2,386**	**104**

Total salaries and wages rose due to the growth in jobs and on account of the compensation measures decided upon by the ETH Board in coordination with the Federal Government for 2020. The ETH Board approved a salary increase of 1% (incl. inflation adjustment for 2019). Furthermore, 1.2% of the total salary payments was at the disposal of employees under the Salary System (SS) for individual salary adjustments (on the basis of performance and experience).

There was an average of 19,361 full-time equivalents (FTEs) (excluding apprentices) in the reporting period (previous year: 18,915 FTEs), representing an increase of 2%.*

The detailed composition of the net pension costs is set out in detail in Note 28 Net defined benefit liabilities. Explanations on the changes in provisions can be found in Note 27 Provisions.

* The annual report does not show the annual average value but the year-end figure. This is 20,108.0 FTEs (including apprentices). The figure in the annual report also excludes the FTEs of the controlled entities.

13 Other operating expenses

Table 23: Other operating expenses

CHF millions	2020	2019	Change absolute
Expenses for goods and materials	145	140	5
Premises costs	356	350	6
Energy costs	61	64	−3
IT expenses	106	93	13
Expenses for consultations, expertises and guest lecturers	77	96	−19
Library expenses	27	33	−5
Other operating costs	113	160	−47
Total other operating expenses	**885**	**935**	**−50**

The increase in expenses for goods and materials relates to non-capitalisable property, plant and equipment and is connected to the increased construction activities at ETH Zurich during the reporting period.

69% (previous year: 70%) of the premises costs comprise the accommodation expenditure for the state-owned real estate used by the institutions of the ETH Domain. The increase compared with the previous year is attributable to external rents.

The coronavirus pandemic, in particular, had a major impact on the other items recognised under other operating expenses. In the area of IT infrastructure (non-capitalisable portion), costs increased by CHF 13m. Expenses for consultations, expertise and guest lecturers, on the other hand, declined by CHF 19m, as there was less spending on guest speakers and the organisation of seminars.

Within other operating costs, it was expenses, in particular, that were considerably lower due to the pandemic (70% or down CHF 48m on the previous year).

In the reporting period, a charge was paid to the Federal Government again from the transfer of use of state-owned real estate to third parties (Ordinance on Finance and Accounting of the ETH Domain, Section 2b). The charge was included in other operating costs and amounted to CHF 2m in the reporting period. The corresponding revenue of CHF 4m is disclosed under other revenue (see Note 11).

14 Transfer expenses

Table 24: Transfer expenses

CHF millions	2020	2019	Change absolute
Scholarships and grants to students and doctoral students	18	21	−3
Contributions to research projects	19	16	3
Other transfer expenses	14	12	2
Total transfer expenses	**51**	**49**	**2**

Transfer expenses are contributions for which no direct payment is invoiced. ETH Zurich (−CHF 2m) and EPFL (−CHF 1m) reported a decline in scholarships and grants to students and doctoral students.

In the increase in contributions to research projects, CHF 1m is accounted for by ETH Zurich and CHF 1m by the PSI.

In particular, the increase of CHF 2m in other transfer expenses can be attributed to Empa.

15 Net finance income / expense

Table 25: Net finance income / expense

CHF millions	2020	2019	Change absolute
FINANCE INCOME			
Interest income	5	5	–
Income from investments	5	4	–
Changes in fair value of financial assets	29	33	–4
Foreign currency gains	7	5	2
Other finance income	–	–	–
Total finance income	**46**	**47**	**–2**
FINANCE EXPENSE			
Interest expense	9	9	–
Other financing costs for provision of capital	–	–	–
Changes in fair value of financial assets	12	1	11
Foreign currency losses	12	8	4
Impairment of loans and fixed deposits	–	–	–
Other finance expense	1	1	–
Total finance expense	**34**	**20**	**14**
Total net finance income / expense	**11**	**28**	**–16**

The development on the financial markets led to a positive performance on the investment capital employed in the reporting period. The unfavourable development in exchange rates dampened the positive financial result.

The interest income includes interest from the compounding of the receivables and loans to the tune of CHF 5m (previous year: CHF 4m).

Interest expenses mainly comprise interest expenses from finance leases. Further information about finance leases can be found in Note 25 Financial liabilities.

16 Cash and cash equivalents

Table 26: Cash and cash equivalents

CHF millions	31.12.2020	31.12.2019	Change absolute
Cash	1	2	–1
Swiss Post	214	258	–44
Bank	42	39	3
Short-term deposits (<90 days)	1,711	651	1,060
Total cash and cash equivalents	**1,968**	**950**	**1,018**

CHF 1,710m or 99.9% of the short-term deposits are with the Federal Treasury, based on the agreement of 29 November 2007 between the Federal Finance Administration and the ETH Domain on the treasury relationships. These funds will be used for teaching and research in the future. The increase in the reporting period is due, in particular, to a reallocation of funds invested with the Federal Government. In this context, ETH Zurich (CHF 745m) and EPFL (CHF 232m) have shifted current financial assets to short-term deposits vis-à-vis the Federal Treasury (see also Note 22 Financial assets and loans).

17 Receivables

Table 27: Receivables

CHF millions	31.12.2020	31.12.2019	Change absolute
RECEIVABLES FROM NON-EXCHANGE TRANSACTIONS			
Receivables from project contracts and donations	1,572	1,544	28
Other receivables	16	8	8
Value adjustments	–	–	–
Total receivables from non-exchange transactions	**1,588**	**1,551**	**36**
of which current	616	612	4
of which non-current	971	939	32
RECEIVABLES FROM EXCHANGE TRANSACTIONS			
Trade accounts receivable	54	49	5
Other receivables	8	1	7
Value adjustments	−2	−2	−1
Total receivables from exchange transactions	**60**	**48**	**12**
of which current	60	48	12
of which non-current	–	–	–

The receivables from non-exchange transactions comprise the remaining amounts from contractually agreed project totals or from granted donations which had not been called or paid by the end of the year. Compared to 2019, credit due from third-party donors grew by CHF 31m.

Compared to the previous year, receivables from the SNSF and EU FPs as well as from municipalities, cantons and international organisations increased, while receivables from Innosuisse, special federal funding of applied research and private sector funding categories decreased.

The other receivables from non-exchange transactions essentially included the assets from the settlement with social security institutions.

Due dates of the receivables:

Table 28: Maturity analysis

CHF millions	Total receivables	Not past due	Past due up to 90 days	Past due 91 to 180 days	Past due more than 180 days
	31.12.2020				
Gross amount	**1,650**	**1,614**	**19**	**4**	**13**
Receivables from non-exchange transactions	1,588	1,570	8	3	7
Receivables from exchange transactions	62	45	11	1	5
Value adjustments	**−3**	**–**	**–**	**–**	**−3**
Of which individually impaired	−1				
	31.12.2019				
Gross amount	**1,601**	**1,566**	**20**	**6**	**9**
Receivables from non-exchange transactions	1,551	1,530	11	5	5
Receivables from exchange transactions	50	36	9	1	4
Value adjustments	**−2**	**–**	**–**	**–**	**−2**
Of which individually impaired	−1				

Value adjustments of receivables

Value adjustments of an unchanged CHF 2m were recognised for at-risk trade accounts receivable at the end of 2020. Minor value adjustments are to be reported on receivables from non-exchange transactions.

18 Inventories

Table 29: Inventories

CHF millions	31.12.2020	31.12.2019	Change absolute
Inventories purchased	10	10	–
Inventories self-produced	–	–	–
Total inventories	**10**	**10**	**–**

Basically, the ETH Domain does not have considerable inventories or its own products to sell. The inventories consist of recurring stock items such as chemicals, laboratory materials and materials for experiments that are used in teaching and in research. An annual physical inventory is done for stocks with a total value of more than CHF 100,000.

19 Prepaid expenses and accrued income

Table 30: Prepaid expenses and accrued income

CHF millions	31.12.2020	31.12.2019	Change absolute
Interest	–	–	–
Prepaid expenses	37	29	8
Other prepaid expenses and accrued income	25	20	6
Total prepaid expenses and accrued income	**63**	**49**	**14**

The largest deferrals for prepaid expenses concerned the library (CHF 12m), rental payments in advance (CHF 8m) and information technology services (CHF 6m).

Other prepaid expenses and accrued income in turn include accrued income in connection with IPSAS 9 transactions (revenue from exchange transactions), which amounted to CHF 19m, in particular.

20 Investments in associated entities and joint ventures

Details about the significant associated entities can be found in the tables below. All associated entities can be found in Note 35 Relationships with controlled and associated entities.

There were no joint ventures in the ETH Domain in the reporting period.

Investments in associated entities changed as follows over the course of the year, as shown in Table 31.

Table 31: Change in associated entities

CHF millions	2020	2019
As of 01.01.	**208**	**135**
Additions	–	–
Disposals	–	–
Dividends	–	–
Share of the annual surplus or deficit	32	74
Share of items directly recognised in equity	2	–1
As of 31.12.	**242**	**208**

The summarising financial information about the material associated entities is indicated below. The statements and the amounts shown there were adjusted for the purposes of recognition in accordance with the equity method with simplifications in line with the accounting practices of the ETH Domain.

Table 32: Material associated entities – aggregated financial information

CHF millions	ETH Zurich Foundation *	Albert Lück Foundation **	Student Housing Foundation	Fondation Les Bois Chamblard	Fondation Campus Biotech Geneva
31.12.2020					
Reporting date used	31.12.2020	31.12.2019	31.12.2019	31.12.2019	31.12.2020
Current assets	387	9	6	12	7
Non-current assets	230	39	111	15	10
Short-term liabilities *	38	9	1	–	5
Long-term liabilities *	433	23	52	–	5
Revenue	49	6	13	–	23
Surplus (+) or deficit (–)	32	–2	3	–	–2
Dividends received from the associated entity	–	–	–	–	–
31.12.2019					
Reporting date used	31.12.2019	31.12.2018	31.12.2018	31.12.2018	31.12.2019
Current assets	330	1	5	11	12
Non-current assets	224	51	109	15	12
Short-term liabilities *	46	7	1	–	8
Long-term liabilities *	396	28	52	–	6
Revenue	52	6	13	–	21
Surplus (+) or deficit (–)	73	1	4	–1	–1
Dividends received from the associated entity	–	–	–	–	–

* The short and long-term liabilities of the ETH Zurich Foundation includes capital in the form of dedicated funds and liabilities arising from grants of CHF 38m (short-term, previous year: CHF 46m) and CHF 433m (long-term, previous year: CHF 396m). They are already included in ETH Zurich's equity, where they make up a significant portion of dedicated donation and bequest reserves.

** The disclosed values as at 31 December 2019 were supplemented by a material transaction in the 2020 financial year.

Table 33: Aggregated information for individually immaterial associated entities

CHF millions	2020	2019
Revenue	33	38
Tax expense	–	1
Surplus (+) or deficit (–)	1	2

Unrecognised share of losses of associated entities:
There is no unrecognised share of losses of associated entities, either in the reporting period or on a cumulative basis.

21 Property, plant and equipment and intangible assets

Movable assets

Large-scale research plants and equipment, machinery, furnishings, vehicles:
Purchases in this category amounted to CHF 94m in the reporting period (previous year: CHF 86m). Examples of major investments this year included spectrometers and microscopes at ETH Zurich and specific technical-scientific equipment at EPFL, including the upgrading of the "TCV Auxiliary Heating system". There were also investments in SwissFEL (ATHOS beamline), the SINQ upgrade and SLS 2.0 at the PSI. At Empa, electron microscopes were purchased and further expansions were made to the NEST research and innovation building (HiLo building).

The reclassifications of CHF 40m relate to movable assets under construction, which were definitely allocated to this asset category in the reporting period and will be depreciated in the future.

The disposals of CHF 23m include scrapped, derecognised or sold assets.

The carrying amount of the accelerator facilities at the PSI amounted to CHF 457m as at 31 December 2020 (previous year: CHF 474m).

Information and communication:
The information technology hardware and communication equipment acquired during the reporting period in the amount of CHF 45m primarily relates to the universities' server systems and high-performance computers. Significantly higher investments were also made in this category relative to 2019 (prior year: CHF 28m).

The disposals (–CHF 13m) relate to scrapped, derecognised or sold assets.

Advance payments, movable assets under construction:
The additions in this category in the amount of CHF 59m are divided into CHF 40m in investments in movable assets under construction and CHF 18m in advance payments made.

The reclassifications of CHF 41m relate to concluded projects that were allocated to the relevant asset category during the reporting period.

Table 34: Change in property, plant and equipment and intangible assets in 2020

CHF millions	Large-scale research plants and equipment, machinery, furnishings, vehicles	Information and communication	Advance payments, movable assets under construction	Total movable assets	Property, buildings	Assets under construction	Total immovable assets	Total property, plant and equipment	Total intangible assets
PURCHASE VALUE									
Value as of 01.01.2020	**2,812**	**418**	**113**	**3,343**	**801**	**201**	**1,002**	**4,345**	**98**
Additions	94	45	59	198	16	105	122	320	5
Reclassifications	40	1	–41	–	103	–103	–	–	–
Disposals	–23	–13	–1	–38	–8	–1	–9	–47	–
Value as of 31.12.2020	**2,923**	**451**	**129**	**3,503**	**912**	**203**	**1,115**	**4,618**	**102**
ACCUMULATED DEPRECIATION									
Value as of 01.01.2020	**1,741**	**365**	**–**	**2,107**	**340**	**–**	**340**	**2,447**	**35**
Depreciation	163	32	–	195	50	–	50	244	6
Impairments	–	–	–	–	–	–	–	–	–
Reversed impairments	–	–	–	–	–	–	–	–	–
Reclassifications	–	–	–	–	–	–	–	–	–
Disposals value adjustments	–20	–13	–	–34	–6	–	–6	–40	–
Value as of 31.12.2020	**1,884**	**384**	**–**	**2,268**	**383**	**–**	**383**	**2,651**	**41**
Balance sheet value as of 31.12.2020	**1,039**	**67**	**129**	**1,235**	**529**	**203**	**732**	**1,967**	**62**
thereof leased assets				–			198	198	–

Immovable assets

Most of the real estate is owned by the Federal Government, meaning it is mainly leasehold improvements that are reported. Leasehold improvements under construction show additions of CHF 105m in the reporting period. The increase in the volume of capitalisation (previous year: CHF 80m) was mainly due to increased construction activity at ETH Zurich. During the reporting period, leasehold improvements for the interior fittings of the new "Flux" laboratory and office building at Eawag in the amount of CHF 3m were also carried out. The property, plant and equipment leased in the amount of CHF 198m relates largely to the SQIE and SQNE entities controlled by EPFL.

Intangible assets

Intangible assets include capitalised licences, patents, rights, software and donated rights. The net carrying amount of CHF 62m consists largely of the rights of use for the Microcity building at EPFL (CHF 53m). The additions in the reporting period relate, in particular, to software acquired by ETH Zurich, EPFL and the PSI.

All asset categories are depreciated using the principles described in Note 3. Possible impairments are disclosed separately in Tables 34 and 35.

Table 35: Change in property, plant and equipment and intangible assets in 2019

CHF millions	Large-scale research plants and equipment, machinery, furnishings, vehicles	Information and communication	Advance payments, movable assets under construction	Total movable assets	Property, buildings	Assets under construction	Total immovable assets	Total property, plant and equipment	Total intangible assets
PURCHASE VALUE									
Changes from restatement as of 01.01.	–	–	–1	–1	–	–	–	–1	–
Value as of 01.01.2019	**2,821**	**401**	**84**	**3,306**	**773**	**141**	**915**	**4,221**	**96**
Additions	86	28	53	167	12	80	92	259	2
Reclassifications	21	2	–23	–	20	–20	–	–	–
Disposals	–116	–13	–2	–131	–5	–	–5	–136	–
Value as of 31.12.2019	**2,812**	**418**	**113**	**3,343**	**801**	**201**	**1,002**	**4,345**	**98**
ACCUMULATED DEPRECIATION									
Changes from restatement as of 01.01.	39	–	–	39	–	–	–	39	–
Value as of 01.01.2019	**1,609**	**334**	**–**	**1,943**	**295**	**–**	**295**	**2,238**	**29**
Depreciation	162	44	–	206	49	–	49	255	6
Impairments	–	–	–	–	–	–	–	–	–
Reversed impairments	–	–	–	–	–	–	–	–	–
Reclassifications	–	–	–	–	–	–	–	–	–
Disposals value adjustments	–30	–13	–	–43	–4	–	–4	–47	–
Value as of 31.12.2019	**1,741**	**365**	**–**	**2,107**	**340**	**–**	**340**	**2,447**	**35**
Balance sheet value as of 31.12.2019	**1,070**	**53**	**113**	**1,236**	**461**	**201**	**662**	**1,898**	**63**
thereof leased assets				–			209	209	–

The decrease in purchase values in the category large-scale research plants and equipment, machinery, furnishings, vehicles for 2019 includes a non-cash one-off effect at the PSI amounting to CHF 84m. The restatement of CHF 39m relates to the adjustment of the useful life of the PSI accelerator facilities (see Note 4 Estimate uncertainty and management judgements).

22 Financial assets and loans

Table 36: Financial assets and loans

CHF millions	31.12.2020	31.12.2019	Change absolute
CURRENT FINANCIAL ASSETS AND LOANS			
Securities, fixed deposits and investment funds	339	283	55
Positive replacement values	–	–	–
Other financial assets	124	1,146	–1,022
Loans	1	1	–
Total current financial assets and loans	**464**	**1,430**	**–967**
NON-CURRENT FINANCIAL ASSETS AND LOANS			
Securities and fixed deposits	–	–	–
Other financial assets	51	40	11
Loans	1	1	–
Total non-current financial assets and loans	**52**	**42**	**11**

Current financial assets are especially financed with third-party funds that are not used immediately. On the basis of the prevailing treasury agreement between the FFA and the ETH Domain, these funds are placed on the market or with the Federal Government. The third-party funds placed on the market are managed under asset management mandates with Swiss banks. The positive performance as well as the increase of an asset management mandate by CHF 35m at ETH Zurich led to a higher portfolio of securities, fixed deposits and investment funds.

Other current financial assets primarily include the short-term deposit accounts with the Federal Government with a total or remaining term at the time of acquisition of three to twelve months. The decline primarily reflects the transfer of ETH Zurich (–CHF 745m) and EPFL (–CHF 232m) to deposit accounts with the Federal Government with a remaining term of less than three months (short-term deposits) in order to increase financial flexibility (see also Note 16 Cash and cash equivalents).

Other non-current financial assets include investments which are available for sale (CHF 14m) and the non-current Federal Government deposit account (CHF 37m), to which CHF 10m net was allocated. This deposit account is accumulated annually in order to finance the future dismantling of the accelerator plant at the PSI (see Note 27 Provisions). The investments which are available for sale mainly contain participations in spin-offs with a shareholding of less than 20% in the accounts of ETH Zurich, the ETH Board (on behalf of the ETH Domain; held in trust by EPFL) and the PSI. They are measured at their fair values.

One third of the current and non-current loans, which totalled CHF 3m, consist of concessionary loans given to students, doctoral students and spin-offs. Loans to students and doctoral students are to be paid back within a year (current) or in instalments within six years of completion of the studies (non-current). There were no significant overdue loans as of 31 December 2020. No significant value adjustments were recognised in respect of loans.

Of the total financial assets at the end of 2020 (CHF 516m), CHF 161m (2019: CHF 1,173m) was invested with the Federal Government and CHF 339m (2019: CHF 283m) was placed with financial institutions.

23 Co-financing

Table 37: Co-financing

CHF millions	2020	2019	Change absolute
PURCHASE VALUE			
As of 01.01.	**164**	**164**	**–**
Additions	–	–	–
Disposals	–1	–	–1
As of 31.12.	**163**	**164**	**–1**
ACCUMULATED DEPRECIATION			
As of 01.01.	**40**	**36**	**4**
Depreciation	5	4	–
Disposals	–1	–	–1
As of 31.12.	**45**	**40**	**4**
Balance sheet value as of 31.12.	**118**	**123**	**–5**

There were no additions in the 2020 reporting period. After the depreciation of the co-financing (2020: –CHF 5m) a carrying amount of CHF 118m resulted as of the end of 2020.

24 Current liabilities

Table 38: Current liabilities

CHF millions	31.12.2020	31.12.2019	Change absolute
Trade payables	61	41	20
Liabilities to social insurance institutions	28	37	–9
Other current liabilities	100	76	24
Total current liabilities	**189**	**154**	**35**

The increase in trade payables is made up of two effects. On the one hand, ETH Zurich recorded an increase of +CHF 29m, which reflects the variability of the accounts payable. On the other hand, there was a reduction at both EPFL (–CHF 7m) and the PSI (–CHF 3m).

The increase in other current liabilities can primarily be attributed to the higher withholding tax due to the cantonal tax office. The item also includes financial obligations towards the research partners involved in projects in which the institutions of the ETH Domain are the leading houses.

25 Financial liabilities

Table 39: Current and non-current financial liabilities – Summary

CHF millions	31.12.2020	31.12.2019	Change absolute
CURRENT FINANCIAL LIABILITIES			
Liabilities to financial institutes	–	–	–
Finance lease liabilities	9	9	–
Negative replacement values	–	–	–
Other financial liabilities	9	6	4
Total current financial liabilities	**19**	**15**	**4**
NON-CURRENT FINANCIAL LIABILITIES			
Finance lease liabilities	267	276	–9
Other financial liabilities	68	74	–6
Total non-current financial liabilities	**335**	**350**	**–15**

Table 40: Current and non-current financial liabilities – Change

	2020			2019		
CHF millions	Current	Non-current	Total	Current	Non-current	Total
Financial liabilities as of 01.01.	**15**	**350**	**365**	**16**	**361**	**377**
Increase in short-term and long-term financial liabilities	–	1	1	1	–	1
Decrease in short-term and long-term financial liabilities	–10	–	–10	–10	–	–10
Total cash transactions	**–10**	**1**	**–9**	**–9**	**–**	**–9**
Changes in fair values	–	–	–	–1	–	–1
Reclassifications	16	–16	–	11	–11	–
Other changes	–2	–	–2	–3	–	–3
Total non-cash transactions	**14**	**–16**	**–2**	**8**	**–11**	**–3**
Financial liabilities as of 31.12.	**19**	**335**	**353**	**15**	**350**	**365**

The finance lease liabilities decrease by the proportion of the annual lease payments paid back. Other financial liabilities include the payment commitment for the right of use received by EPFL in connection with the Microcity building, which was recognised as a finance lease (CHF 53m, previous year: CHF 55m). The annual decrease corresponds to a service received periodically and is recognised as non-cash revenue from donations.

Table 41: Finance leases

CHF millions	Future minimum leasing payments	Future financial expenses	Present value of future minimum leasing payments	Future minimum leasing payments	Future financial expenses	Present value of future minimum leasing payments
	2020	2020	2020	2019	2019	2019
Due dates						
Due within 1 year	17	8	9	17	8	9
Due within 1 to 5 years	68	29	39	68	30	38
Due after more than 5 years	294	66	228	311	73	238
As of 31.12.	**379**	**103**	**276**	**396**	**111**	**285**

	2020	2019
LEASING EXPENSES		
Contingent lease payments expensed in period	–	–
ADDITIONAL DETAILS		
Future revenue from sublease (from non-cancellable contracts)	29	36

The finance leases at EPFL relate to real estate belonging to the simple partnerships SQIE and SQNE. EPFL has made various assumptions with regard to the recognition of these lease agreements, which are set out in Note 4 Estimate uncertainty and management judgements. The lease agreements both include a clause linking the rent to general price trends (underlying consumer price index). The present value of minimum lease payments as of the end of the reporting period is CHF 165m with SQNE and CHF 95m with SQIE (30-year lease). The finance lease for ETH Zurich concerns real estate on the Hönggerberg campus (total present value of future minimum leasing payments is CHF 16m). The building was occupied in September 2015, and the lease will run until 2045. There are no options for extension or purchase. The net rent is indexed at 80% and can be adjusted at the end of each year.

26 Accrued expenses and deferred income

Table 42: Accrued expenses and deferred income

CHF millions	31.12.2020	31.12.2019	Change absolute
Interest	–	–	–
Deferred income	114	105	9
Other accrued expenses and deferred income	37	45	−8
Total accrued expenses and deferred income	**151**	**150**	**1**

Deferred income especially includes service agreements and commissioned research from exchange transactions in accordance with IPSAS 9 (2020: CHF 107m; 2019: CHF 98m). Due to the generally higher order volume under IPSAS 9, the amounts received in advance also increased.

Other accrued expenses and deferred income mainly consist of deferrals in connection with withholding taxes and with deferrals of expenses for central procurement for operations, for construction projects or for the purchase of IT equipment. The total is divided between ETH Zurich (CHF 16m), EPFL (CHF 11m), the PSI (CHF 7m), Empa and Eawag (CHF 1m each).

27 Provisions

Table 43: Provisions – Summary

CHF millions	31.12.2020	31.12.2019	Change absolute
Provisions for untaken leave and overtime	101	99	1
Other long-term employee benefits (IPSAS 39)	64	71	–7
Dismantling	549	551	–1
Guarantees and warranties	–	–	–
Litigations	2	2	1
Other provisions	2	–	1
Total provisions	**718**	**723**	**–5**

Provisions for untaken leave and overtime are calculated on the basis of the actual hourly balances per employee. This employees' credit is classified as current. In the reporting period, provisions were created at EPFL (+CHF 5m) and reversed at the PSI (–CHF 4m), meaning both changes almost offset one another on a net basis.

Other long-term employee benefits (IPSAS 39) include the acquired long-service awards / jubilee, which are measured by independent actuaries using the projected unit credit method. The creation (incl. increase) and appropriation of this provision are to be recognised separately.

The amount for dismantling includes CHF 542m (2019: CHF 543m) for the dismantling of the accelerator facilities and the disposal of radioactive waste at the PSI (see explanations in Note 4 Estimate uncertainty and management judgements). In the reporting period, the PSI used CHF 1m (previous year: CHF 2m) for initial measures relating to dismantling. The annual addition to the deposit account with the Federal Government, earmarked for financing these costs, amounts to CHF 11m. The PSI also has provisions of almost CHF 4m each for the dismantling of Gantry 3 (radiotherapy facility) and the SwissFEL.

Table 44: Provisions – Change 2020

CHF millions	Provisions for untaken leave and overtime	Other long-term employee benefits (IPSAS 39)	Dismantling	Guarantees and warranties	Litigations	Other provisions	Total provisions
Value as of 01.01.2020	**99**	**71**	**551**	**–**	**2**	**–**	**723**
Creation (incl. increase)	5	2	–	–	2	2	11
Reversal	–4	–	–	–	–1	–	–5
Appropriation	–	–9	–1	–	–	–	–11
Reclassifications	–	–	–	–	–	–	–
Increase in present value	–	–	–	–	–	–	–
Value as of 31.12.2020	**101**	**64**	**549**	**–**	**2**	**2**	**718**
of which current	101	–	3	–	2	2	108
of which non-current	–	64	546	–	–	–	610

Table 45: Provisions – Change 2019

CHF millions	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.	–	–	–1	–	–	–	–1
Value as of 01.01.2019	**102**	**66**	**637**	**–**	**2**	**5**	**812**
Creation (incl. increase)	1	13	–	–	1	–	14
Reversal	–2	–	–84	–	–1	–3	–90
Appropriation	–1	–8	–2	–	–	–2	–14
Reclassifications	–	–	–	–	–	–	–
Increase in present value	–	–	–	–	–	–	–
Value as of 31.12.2019	**99**	**71**	**551**	**–**	**2**	**–**	**723**
of which current	99	–	–	–	2	–	102
of which non-current	–	71	550	–	–	–	621

28 Net defined benefit liabilities

Most employees and pensioners of the institutions of the ETH Domain, as well as the staff and the President of the ETH Board, are insured under the pension scheme the ETH Domain maintains at the collective institution "Swiss Federal Pension Fund PUBLICA" (PUBLICA). There are no other significant pension schemes at the controlled entities, therefore any further statements in the text refer to the pension scheme the ETH Domain maintains at PUBLICA.

However, the existing balance for net defined benefit liabilities as of 31 December 2020 includes obligations under other pension plans outside the ETH Domain's pension fund at PUBLICA amounting to CHF 3m (previous year: CHF 4m).

Legal framework and responsibilities

Legal requirements

Swiss pension plans must be run through a legally separate, trustee-administered pension institution. The law prescribes minimum benefits.

Organisation of the pension scheme

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

The Board of Directors (*Kassenkommission*) is PUBLICA's most senior governing body. In addition to management, it is also responsible for the oversight and supervision of PUBLICA's Executive Board. The Board of Directors has 16 members, eight representing the insured employees and eight representing the employers, from among all the affiliated pension plans. This means that PUBLICA's most senior governing body is made up of an equal number of employee and employer representatives.

Each pension scheme has its own governing body made up of equal numbers of representatives. Among other things, it is involved in concluding the affiliation contract and decides on the appropriation of any surpluses. Each governing body is made up of nine employer representatives and nine employee representatives from the entities.

Insurance plan

In accordance with IPSAS 39, insurance plans are classified as defined benefit plans.

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

The employer and employee savings contributions are set as a percentage of the insured salary. A risk premium is charged for death and disability insurance. The administrative costs are paid by the employer.

The old-age pension is calculated from the credit balance in the retirement fund at the retirement date multiplied by the conversion rate specified in the terms. Employees have the option of drawing the retirement benefits as a lump sum. There are pension plans for different groups of insured persons. In addition, employees have 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 of assets

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

As PUBLICA's most senior governing body, the Board of Directors bears overall responsibility for asset management. 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 implementing the investment strategy rests with PUBLICA's Asset Management. Asset Management also makes tactical decisions to deviate temporarily from the investment strategy weightings in order to generate added value compared to the existing strategy. Where individual asset 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 time.

Risks for the employer

The governing body of the ETH Domain's pension scheme made up of equal numbers of representatives can change the funding system (contributions and future benefits) at any time. The governing body may collect restructuring contributions from the employer if the scheme is underfunded within the meaning of pension law (Article 44 Occupational Pension Ordinance (BVV 2)) and if other measures are without success. If these are used to fund benefits in excess of the statutory minimum, the employer must indicate their agreement with this.

The definitive regulatory funding ratio for the ETH Domain's pension scheme at PUBLICA, in accordance with the Occupational Pension Ordinance (BVV 2), was 107,9% at the end of 2020 (2019: 105.6%). The definitive economic funding ratio for the ETH Domain's pension scheme at PUBLICA was 88,9% at the end of the year (2019: 87.3%).

Special events

There were no plan amendments, curtailments or settlements to be considered in the current reporting period.

Change in the accounting estimate as of 31 December 2020: introduction of risk sharing and change in setting the discount rate

As regards the risk sharing between employer and employee, now only that part of defined benefit obligation that is likely to be borne by the employer is taken into account. This provides a more true and fair view of the anticipated pension scheme costs for the ETH Domain. Risk sharing was not considered for the actuarial calculation as at 31 December 2019. The estimation procedure to determine the financial assumptions taking account of risk sharing were applied on 31 December 2020 for the first time.

With the inclusion of risk sharing, there was a reduction in net defined benefit liabilities of CHF 336m as at 31 December 2020, which was directly included in equity as a change in the accounting estimate in actuarial gains and losses.

Furthermore, the discount rate as at 31 December 2020 was linked to the yield from fixed-interest high-quality corporate bonds for the first time. This adjustment was also entered directly into equity as a change in the accounting estimate.

Table 46: Net defined benefit liabilities

CHF millions	31.12.2020	31.12.2019	Change absolute
Present value of defined benefit obligations	−8,866	−9,842	976
Fair value of plan assets	7,779	7,419	360
Recognised net defined benefit liabilities	**−1,087**	**−2,423**	**1,336**

The reduction in net defined benefit liabilities of CHF 1,336m results from a reduction in the present value of defined benefit obligations and an increase in the fair value of plan assets. The one-off conversion effect was recorded as at 31 December 2020 with no effect on profit or loss and reduced the liability by 336m. Moreover, the increase in the discount rate (31 December 2020: 0.2% / 31 December 2019: -0.2%) and the adjustment of demographic assumptions led to a reduction in net defined benefit liabilities of CHF 618m resp. CHF 301m.

Plan assets increased by CHF 361m due to the positive return on investment.

Of the total, CHF 3m (2019: CHF 4m) of the net defined benefit liabilities relate to pension plans outside the ETH Domain's pension fund at PUBLICA.

Table 47: Net pension costs

CHF millions	2020	2019	Change absolute
Current service cost (employer)	337	291	46
Past service cost	7	6	1
Gains (–) / losses (+) from plan settlements	–	–	–
Interest expense from defined benefit obligations	–20	27	–47
Interest income from plan assets	15	–20	35
Administrative costs (excl. asset management costs)	4	4	–
Other	–	–	–
Total Net pension costs incl. interest expense recognised in statement of financial performance	**343**	**308**	**35**

The ETH Domain's net pension costs for the reporting period are CHF 343m (2019: CHF 308m), of which CHF 1m (2019: CHF 1m) relate to pension plans outside the ETH Domain's pension plan at PUBLICA.

Net pension costs are CHF 35m higher than in the previous year. The increase in current service cost (CHF + 46m) and the change in interest expense from defined benefit liabilities and interest income from plan assets can be primarily attributed to the actuarial assumptions adjusted in the previous year (discount rate as of 1 January 2020: -0.2% vs. 1 January 2019: 0.3%). As a consequence of the negative discount rate, the compounding of interest on the defined benefit liabilities results in interest income for the 2020 reporting period. As the pension costs as per IPSAS 39 are based on the assumptions from the previous year, the calculation of risk-sharing features only affects pension expenditure in the following year.

The past service cost includes the acquisitions made by professors at ETH Zurich and EPFL. No deposits (2019: CHF 3.5m) were transferred from ETH Board to the ETH Domain's pension plan in the reporting period.

Employer's contributions of CHF 235m and employees' contributions of CHF 130m are expected for the coming financial year.

Table 48: Revaluation recognised in equity

CHF millions	31.12.2020	31.12.2019	Change absolute
Actuarial gains (-) and losses (+)	–1,081	725	–1,806
from change in financial assumptions	–905	659	–1,564
from change in demographic assumptions	–301	–1	–299
from experience adjustments	125	67	57
Return on plan assets excl. interest income (gains (-) / losses (+))	–361	–618	258
Other	–	–	–
Revaluation amount recognised in equity	**–1,442**	**107**	**–1,549**
Cumulative amount of revaluation recognised in equity (gain (–) / loss (+))	**31**	**1,473**	**–1,442**

The revaluation gain recognised in equity in 2020 amounted to CHF 1,442m (2019: revaluation loss of CHF 107m). This results in an amount of negative valuation reserves of CHF 31m as of 31 December 2020 (2019: CHF 1,473m). Of which, revaluation gains of CHF 2m (2019: CHF 1m) relate to pension plans outside the ETH Domain's pension fund at PUBLICA. The actuarial gains from changes in financial assumptions result from the increase in the discount rate (CHF 618m) and the introduction of risk sharing (CHF 336m). They were mitigated slightly by the higher interest on retirement savings and the reduction in the expected salary development (actuarial loss of CHF 49m).

The adjustment of the demographic assumptions (in particular the probabilities of departure and disability) led to actuarial gains in the amount of CHF 301m (previous year: CHF 1m).

The return on plan assets recognised in equity is attributable to the higher return on investment of over 4.2% generated compared with the expected return (corresponds to a discount rate of −0.2%).

Table 49: Change in present value of defined benefit obligations

CHF millions	2020	2019
Present value of defined benefit obligations as of 01.01.	**9,842**	**9,033**
Current service cost (employer)	337	291
Interest expense from defined benefit obligations	−20	27
Employee contributions	132	126
Benefits paid in (+) and paid out (−)	−351	−367
Past service cost	7	6
Gains (−) / losses (+) from plan settlements	–	–
Actuarial gains (−) / losses (+)	−1,081	725
Other	–	–
Present value of defined benefit obligations as of 31.12.	**8,866**	**9,842**

The weighted average term arising from defined benefit obligations is 14.2 years as of 31 December 2020 (2019: 15.6 years).

Table 50: Change in the fair value of plan assets

CHF millions	2020	2019
Fair value of plan assets as of 01.01.	**7,419**	**6,795**
Interest income from plan assets	−15	20
Employer contributions	237	231
Employee contributions	132	126
Benefits paid in (+) and paid out (−)	−351	−367
Gains (+) / losses (−) from plan settlements	–	–
Administrative costs (excl. asset management costs)	−4	−4
Return on plan assets excl. interest income (gains (+) / losses (−))	361	618
Other	–	–
Fair value of plan assets as of 31.12.	**7,779**	**7,419**

Table 51: Transition of net defined benefit liabilities

CHF millions	2020	2019
Net defined benefit liabilities as of 01.01.	**−2,423**	**−2,239**
Net pension costs incl. interest expense recognised in statement of financial performance	−343	−308
Revaluation amount recognised in equity	1,442	−107
Employer contributions	237	231
Obligations paid directly by the entity	–	–
Other	–	–
Net defined benefit liabilities as of 31.12.	**−1,087**	**−2,423**

Table 52: Major categories of plan assets (in percentage)

Percentage	31.12.2020 * Listed	Not listed	Total	31.12.2019 * Listed	Not listed	Total
Liquidity	3	–	3	4	–	4
Bonds (in CHF) Confederation	6	–	6	5	–	5
Bonds (in CHF) ex. Confederation	10	–	10	10	–	10
Government bonds (in foreign currencies)	25	–	25	26	–	26
Corporate bonds (in foreign currencies)	10	–	10	11	–	11
Mortgages	1	–	1	–	–	–
Shares	26	–	26	27	–	27
Real estate	4	6	10	3	6	9
Commodities	2	–	2	3	–	3
Other	–	7	7	–	5	5
Total plan assets	**87**	**13**	**100**	**89**	**11**	**100**

* The table was adjusted including the previous year's figures. The listed and not listed shares of total plan assets are now shown as a percentage per category.

PUBLICA bears the actuarial and investment risks itself. The investment strategy is defined in such a way that benefits under the policy can be provided at maturity.

There is no known pension plan property used by the employer.

Table 53: Principal actuarial assumptions used as at the reporting date (in percentage)

Percentage	2020	2019
Discount rate as of 01.01.	−0.20	0.30
Discount rate as of 31.12.	0.20	−0.20
Expected salary development	0.40	0.50
Expected pension development	0.00	0.00
Interest on retirement savings	0.30	0.00
Share of employee contribution to funding gap	36.00	n/a
Life expectancy at age 65 – women (no. of years)	24.76	24.65
Life expectancy at age 65 – men (no. of years)	22.72	22.61

The discount rate is now based on the return from the fixed-interest high-yield corporate bonds (previous year: the spot interest rates for federal bonds published by the Swiss National Bank on a monthly basis) and the expected capital flows from ETH Domain pension scheme to PUBLICA based on the previous year's data. The expected future salary development is based on economic reference values. The rate of pension increase is the rate of pension increase expected for the average remaining term based on the financial position of the pension plan. The share of employee contribution to funding gap is based on the current graduation of the savings contributions under the policy. The generation tables in BVG 2015 are applied for assumptions about life expectancy.

Table 54: Sensitivity analysis (effect on present value of defined benefit obligations)

	31.12.2020		31.12.2019	
CHF millions	Increase in assumption	Decrease in assumption	Increase in assumption	Decrease in assumption
Discount rate (change + / – 0.25%)	–233	248	–372	398
Expected salary development (change + / – 0.25%)	24	–23	41	–40
Expected pension development (change + / – 0.25%)	193	n/a	307	n/a
Interest on retirement savings (change + / – 0.25%)	42	–42	61	n/a
Share of employee contribution to funding gap (change + / – 10%)	–100	100	n/a	n/a
Life expectancy (change + / –1 year)	239	–242	358	–362

The adjustment in defined benefit obligations upon adjustment of the actuarial assumptions is determined in the sensitivity analysis. Only one of the assumptions is adjusted at a time, while the other parameters remain unchanged.

The discount rate, the assumptions made on salary development and on interest on retirement savings as well as the share of employee contribution to funding gap have been increased or lowered by fixed percentage points. The assumption made on pension development has been increased but not lowered for the reporting period, as a reduction of the pension benefit is not possible (an assumption on the interest on retirement savings was also applied in the previous year). The sensitivity to life expectancy has been calculated by lowering or increasing life expectancy by a flat-rate factor, as a result of which the life expectancy of most age categories has been increased or reduced by about one year.

29 Dedicated third-party funds

Table 55: Dedicated third-party funds

CHF millions	31.12.2020	31.12.2019	Change absolute
Swiss National Science Foundation (SNSF)	684	644	40
Swiss Innovation Agency (Innosuisse)	63	64	–
EU Framework Programmes for Research and Innovation (EU FPs)	464	423	41
Special federal funding of applied research	98	115	–17
Industry-oriented research (private sector)	98	115	–17
Other project-oriented third-party funding	96	86	10
Donations and bequests	106	110	–4
Total dedicated third-party funds	**1,608**	**1,555**	**53**

The dedicated third-party funds correspond to the outstanding performance obligations on current research projects and mandates from contracts with non-exchange transactions. The increase of CHF 53m or + 3% is positive; it reflects increased availability of third-party funding to promote research in the ETH Domain.

Virtually all the institutions successfully bid for a larger quantity of new projects from the SNSF in 2020 and the contract amounts were immediately recognised. Due to the increased project volumes, the dedicated third-party funds also rose with regards to the SNSF compared with the previous year.

Dedicated third-party funds from EU research contributions grew at all institutions except WSL. During the reporting period, an increase was observed in the grants obtained for project funding, with this also being true for Future Emerging Technologies (FET), in particular.

The previous year's volume of special federal funding of applied research included a four-year contract for avalanche warnings, which WSL concluded with the FOEN in 2019. The contract was terminated during the reporting period, as this activity will in future (from 2021) be financed directly via the federal financial contribution. As a result, this situation essentially led to a decline in the volume of dedicated third-party funds with respect to special federal funding of applied research.

The decrease in the volume of third-party funding from the private sector primarily related to a contract between EPFL and the Wyss Foundation, which came to an end during the reporting period.

Dedicated third-party funds in the category "Other project-oriented third-party funding" declined in most institutions owing to the progress made in the projects that are financed by cantons as well as municipalities, public-law institutions and international organisations. The increase in the overall total can be attributed to a contract of EPFL with the University of Lausanne (UNIL): UNIL will finance half of the equipment for a new research centre (Dubochet Center for Imaging) as well as the personnel costs for a new professorship.

30 Financial risk management and additional information about financial instruments

General

Financial risk management is embedded in the general risk management of the ETH Domain, in respect of which annual reports are made to the ETH Board (see Annual Report, chapter on Risk Situation and Risk Management, p. 48).

Financial risk management primarily addresses credit risk (default risk) and liquidity risk as well as market risk (interest rate, foreign currency and other price risk).

The focus of risk management remains on credit risk. There are guidelines governing the investment of financial resources in order to reduce credit and market risk. The counterparties to a large proportion of the receivables and claims arising from financial assets are of high credit standing and solvency. Risk concentrations only exist in respect of those counterparties, which is why credit risk is regarded as low. Furthermore, there are receivables and financial assets in foreign currencies which are hedged according to prevailing circumstances in order to minimise the risk.

Compliance with and the effectiveness of the guidelines are ensured by the internal control system (ICS).

Credit and default risk

The maximum exposure to credit risk corresponds to the carrying amounts in the balance sheet. The actual risk is very low due to the fact that the counterparties to a large proportion of the financial assets are the Federal Government and other public-sector institutions.

Table 56 shows the maximum exposure to credit risk.

Table 56: Maximum exposure to credit risk

CHF millions	Total	Federal Government	European Commission FP *	SNSF, Innosuisse, OASI social service, Suva	SNB and banks with government guarantee	PostFinance and other banks	Other counter-parties
				31.12.2020			
Cash and cash equivalents	1,968	1,711	–	–	27	229	–
Receivables from non-exchange transactions	1,588	93	351	540	–	–	603
Receivables from exchange transactions	60	4	–	1	–	–	55
Financial assets and loans	516	161	–	–	–	20	335
Prepaid expenses and accrued income	25	1	–	–	–	–	25
Total	**4,157**	**1,970**	**352**	**540**	**27**	**250**	**1,018**
				31.12.2019			
Total previous period	**4,041**	**1,946**	**338**	**524**	**17**	**301**	**915**

* The remaining receivables due from the Federal Government (State Secretariat for Education, Research and Innovation 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.

Liquidity risk

The ETH Domain has processes and principles in place which guarantee that adequate liquidity is available to settle current and future obligations. This includes maintaining an adequate reserve of liquidity and tradeable securities.

Financial liabilities arise, most notably, from current operating liabilities and leasing liabilities. Under normal circumstances, expenses and investments are financed with self-generated funds. In some cases, investments are financed through lease agreements. Financial liabilities include a liability due to the donated right at EPFL (Microcity) which is recognised in the balance sheet. It is treated as a finance lease but does not represent a liquidity risk.

Table 57 shows the maturities of the financial liabilities.

The entities controlled by the institutions of the ETH Domain may raise funds on the financial market.

All financial liabilities are covered by liquidity and by short-term deposits with the Federal Government. Liquidity risk is low.

Table 57: Contractual maturities of the financial liabilities

CHF millions	Total carrying amount	Total contract value	Up to 1 year	1–5 years	More than 5 years
			31.12.2020		
Non-derivative financial liabilities					
Current liabilities	189	189	189	–	–
Leasing liabilities	276	379	17	68	294
Financial liabilities	77	77	9	19	48
Accrued expenses and deferred income	36	36	36	–	–
Derivative financial liabilities	**–**	**–**	**–**	**–**	**–**
Total	**578**	**681**	**251**	**87**	**342**
			31.12.2019		
Total previous period	**563**	**674**	**222**	**89**	**364**

Market risk

Interest rate and price risk

Interest rate risk is not hedged. A one percentage point increase or decrease in the interest rate would increase or reduce surplus or deficit by around CHF 18m.

The bonds under the asset management mandates are also taken into account in analysing interest rate risk. The other trading positions (excluding bonds) largely consist of equity funds holding both international and Swiss equities. A 10% decrease in price would reduce surplus or deficit by CHF 33m.

Most of the trading positions exposed to a price risk are held under asset management mandates with Swiss banks.

The ETH Board issued the investment guidelines based on Art. 34*c* paragraph 2 of the ETH Act (SR 414.110), which came into effect on 1 January 2008. The two Federal Institutes of Technology and the four research institutes defined their own investment strategies on this basis. A model is operated at ETH Zurich for the selection of the relevant portfolio optimised for the investment strategy of the asset management mandate. The risk capacity is determined using the value-at-risk approach. The investment strategy and the amount of the invested assets must be selected in such a way that sufficient risk capital is available or can be formed in order to cover the calculated value at risk. EPFL reviews the defined strategy quarterly.

Foreign currency risk

Most foreign currency receivables are in euros and US dollars; they are hedged using derivative financial instruments according to prevailing circumstances. Most foreign currency risks in asset management mandates are hedged. Net of hedges, a fluctuation in the exchange rate of these two currencies of +/– 10% would impact on the statement of financial performance as follows:

Table 58: Sensitivity to foreign currency risk

	31.12.2020					31.12.2019				
CHF millions	Total	CHF	EUR	USD	Other	Total	CHF	EUR	USD	Other
Net currency balance	**2,910**	**2,852**	**21**	**9**	**28**	**2,819**	**2,767**	**16**	**8**	**28**
Sensitivity affecting financial performance +/– 10%			2	1				2	1	
Closing rate			1.0817	0.8840				1.0866	0.9676	

The net currency balance for the other currencies category is primarily related to the asset management mandates and the consolidated entity in Singapore, controlled by ETH Zurich.

Capital management

Managed capital is defined as equity excluding valuation reserves. The ETH Domain seeks to create a solid equity base. This base will enable the implementation of the performance mandate to be guaranteed. Legal regulations prohibit the institutions of the ETH Domain and the ETH Board from raising funds in the capital market.

Estimation of fair value

Because of their short-term maturity, the carrying amount of cash and cash equivalents and the carrying amounts of current loans, fixed deposits, receivables and current liabilities are a reasonable approximation of fair value.

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

The fair value of available-for-sale financial assets is based on actual values, provided they can be determined reliably, or reflects their 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 and 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 falling due in the future, which are discounted at market interest rates.

Classes and categories of financial instruments, by carrying amount and fair value

Table 59: Classes and categories of financial instruments

CHF millions	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
	31.12.2020					
Cash and cash equivalents	1,968				1,968	1,968
Receivables from non-exchange transactions	1,588				1,588	1,588
Receivables from exchange transactions	60				60	60
Financial assets and loans	163	339	14		516	516
Prepaid expenses and accrued income	25				25	25
Financial liabilities *	–	–	–	578	578	578
	31.12.2019					
Financial assets **	3,744	283	13	–	4,041	4,041
Financial liabilities *	–	–	–	563	563	563

* Current liabilities, Leasing liabilities, Financial liabilities, Accrued expenses and deferred income

** Cash and cash equivalents, Receivables from non-exchange transactions, Receivables from exchange transactions, Financial assets and loans, Prepaid expenses and accrued income

The ETH Domain does not hold any held-to-maturity financial assets.

Hierarchy levels of the financial instruments measured at the fair value

Financial instruments measured at fair value are required to be disclosed within a three-level valuation hierarchy:

- Level 1: quoted prices in an active market for identical assets and liabilities;
- Level 2: valuation techniques where all significant inputs are based on observable market data;
- Level 3: valuation techniques where significant inputs are not based on observable market data.

Table 60: Fair value hierarchy

	31.12.2020				31.12.2019			
CHF millions	Carrying amount / fair value	Level 1	Level 2	Level 3	Carrying amount / fair value	Level 1	Level 2	Level 3
Financial assets	353	339	7	7	295	283	6	6
Financial liabilities	–	–	–	–	–	–	–	–

Net surplus or deficit by category

Table 61: Net surplus or deficit by category

CHF millions	31.12.2020 Loans and receivables	At fair value through surplus or deficit	Available for sale	Financial liabilities
Interest income (+) / interest expense (–)	5	–		–9
Income from investments		4	–	
Change in fair value		17		
Currency translation differences, net	–5	–		–
Impairments	–		–	
Reversal of impairment	–			
Gains and losses reclassified from equity to the statement of financial performance			–	
Net surplus or deficit recognised in the statement of financial performance	**–**	**21**	**1**	**–9**
Net surplus or deficit recognised in equity	**–**	**–**	**1**	**–**
Total net surplus or deficit by category	**–**	**21**	**1**	**–9**
	31.12.2019			
Total net surplus or deficit by category previous year	**1**	**35**	**2**	**–9**

Changes in fair value and interest expense of the financial liabilities have had the biggest impact on net income. Further information can be found in Note 15 Financial Result.

31 Contingent liabilities and contingent assets

Contingent liabilities

Table 62: Contingent liabilities

CHF millions	31.12.2020	31.12.2019	Change absolute
Guarantees	–	–	–
Warranties	1	1	–
Litigations	–	–	–
Other	248	260	–12
Total contingent liabilities	**249**	**261**	**–12**

There are still two warranties for the total amount of CHF 1m at EPFL to cover possible foreign customs demands within the scope of cross-border transactions. They are not limited by time.
EPFL shows the following other contingent liabilities:
- Biotech Campus: CHF 220m and repairs CHF 14m: EPFL, the University of Geneva and the Fondation Campus Biotech Geneva hold joint and several liability from leasing relationships until 30 June 2043.
- Joint and several liability in respect of rental payments for the AGORA building. This amount corresponds to the risk for EPFL if both parties (CHUV, UNIL) were to default (CHF 4m) by 31 May 2026.
- There continues to be a risk regarding the eligibility of certain project costs to be charged to the European Commission by 31 December 2021. An extrapolation of these facts led to an estimated maximum risk of CHF 9m.

ETH Zurich had other contingent liabilities of CHF 1m at the end of 2020 (previous year: none) in connection with the expenses of contractual partners that may have to be reimbursed to them.

ETH Zurich also has contingent liabilities that cannot be reliably quantified in the low single-digit million range due to a possible impending legal dispute and the associated costs.

Contingent assets

Table 63: Contingent assets

CHF millions	31.12.2020	31.12.2019	Change absolute
Off-balance sheet receivables	–	–	–
Other	–	–	–
Total contingent assets	**–**	**–**	**–**

ETH Zurich had two unquantifiable contingent assets at the end of 2020. These particularly entail a donation by Hansjörg Wyss for the Wyss Translational Center Zurich, as well as a donation relating to the remaining inheritance from Dr Branco Weiss for the Society in Science Programme (The Branco Weiss Fellowship) to support young researchers.

32 Financial commitments

Table 64: Financial commitments

CHF millions	31.12.2020	31.12.2019	Change absolute
Financial commitments <= 1 year	69	70	–1
Financial commitments from 1 to 5 years	25	11	14
Financial commitments > 5 years	1	–	1
No due date / indefinite	–	–	–
Total financial commitments	**95**	**81**	**14**

At the reporting date, the PSI had contractual obligations for the acquisition of goods and services in the amount of CHF 55m (of which CHF 40m short term and CHF 16m long term). The financial commitments relate, in particular, to various orders for plant construction projects in the area of SwissFEL / ATHOS, SLS 2.0, CHART and ESS.

At ETH Zurich, financial commitments in the amount of CHF 13m existed at the end of 2020, of which CHF 10m relates, in particular, to the ETH Library for the accessing of digital publications and CHF 3m is attributable to the acquisition of technical-scientific equipment.

Financial commitments for the acquisition of technical-scientific equipment have also been reported by EPFL (CHF 21m), Empa (CHF 5m) and Eawag (CHF 1m).

In addition, EPFL has contractually undertaken to bear the following costs:

- 40% of the cost of the Centre Wyss at the Wyss Center for Bio- and Neuroengineering Foundation in Geneva.
- Expenses for major maintenance work, as well as conversion and renovation costs for the interior fittings and operating facilities of the Microcity building in Neuchâtel.

33 Operating lease

Table 65: Operating lease

CHF millions	2020	2019	Change absolute
DUE DATES			
Due within 1 year	44	42	2
Due within 1 to 5 years	135	127	8
Due after more than 5 years	302	318	–17
Future minimum payments for non-cancellable operating lease as of 31.12.	**480**	**487**	**–6**
LEASING EXPENSES			
Minimum lease payments	43	36	7
Payments from subleasing	1	1	–
Leasing payments of current period	**44**	**37**	**7**
ADDITIONAL DETAILS			
Future revenue from sublease (from non-cancellable contracts)	3	4	–

In the reporting period, the lease agreements affected, in particular ETH Zurich (future minimum lease payments of CHF 212m, –CHF 2m), EPFL (future minimum lease payments of CHF 134m, –CHF 4m), the PSI (future minimum lease payments of CHF 130m, no change relative to the previous year) and Empa (future minimum lease payments of CHF 4m, no change relative to the previous year). This primarily involves the rental of various real estate. The PSI has a concluded lease agreement for office, laboratory and workshop space in a building yet to be completed (planned occupation from 1 January 2024 for a term of 23 years).

The leasing payments of the current period are mainly divided between ETH Zurich (CHF 32m), EPFL (CHF 9m) and Empa (CHF 2m).

34 Remuneration of key management personnel

Table 66: Remuneration of key management personnel (rounded values)

CHF millions	2020	2019	Change absolute
ETH Board	1	1	–
Directorate	2	2	–
Remuneration of key personnel	**3**	**3**	**–**

Table 67: Key personnel

Full-time equivalent	2020	2019	Change absolute
ETH Board *	2.20	1.89	0.31
Directorate **	6.08	6.00	0.08
Number of persons (in full-time positions)	**8.28**	**7.89**	**0.39**

* Workload: President of the ETH Board: 78% (prior year 60%), Vice President of the ETH Board: 16%, President Audit Committee: 16%, one member of the ETH Board: 70%, remaining four members of the ETH Board without management functions: 10% each

** Board members with management functions and the directors of the other research institutes.

35 Relationships with controlled and associated entities

Controlled entities

The following institutions, the ETH Board and the units listed in table 68 are fully consolidated.

Institutions and ETH Board:

- Board of the Federal Institutes of Technology (ETH Board), Zurich and Bern
- ETH Zurich, Zurich
- EPFL, Lausanne
- Paul Scherrer Institute (PSI), Villigen
- Swiss Federal Institute for Forest, Snow and Landscape Research (WSL), Birmensdorf and Davos
- Swiss Federal Laboratories for Materials Testing and Research (Empa), Dübendorf, St.Gallen and Thun
- Swiss Federal Institute of Aquatic Science and Technology (Eawag), Dübendorf and Kastanienbaum

Table 68: Controlled entities

	Legal form	Nature of collaboration / business activity	Domicile	Jurisdiction	Currency	Proportion of voting rights or participating share (in %) 31.12.2020[1]		Reporting date used
ETH Singapore SEC Ltd.	Ltd.	Strengthening of the global position of Switzerland and Singapore in the field of environment/sustainability and engaging in appropriate research cooperation	Singapore	Singapore	SGD	100	100	31.03.2020
Rübel Geobotanical Research Institute Foundation[2]	Foundation	Promoting geobotanical science (plant sociology, plant ecology, plant propagation, vegetation history)	Zurich	Switzerland	CHF	57	100	31.12.2019
Fondation pour les Etudiants de l' EPFL	Foundation	The foundation supports students at EPFL if their financial circumstances are making it much more difficult for them to complete their degree.	Lausanne	Switzerland	CHF	60	100	31.12.2020
EPFL Innovation Park Foundation	Foundation	The foundation owns and maintains buildings for promising start-ups (technology park).	Ecublens (VD)	Switzerland	CHF	42	100	31.12.2020
Société du Quartier de l'Innovation (SQIE)	Simple partnership	The simple partnership maintains buildings on a finance lease basis for larger technology companies.	Ecublens (VD)	Switzerland	CHF	100	100	31.12.2020
Société du Quartier Nord de l' EPFL (SQNE)[3]	Simple partnership	The simple partnership maintains various buildings on a finance lease basis and operates a convention centre, student halls of residences, shops and a hotel.	Ecublens (VD)	Switzerland	CHF	75	100	31.12.2020

1 With the exception of EPFL Innovation Park Foundation (45% of the voting rights in the previous year) and Société du Quartier Nord de l'EPFL (80% of the voting rights in the previous year), the figures are unchanged compared to the previous year.

2 The remaining 43% of the voting rights in the Rübel Geobotanical Research Institute Foundation are held by people determined by the founder.
However, ETH Zurich has a 100% share in the capital of the foundation.

3 EPFL has a stake of 100% in SQNE. EPFL has a direct holding of 90% and an indirect holding of 5% through the fully consolidated EPFL Innovation Park Foundation. The other 5% is held by the associated entity Foundation Les Bois Chamblard in which EPFL holds a substantial interest with a stake of 100%. Due to the interest of 100% in the Foundation Les Bois Chamblard, SQNE is fully consolidated without consideration and presentation of non-controlling interests.

Associated entities

All associated entities listed are entered in the balance sheet on the basis of the equity method.

Table 69: Associated entities

	Legal form	Nature of collaboration / business activity	Domicile	Jurisdiction	Currency	Proportion of voting rights or participating share (in %) 31.12.2020[1]	
ETH Zurich Foundation[2]	Foundation	Promoting research and teaching at the Swiss Federal Institute of Technology Zurich	Zurich	Switzerland	CHF	15	100
Albert Lück Foundation	Foundation	Promoting teaching, research and study in the field of building and construction at ETH Zurich, initially in the current Department of Civil, Environmental and Geomatic Engineering and in its successor unit	Zurich	Switzerland	CHF	20	100
Student Housing Foundation	Foundation	Providing and operating low-cost housing for students in Zurich	Zurich	Switzerland	CHF	22	50
Archives of Contemporary History Foundation	Foundation	Promoting, safeguarding the long-term existence of and extending ETH Zurich's Archives of Contemporary History as a documentation and research centre for general and Swiss contemporary history	Zurich	Switzerland	CHF	43	100
Foundation for Contemporary Jewish History	Foundation	Setting up and promoting a documentation centre for contemporary Jewish history within ETH Zurich's Archives of Contemporary History	Zurich	Switzerland	CHF	25	100
Fondation Les Bois Chamblard	Foundation	The foundation provides infrastructure for the organisation of workshops and conferences.	Buchillon	Switzerland	CHF	20	100
Fondation Campus Biotech Geneva	Foundation	The Biotech Campus is a centre of excellence in biotechnology and in life science research.	Geneva	Switzerland	CHF	25	50
Fondation du Centre universitaire protestant de Lausanne	Foundation	The foundation provides accommodation for students from EPFL and from the University of Lausanne.	Lausanne	Switzerland	CHF	33	60
Fondation "Institut d'Imagerie Moléculaire Translationnelle IIMT"	Foundation	The foundation contributes to the development of new programmes in translational research and technological innovation in the area of molecular imaging.	Geneva	Switzerland	CHF	50	50
DECTRIS LTD	Public limited company	Development and production of electronic measuring instruments for scientific and industrial applications	Baden	Switzerland	CHF	21	21

1 With the exception of the Foundation for Contemporary Jewish History (20% of the voting rights in the previous year) and the Fondation du Centre universitaire protestant de Lausanne (43% of the voting rights in the previous year), the figures are unchanged compared to the previous year.

2 Even though ETH Zurich has less than 20% of the voting rights in the ETH Zurich Foundation, ETH Zurich can still exercise considerable influence over the foundation and is also the sole beneficiary. For this reason, the ETH Zurich Foundation has been classified as an associated entity.

Restrictions

The ETH Domain does not have any access rights to the assets of the controlled or associated entities listed above. For instance, it cannot arrange a transfer of liquidity or access the funds of the units in any other way.

Controlled and associated entities under the threshold according to the Ordinance on Finance and Accounting of the ETH Domain (OFA)

Details about the consolidation are specified in the Ordinance on Finance and Accounting of the ETH Domain. This Ordinance also defines thresholds to be taken into account in the consolidated financial statements. Units which meet the criteria for consolidation or for equity valuation but which come under these thresholds are to be disclosed as follows in accordance with Note 2 of the Ordinance on Finance and Accounting of the ETH Domain and are excluded from the consolidated financial statements of the ETH Domain:

Table 70: Entities below the thresholds according to the Finance and Accounting Regulations of the ETH Domain

	31.12.2020	31.12.2019
Controlled entities		
Quantity	9	9
Total assets (CHF million)	20	20
Associated entities		
Quantity	15	15
Total assets (CHF million)	62	51

36 Events after the balance sheet date

The ETH Board agreed the 2020 consolidated financial statements of the ETH Domain on 4 March 2021. No significant events have occurred prior to that date in the ETH Domain that would necessitate any disclosure regarding the consolidated financial statements of the ETH Domain as of 31 December 2020 or any adjustment thereto.

Auditors' report

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

Reg. Nr. 1.20547.932.00348.002

Report of the statutory auditor

to the Federal Council and the ETH Board

Consolidated financial statements of the Domain of the Swiss Federal Institutes of Technology for the year 2020

Report on the audit of the consolidated financial statements

Opinion

We have audited the consolidated financial statements of the Domain of the Swiss Federal Institutes of Technology (ETH Domain) which comprise the consolidated statement of financial performance 2020, the consolidated balance sheet as of 31 December 2020, 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.

In our opinion the consolidated financial statements (pages 12 to 75) present fairly, in all material respects, the consolidated financial position of the ETH Domain as of 31 December 2020, 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 35a^{ter} 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 Audit Office Act (SR 614.0) and the requirements of the audit profession 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 ETH Board 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 ETH Board for the consolidated financial statements

The ETH Board 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 ETH 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 ETH Board is responsible for assessing the ETH Domain'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 ETH Domain'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 ETH Board'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 ETH Domain'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 ETH Domain 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 ETH Domain 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 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 Audit Office 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, 4 March 2021

SWISS FEDERAL AUDIT OFFICE

Eric-Serge Jeannet
Licensed audit expert

Martin Köhli
Licensed audit expert

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Rounding differences: the figures presented in this document may not correspond precisely to the total amounts presented in the tables. Changes are calculated on unrounded amounts and may differ from a figure that is based on the rounded amounts presented in the tables.

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