



ETH BOARD

FINANCIAL REPORT OF THE ETH BOARD ON THE ETH DOMAIN 2021

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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Report on the 2021 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 108 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 79 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 immovable assets owned by the ETH Domain, most of which are leasehold improvements, were financed from the federal financial contribution and form part of the consolidated financial statements.

Comparability with previous years

The 2021 financial statements do not contain any fundamental changes and are comparable with previous years. An exception here are the net pension costs and net defined benefit liabilities. At the end of 2020, extended risk sharing was introduced in accordance with IPSAS standard 39 for net defined benefit liabilities. The effects from risk sharing and the adjustment of the actuarial assumptions are explained on page 5 (Net defined benefit liabilities).

Since 1 January 2017, all the entities have been included which are controlled by or are 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 number of entities that are controlled or can be significantly influenced has remained unchanged since 2017.

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

Key developments in 2021 at a glance

In the reporting period, it was possible to carry out research activities almost like before the pandemic and further significant investments were made. In line with the Federal Council's strategic objectives for the ETH Domain, the 2021 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.
- Salaries and wages and other operating expenses increased.
- Depreciation remained at a high level due to the investments made in previous years.
- There was a reduction in liquidity due to high expenses.

Higher revenue from third-party funding contributed to the positive operating result of CHF 56m. The effects from the calculation of the net defined benefit liabilities had the effect of reducing expenses, in contrast to the previous year (see below). The annual surplus of CHF 110m (2020: CHF 41m) again included 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 2021 annual financial statements can only be understood if these effects are taken into consideration:

1. The increase in the discount rate (CHF 168m) and the adjustment of demographic assumptions (CHF 247m) led to revaluation gains recognised in equity and a reduction in the **defined benefit obligations**. Losses based on experience reduced the revaluation gains by CHF 283m.
2. Plan **assets** increased primarily due to the positive investment return, with CHF 331m being recognised in equity.
3. Overall, the changes in assumptions led to a revaluation gain recognised in **equity** of CHF 449m (amount of positive valuation reserves as at 31 December 2021: CHF 417m). The net defined benefit liabilities themselves fell by CHF 473m.
4. The **net pension costs** (change of –CHF 122m) as per IPSAS 39 are based on the assumptions from the previous year. As the switch to risk sharing was implemented at the end of 2020, this did not impact the statement of financial performance until 2021. Together with the increase in the discount rate, this led to a considerable reduction in expenses.

Statement of financial performance

CHF millions	2021	2020	2019	2018
Operating revenue	3,697	3,680	3,676	3,714
Changes to previous year	0%	0%	-1%	0%
Operating expenses	3,641	3,682	3,637	3,631
Changes to previous year	-1%	1%	0%	3%
NET FINANCE INCOME / EXPENSE	26	11	28	-22
SURPLUS (+) OR DEFICIT (-)	110	41	140	50
Third-party funds relative to total revenue	31%	30%	31%	29%
Personnel expenses relative to total revenue	65%	67%	63%	63%

Operating revenue and total revenue

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

Operating revenue increased slightly relative to the previous year to CHF 3,697m (+CHF 17m). **Total revenue**, which also includes net finance income and income from investments, was CHF 3,751m (previous year: CHF 3,723m, +CHF 28m).

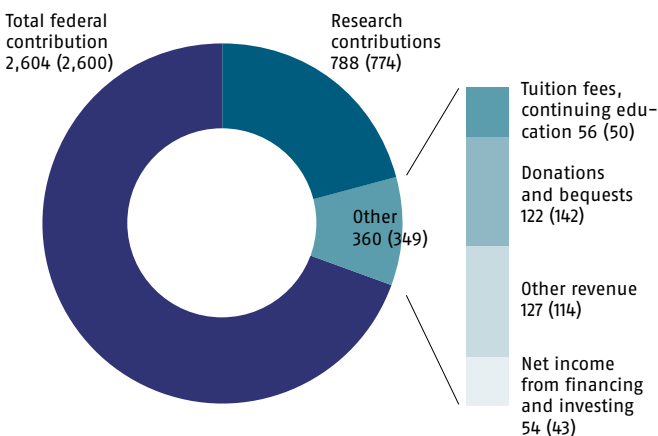
Federal financing, the total **federal contribution** (see Note 7), is the main component of the operating revenue. It consisted of the federal financial contribution of CHF 2,373m (2020: CHF 2,355m) and the federal contribution to accommodation of CHF 230m (2020: CHF 244m). Compared to the previous year, the increase amounted to CHF 4m.

Revenue from third-party funding (see Notes 8, 9, 10, 11,15 and 20) increased by CHF 24m or 2%. It totalled CHF 1,148m in absolute terms, accounting for almost 31% of total revenue in the reporting period. The increase in revenue from third-party funding is related to the higher research contributions, the rise in service revenue and the improvement in net finance income.

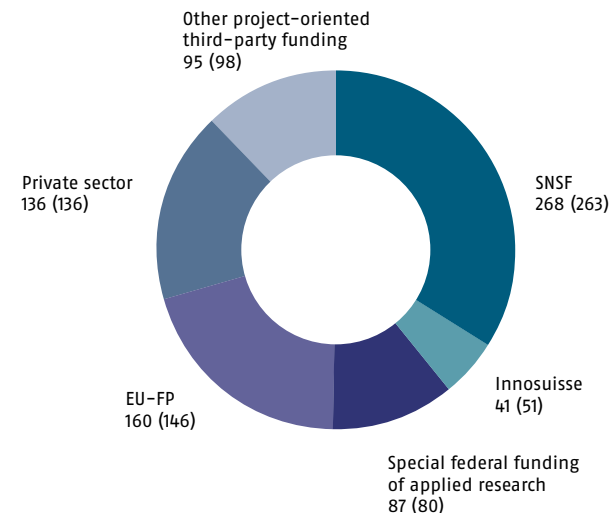
Revenue from research contributions, mandates and scientific services exceeded the prior-year level at CHF 788m (2020: CHF 774m). With a share of 21%, which is in line with the level seen in previous years, it is the second most important component of the operating revenue. These are mainly multi-year 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.

In the reporting period, there was a high level of project progress with respect to the **EU Framework Programme for Research and Innovation (EU-FP)** (Horizon 2020, ERC Grants), with revenue

Total revenue in 2021 in CHF m
CHF 3,751m (previous year: CHF 3,723m)



Research contributions in 2021 in CHF m
CHF 788m (previous year: CHF 774m)



increasing by CHF 14m relative to the previous year. Project delays from the previous year owing to the pandemic were made up.

The funding of research projects of the **Swiss National Science Foundation (SNSF)** is at a high level of implementation and, in terms of revenue, was CHF 5m above the prior-year figure. The two Federal Institutes of Technology are either leading house or co-leading house in 13 out of 22 of the current National Centres of Competence in Research (NCCRs), and the research institutes are also participating in them. Researchers from the institutions of the ETH Domain are also actively taking part in the National Research Programmes (NRPs).

Varying trends in revenue were observed for **special federal funding of applied research**. Overall, revenue increased by CHF 7m compared to 2020, namely in the area of contract research. While project progress led to higher revenue at ETH Zurich and EPFL, revenue declined at the PSI, in particular. The decrease in revenue at WSL is related to the FOEN contribution for the avalanche warning system (CHF 3m), which is now accounted for via the total federal contribution. WSL generates a significant share of its operating revenue with research mandates from government agencies.

Revenue from **cooperation with the private sector** remained stable relative to the previous year. While revenue increased at EPFL, with projects being funded by Fondation Botnar, amongst others, revenue at the PSI declined owing to the impact of the pandemic.

In terms of **other project-oriented third-party funding** (–CHF 3m), revenue declined at ETH Zurich, Empa and Eawag. In contrast, EPFL recorded a significant increase in revenue, which can be attributed to the invoiced project progress for the Stahlberg Chair and the Dubochet Center with the University of Lausanne. The revenue of WSL also includes financial resources from the Canton of Graubünden for the new Climate Change, Extreme Events and Natural Hazards in Alpine Regions Research Centre (CERC) in Davos.

The conclusion of the projects of the Swiss Competence Centers for Energy Research (SCCERs), which were regulated and financed by Innosuisse until 2020, is reflected in the lower income during the reporting period (–CHF 9m). The projects from the new Innosuisse “Flagship” initiative are only in the initial phase and therefore still only generated little revenue.

Third-party funding also includes the following components:

Revenue from **donations and bequests** totalled CHF 122m (2020: CHF 142m). The growth in the number of students and the gradual increase in tuition fees was reflected, amongst other things, in higher revenue from **tuition fees, continuing education** (2021: CHF 56m; 2020: CHF 50m). In terms of **other revenue**, the recovery in service revenue following the pandemic-related decline in the previous year contributed to the increase (2021: CHF 127m; 2020: CHF 114m). Positive net finance income increased (2021: CHF 26m; 2020: CHF 11m), while the share of surplus of the associated entities declined (2021: CHF 28m; 2020: CHF 32m).

Obtained grants

The analysis of the balance sheet, which is explained below, and the diagram on page 8 show that receivables have increased, while dedicated third-party funds in 2021 remained roughly at the previous year's level. It can be deduced from this that revenue from research contributions should remain at roughly the current high level for the next year or two. The SNSF, EU-FP and Innosuisse grants obtained in the reporting period decreased, which may have an impact on future revenue volumes in the medium term. In 2021, obtained grants totalled CHF 388m* (total in 2020: CHF 468m; 2019: CHF 443m and 2018 CHF 512m). The SNSF committed CHF 222m to the ETH Domain, 7% down on the previous year. Amongst other factors, there were no comparable calls to those of previous years (e.g. NCCRs). The uptrend for projects funded by Innosuisse continued: +CHF 5m. The considerable decline of CHF 69m in the commitments of EU-FPs clearly shows, amongst other things, the difficult position with respect to acquiring EU grants (Horizon Europe, Switzerland as a non-associated third country). While the transitional and complementary measures of the Federal Government should have a positive effect on the allocation of research funding, further developments must be awaited.

* 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 but leads to excellence and takes Switzerland and science a step further.

Operating expenses

Operating expenses decreased by CHF 41m to CHF 3,641m in the reporting period. This decline is largely attributable to personnel expenses (net pension costs).

Personnel **expenses** is the largest item of expense (2021: 65%; 2020: 67%). Compared to the previous year, it fell by a total of CHF 64m to CHF 2,426m. The increase in salaries and wages (+CHF 53m) was more than offset by the lower net pension costs (-CHF 122m).

The higher salaries and wages resulted from, in particular, the rise in the percentage of FTEs. The average headcount in the whole ETH Domain in 2021 was 19,867 full-time equivalents (FTEs), excluding apprentices. This is 3% up on the previous year's figure of 19,361 FTEs*. Net pension costs were well down on the prior-year figure. As risk sharing was introduced at the end of 2020, it was first taken into account in net pension costs in 2021, resulting in a decline relative to the previous year (see also explanations above in the section on net defined benefit liabilities).

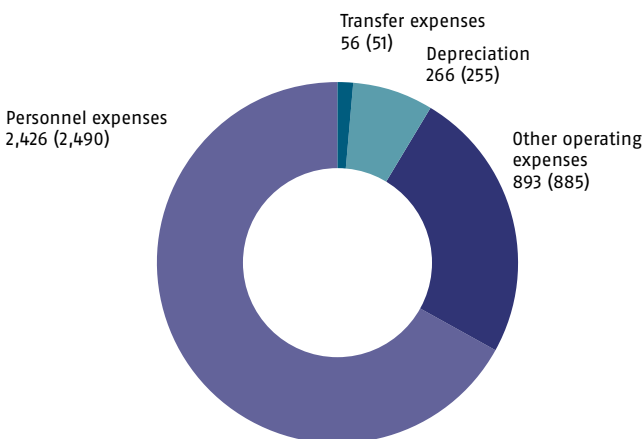
Other **operating expenses** were thus slightly higher than in the previous year at CHF 893m (2020: CHF 885m), but still lower than before the coronavirus pandemic (2019: CHF 935m). The increase can be attributed to a further increase in business activities and the resulting operating costs, as well as to generally higher material purchase prices. 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. This amounted to CHF 1m (2020: CHF 2m) and is included in other operating expenses.

At CHF 266m, **depreciation** remained high (2020: CHF 255m). In particular, higher depreciation was recorded for leasehold improvements in the reporting period. The volume of depreciation continues to be determined by the extensive investments in strategically relevant large-scale research facilities and technical equipment.

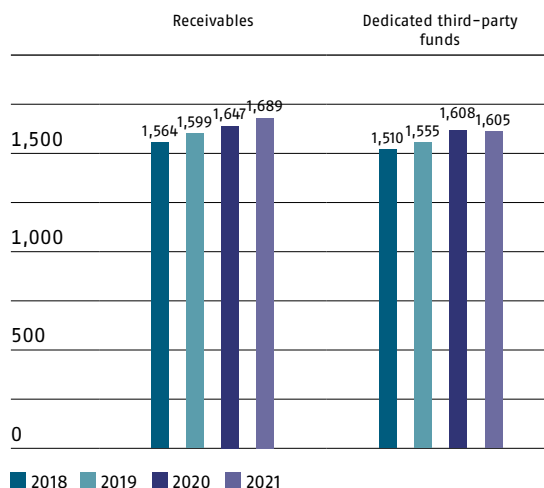
Transfer expenses increased due to higher contributions to scholarships and grants to students and doctoral students (2021: CHF 56m; 2020: CHF 51m).

* The Annual Report does not show the annual average value but the year-end figure. This is 20,533.8 FTEs (including apprentices). The figure in the Annual Report also excludes the FTEs of the controlled entities.

Operating expenses in 2021 in CHF m
CHF 3,641m (previous year: CHF 3,682m)



Receivables and dedicated third-party funds



Consolidated balance sheet

CHF millions	31.12.2021	31.12.2020	31.12.2019	31.12.2018
Current assets	3,143	3,181	3,099	2,913
Non-current assets	3,518	3,412	3,272	3,354
TOTAL ASSETS	6,661	6,592	6,371	6,267
Liabilities	3,616	4,106	5,370	5,261
Equity	3,045	2,486	1,001	1,006
TOTAL LIABILITIES AND EQUITY	6,661	6,592	6,371	6,267

The total assets for the ETH Domain were up CHF 69m or 1% on the previous year. The increase resulted, in particular, from the rise in property, plant and equipment, receivables and financial assets. The level of cash and cash equivalents decreased.

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 2021, receivables irrespective of maturity amounted to CHF 1,689m (2020: CHF 1,647m). 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 2021 were matched by dedicated third-party funds of CHF 1,605m (2020: CHF 1,608m). The latter remained stable compared to the previous year. The amount shows that at the end of 2021 the volume of projects or research available for which services still have to be provided in the coming years was the same as in the previous year.

Property, plant and equipment

The balance sheet value of property, plant and equipment stood at CHF 2,032m at the end of 2021, up CHF 65m. In 2021, CHF 329m was capitalised in property, plant and equipment (additions to fixed assets schedule), CHF 9m 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 29m reflects the aggregated, proportionate surplus / deficit of the associated entities in the reporting period. It was mainly due to net finance income at the ETH Zurich Foundation.

Financial assets and loans

Financial assets and loans with a balance of CHF 552m (2020: CHF 516m) include third-party funds received that are not used immediately.

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 162m of the total financial assets were invested with the Federal Government, and CHF 371m with financial institutions. CHF 8m 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 30m as asset management mandates benefited from the good performance on the financial markets.

Provisions

Provisions totalling CHF 709m (2020: CHF 718m) include provisions set aside for the dismantling of the accelerator facilities and the disposal of radioactive waste at the PSI amounting to CHF 540m (2020: CHF 542m).

Equity

In the reporting period, an adjustment was made to the structure and recognition of equity in order to clarify the difference between reserves with external dedication and reserves with internal dedication. These adjustments are being made to meet the needs of the owner. The amended specifications led to a retroactive adjustment of the figures as at 1 January 2020 and 31 December 2020. These were exclusively reclassifications between the various items under equity.

Total equity is therefore comparable to the previous year. It increased again in the reporting period largely due to the increase in the revaluation reserve from net defined benefit liabilities (+CHF 449m, see explanations on page 5 in the section on net defined benefit liabilities). The annual surplus stood at CHF 110m, meaning that equity ultimately amounted to CHF 3,045m, CHF 559m more than in the previous year.

The funds in the newly defined category "donations, grants, co-financing" are chiefly earmarked for external purposes, meaning they are used in accordance with the specifications of the funding providers. In the reporting period, they increased by CHF 46m to CHF 953m. This was due to the fact that more new contracts were concluded than funds were used as well as thanks to the positive results generated from the asset management mandates for third-party funds.

The reduction in reserves without dedication (-CHF 101m to CHF 575m) was related to the promotion of strategic initiatives and projects by management bodies as well as, in particular, their use for and the coverage of operating activities. As was the case in the previous year, a significant share of the total federal contribution was invested in movable and immovable property, plant and equipment. As a result, there were fewer funds available for operating activities, which contributed to the decline in this reserve category.

Reserves with internal dedication were reduced in the reporting period, especially at ETH Zurich, as a result of funds being used for ongoing projects (ETH+/Open ETH, at the ETH-PSI Center for Quantum Computing and for the procurement of equipment at the CSCS for the national Higher Performance Computing and Networking Strategy (HPCN Strategy)). Funds saved for infrastructure projects were appropriated for WSL (construction progress at the building in Davos) and Empa (Empa-Eawag research campus). In contrast, an increase was recorded due to approved financial commitments, in particular at EPFL, for example for the initial financing of professors in two faculties, and at WSL for funds saved for the replacement of the workshop in Birmensdorf. An increase in this reserve category was also seen at the PSI thanks to the funds already received for orders made for the SLS 2.0 upgrade. Reserves with internal dedication increased CHF 21m to CHF 786m on a net basis.

The reserves in the ETH Domain are actively managed. Their targeted appropriation for setting strategic focal points in teaching and research and realising large-scale research infrastructure is integrated into the institutions' budgeting and planning processes. This ensures that the reserves and all funds can be appropriated in the ETH Domain in a sustainable manner in accordance with the strategy.

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

Consolidated cash flow statement

In the 2021 reporting period, **the total cash flow from operating activities** was CHF 198m (2020: CHF 354m). It was composed of the surplus of CHF 110m 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 2021 amounted to CHF 348m (2020: CHF 394m). At CHF 289m (2020: CHF 306m), 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 2021 investment programme:

- ETH Zurich: Significant investments were made in the area of moveable property, plant and equipment for technical-scientific equipment such as the Infiniium UXR oscilloscope (financed with third-party funding) and the JEM-F200 spectrometer (total CHF 3m). In the area of information and communication technology, advance payments were made at the CSCS for the new high-performance computer for a total of CHF 19m and a server system for the expansion of the Euler Cluster (Euler VII) was purchased for around CHF 3m. In terms of immovable non-current assets, ETH Zurich again recorded significant additions with respect to leasehold improvements and assets under construction, primarily due to continued strong construction activity. At the new BSS site in Basel (systems biology and synthetic biology), CHF 19m was invested in the leasehold improvements. Further notable leasehold improvements included the renovation of the HPM Kopfbau building (biochemistry and molecular systems biology, ScopeM technology platform, CHF 14m), the renovation and expansion of the HIF building (civil engineering, CHF 8m), the new Gloristrasse building (health sciences and medical technology, CHF 5m) and the expansion of the upper floors of the Andresturm building in Zurich-Oerlikon (centre for AI research, CHF 4m).
- EPFL: The largest acquisitions in the area of movable property, plant and equipment related to specific technical-scientific equipment for the Duboche Center, including the two "Titan Krios G4 (300 kV)" (CHF 8m) and "Glacios (200 kV)" (CHF 1m) transmission electron microscopes, which were financed with third-party funding. In the area of information technology hardware, EPLF invested CHF 6m (of which CHF 4m in third-party funding) in three further server systems for the Center of Micronano Technology, the Blue Brain Project and the Information Technology Infrastructure service. In terms of immovable assets, further investments were made in leasehold improvements at various buildings (five projects with an investment volume of CHF 4m).
- PSI: The majority of the acquisitions were invested in technical equipment such as the user-specific expansion of the large-scale research facilities SwissFEL (ATHOS beamline and experimental end station, CHF 8m) and SLS (SLS 2.0 upgrade, CHF 6m).
- WSL: Acquisition of various analytical instruments for a total of CHF 1m.
- Empa: Worthy of note are the additional expansions for the NEST research and innovation building in the amount of CHF 3m (construction of the "HiLo" and "SPRINT" units). A 3D metal printer was also procured for CHF 1m. In the reporting period, leasehold improvements were also made for the expansion of the "NO" building in the amount of CHF 3m.
- Eawag: Procurement of various pieces of scientific equipment. Leasehold improvements for the interior fittings of the new "Flux" laboratory and office building were also carried out in an amount of CHF 2m.

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

Cash and cash equivalents declined by CHF 106m compared to the previous year.

Consolidated financial statements

Consolidated statement of financial performance

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

CHF millions	Notes	Budget 2021	Actual 2021	Actual 2020	Change to Actual absolute
Federal financial contribution		2,373	2,373	2,355	18
Federal contribution to accommodation		230	230	244	-14
Total federal contribution	7	2,604	2,604	2,600	4
Tuition fees, continuing education	8	56	56	50	6
Swiss National Science Foundation (SNSF)		270	268	263	5
Swiss Innovation Agency (Innosuisse)		51	41	51	-9
Special federal funding of applied research		84	87	80	7
EU Framework Programmes for Research and Innovation (EU-FPs)		156	160	146	14
Industry-oriented research (private sector)		151	136	136	-
Other project-oriented third-party funding (incl. cantons, municipalities, international organisations)		85	95	98	-3
Research contributions, mandates and scientific services	9	798	788	774	14
Donations and bequests	10	79	122	142	-19
Other revenue	11	122	127	114	13
Operating revenue		3,658	3,697	3,680	17
Personnel expenses	5, 12, 28	2,343	2,426	2,490	-64
Other operating expenses	13	958	893	885	8
Depreciation	21, 23	252	266	255	11
Transfer expenses	14	149	56	51	4
Operating expenses		3,702	3,641	3,682	-41
OPERATING RESULT		-44	56	-3	59
NET FINANCE INCOME / EXPENSE	15	-3	26	11	15
Share of surplus / deficit of associated entities and joint ventures	20	-	28	32	-4
SURPLUS (+) OR DEFICIT (-)		-47	110	41	69

Consolidated balance sheet

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

CHF millions	Notes	31.12.2021	31.12.2020	Change absolute
CURRENT ASSETS				
Cash and cash equivalents	16	1,862	1,968	-106
Current receivables from non-exchange transactions	17	637	616	21
Current receivables from exchange transactions	17	73	60	14
Current financial assets and loans	22	488	464	25
Inventories	18	12	10	2
Prepaid expenses and accrued income	19	70	63	7
Total current assets		3,143	3,181	-38
NON-CURRENT ASSETS				
Property, plant and equipment	21	2,032	1,967	65
Intangible assets	21	60	62	-2
Non-current receivables from non-exchange transactions	17	979	971	7
Non-current receivables from exchange transactions	17	-	-	-
Investments in associated entities and joint ventures	20	271	242	29
Non-current financial assets and loans	22	64	52	12
Co-financing	23	114	118	-5
Total non-current assets		3,518	3,412	106
TOTAL ASSETS		6,661	6,592	69
LIABILITIES				
Current liabilities	24	168	189	-21
Current financial liabilities	25	14	19	-4
Accrued expenses and deferred income	26	179	151	28
Short-term provisions	27	105	108	-3
Short-term liabilities		466	467	-1
Dedicated third-party funds	29	1,605	1,608	-3
Non-current financial liabilities	25	327	335	-8
Net defined benefit liabilities	28	615	1,087	-473
Long-term provisions	27	604	610	-6
Long-term liabilities		3,150	3,640	-489
Total liabilities		3,616	4,106	-490
EQUITY				
Valuation reserves		424	-27	452
Reserves from associated entities	20	271	242	29
Donations, grants, co-financing*		953	912	42
Other equity*		1,397	1,360	37
Total equity		3,045	2,486	559
TOTAL LIABILITIES AND EQUITY		6,661	6,592	69

* The 2020 values do not correspond to the values published in the Financial Report 2020. They have been restated due to the retrospective amendment of the accounting and recognition requirements for the reserve categories newly defined in 2021. See the section "Restatement of prior-year figures" in Annex 2.

Consolidated statement of changes in equity

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

CHF millions	Valuation reserves	Reserves from associated entities	Donations, grants, co-financing	Other equity					Total equity
				Teaching and research reserves	Infrastructure and administration reserves	Reserves with internal dedication	Reserves without dedication	Accumulated surplus (+) / deficit (-)	
2020									
Value as of 01.01.2020*	-1,470	208	861	606	96	702	770	-70	1,001
<i>Items directly recognised in equity:</i>									
Revaluation of financial assets	1								1
Revaluation of defined benefit liability	1,442								1,442
Changes in investments in associated entities		2						-	2
Total items directly recognised in equity	1,442	2						-	1,445
Surplus (+) or deficit (-)								41	41
Increase (+) / decrease (-) in reserves**	-	32	51	47	16	64	-94	-52	-
Currency translations								-	-
Total changes	1,442	34	51	47	16	64	-94	-11	1,485
Value as of 31.12.2020**	-27	242	912	653	113	766	676	-81	2,486
2021									
Changes from restatement as of 01.01.***	-	-	-4	-	-	-	-	-	-4
Value as of 01.01.2021	-27	242	907	653	113	766	676	-81	2,482
<i>Items directly recognised in equity:</i>									
Revaluation of financial assets	3								3
Revaluation of defined benefit liability	449								449
Changes in investments in associated entities		1						-	1
Total items directly recognised in equity	452	1						-	453
Surplus (+) or deficit (-)								110	110
Transfers in current period		27	46					-73	-
Transfer of reserves with internal dedication				21	-1	21	-21		-
Appropriation of reserves							-80	80	-
Currency translations								-	-
Total changes	452	29	46	21	-1	21	-101	117	563
Value as of 31.12.2021	424	271	953	674	112	786	575	36	3,045

* The figures as of 1 January 2020 show the values after restatement, meaning that they do not correspond to the values published in the Financial Report 2020. Details on the restatement as of 1 January 2020 can be found in Annex 2 in the section "Restatement of prior-year figures", especially Table 5.

** The 2020 values / values as of 31 December 2020 do not correspond to the values published in the Financial Report 2020. They have been restated due to the amended accounting and recognition requirements for the reserve categories newly defined in 2021.

*** Relates to a reclassification from the donations to liabilities.

Equity increased in the reporting period from CHF 2,486m to CHF 3,045m. Two factors, in particular, led to the increase in equity of CHF 559m: an increase in the revaluation reserves from net defined benefit liabilities of CHF 449m and the annual surplus of CHF 110m.

The changes from restatement as of 1 January 2020 are connected to the changed accounting and recognition requirements for the new reserve categories defined in 2021 (see Note 2).

Valuation reserves

The main components of the valuation reserves comprise the accumulated actuarial and investment net gains on defined benefit pension plans (CHF 417m). The revaluation gain of CHF 449m recorded during the reporting period can be attributed to the changes in financial (especially the discount rate) and demographic assumptions as well as a positive return on investments (for details, see Note 28 Net defined benefit liabilities).

The revaluation reserves for financial assets according to IPSAS 29 have risen by CHF 3m to CHF 7m. As hedge accounting is not applied in the ETH Domain, there are also no items recognised under the reserves from hedging transactions.

Donations, grants, co-financing

Donations, grants, co-financing increased by CHF 46m. This was due to the fact that more new contracts were concluded than funds were used as well as thanks to the positive results generated from the asset management mandates.

Reserves with internal dedication

Reserves with internal dedication include financial commitments made by the governing bodies (ETH Board, Executive Boards and directorates) for the promotion of strategic initiatives and projects, also including federal funds received but not yet used for the strategic focus areas and research infrastructures. The total increase was CHF 21m. Appointment commitments in the amount of CHF 129m (2020: 131m) of ETH Zurich were included in the total figure at the end of 2021.

New commitments were recorded at EPFL, including for the initial financing of professors in several faculties, while the volume of commitments at the PSI increased due to the funds already received for orders placed for the SLS 2.0 upgrade. At WSL, the funds saved for the replacement of the workshop in Birmensdorf were allocated to this reserve category. On the other hand, reserve funds were appropriated in connection with the construction progress of the WSL "New Building D" in Davos and the Empa research campus. Reserves were also reduced at ETH Zurich as a result of funds being used for project progress at ETH+/Open ETH, at the ETH-PSI Center for Quantum Computing and for the procurement of equipment at the CSCS for the national Higher Performance Computing and Networking Strategy (HPCN Strategy).

Reserves without dedication

Reserves without dedication were reduced by CHF 101m in the reporting period. The reduction was related to the promotion of strategic initiatives and projects by management bodies and additionally required funds for the coverage of operating activities. As was the case in the previous year, a significant share of the total federal contribution was invested in movable and immovable property, plant and equipment. As a result, there were fewer funds available for operating activities, which contributed to the decline in the reserves.

Accumulated surplus / deficit

The accumulated surplus of CHF 36m as of 31 December 2021 is the total residual amount of total equity less the equity items shown separately. It includes the undistributed earnings (surplus) from previous years, the negative restatement from the transition and adjustments to IPSAS, the increase/decrease in donations, grants, co-financing, the reserves from associated entities and the appropriation of reserves during the year.

Consolidated cash flow statement

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

CHF millions	Notes	2021	2020	Change absolute
CASH FLOWS FROM OPERATING ACTIVITIES				
Surplus (+) or deficit (-)		110	41	69
Depreciation	21, 23	266	255	11
Share of surplus/deficit of associated entities and joint ventures	20	-28	-32	4
Net finance income/expense (non-cash)	15	-31	-29	-2
Increase/decrease in net working capital		-40	6	-45
Increase/decrease in net defined benefit liabilities	28	-24	106	-130
Increase/decrease in provisions	27	-9	-5	-3
Increase/decrease in non-current receivables	17	-4	-46	41
Increase/decrease in dedicated third-party funds	29	-5	71	-76
Reclassification and other (non-cash) income		-37	-13	-24
Cash flows from operating activities		198	354	-156
CASH FLOWS FROM INVESTING ACTIVITIES				
Investments				
Purchase of property, plant and equipment	21	-289	-306	17
Purchase of intangible assets	21	-4	-5	-
Increase in co-financing	23	-	-	-
Increase in loans	22	-	-	-
Increase in current and non-current financial assets	22	-54	-83	29
Total investments		-348	-394	46
Divestments				
Disposal of property, plant and equipment	21	1	1	-
Disposal of intangible assets	21	-	-	-
Decrease in co-financing	23	-	-	-
Decrease in loans	22	1	-	-
Decrease in current and non-current financial assets	22	52	1,066	-1,015
Total divestments		53	1,067	-1,014
Dividends received from associated entities and Joint Ventures	20	1	-	1
Cash flows from investing activities		-295	674	-968
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	1
Cash flows from financing activities		-10	-9	-
Total cash flow		-106	1,019	-1,124
Cash and cash equivalents at the beginning of the period	16	1,968	950	1,018
Total cash flow		-106	1,019	
Cash and cash equivalents at the end of the period	16	1,862	1,968	-106
Net effect of currency translation on cash and cash equivalents		-	-	-
Contained in the cash flows from operating activities:				
Dividends received		5	4	1
Interest received		-	-	-
Interest paid		-8	-8	-

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 2021 to 31 December 2021. The reporting date is 31 December 2021. 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 6.6)

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	01.01.2023
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.

IPSAS 41 introduces changes in the valuation, classification and impairment of financial instruments. The ETH Domain does not expect any significant impact from the reclassification and application of the new valuation rules. Due to the introduction of the new expected credit loss model under IPSAS 41, a slight increase in impairments on receivables is conceivable. The ETH Domain plans to implement the new standard early as of 1 January 2022 (with no adjustment to the prior year's figures).

There are no further changes or interpretations which are not yet compulsory in their application and which would have a significant impact on the ETH Domain.

Restatement of prior-year figures

During the reporting period, an adjustment was made to the structure and recognition of equity in order to clarify the difference between externally dedicated reserves and internally dedicated reserves. These adjustments address the needs of the owner. The funds reported under the category "Donations, grants and co-financing", in particular, are externally dedicated. The funds received are used in accordance with the specifications of the grant providers.

The adjustment made to the structure of the reserve categories during the reporting period takes this special feature into account. The changed accounting and recognition requirements lead to retro-active adjustments of the values as at 1 January 2020 and 31 December 2020. These relate exclusively to reclassification between the different positions under equity.

During the assessment of the equity positions on the basis of the amended requirements, two business cases were identified that were not correctly allocated in the past. They were also corrected as of 1 January 2020 and are reported separately in the following table under "Restatement of prior period errors".

Table 5: Restatement of the consolidated equity of the ETH Domain as at 1 January 2020

CHF millions	31.12.2019 / 1.01.2020 (disclosed)	Adjustment related to change in accounting policies	Restatement of prior period errors	01.01.2020 (restated)
EQUITY				
Valuation reserves	-1,470	-	-	-1,470
Reserves from associated entities	208	-	-	208
Donations and bequests	583	-581	-2	-
Teaching and research reserves	673	-671	-1	-
Infrastructure and administration reserves	110	-110	-	-
Free reserves	856	-856	-	-
Co-financing	123	-123	-	-
Donations, grants, co-financing*	-	861	-	861
Internally dedicated reserves for teaching and research**	-	606	-	606
Internally dedicated reserves for infrastructure and administration **	-	96	-	96
Reserves without dedication ***	-	755	15	770
Accumulated surplus (+)/ deficit (-)	-82	24	-12	-70
Total equity	1,001	-	-	1,001

* Comprises donations and bequests, co-financing and individual items from the reserves for teaching and research as well as infrastructure and administration and the free reserves

** Corresponds to the former items teaching and research reserves and infrastructure and administration reserves less the items reclassified to donations/grants/co-financing, plus the reclassified positions from the free reserves

*** Corresponds to the former free reserves less the items reclassified to other categories

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 6: Principal currencies

Currency	Unit	Closing rate as of		Average rate	
		31.12.2021	31.12.2020	2021	2020
EUR	1	1.0359	1.0817	1.0810	1.0705
USD	1	0.9107	0.8840	0.9143	0.9381
GBP	1	1.2332	1.2097	1.2575	1.2039
JPY	1,000	7.9230	8.5680	8.3260	8.7890
SGD	1	0.6764	0.6698	0.6803	0.6802

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 7: 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 2021, using actuarial assumptions as of 31 December 2021 (e. g. BVG 2020 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 2021. The fair value of the plan assets is used including estimated performance as of 31 December 2021.

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 have no longer been recognised on the statement of financial performance since the 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.

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.

Donations, grants and co-financing

This item includes unused third-party funds from donations and bequests as well as from other grants that have conditions attached, but are not required to be classified as liabilities.

These funds are exclusively from non-exchange transactions (IPASA 23). The result generated from the management of third-party funds and the reserves for fluctuations in the value of the securities portfolio (risk capital) are also allocated to this category. Further information on co-financing can be found in the section "Co-financing".

Reserves with internal dedication

- **Teaching and research reserves:** this item indicates that various internal commitments exist and appropriate reserves are recognised to cover them. They comprise reserves for teaching and research projects. These also include appointment commitments i.e. funds granted to newly elected professors under contractual arrangements for the purpose of setting up their professorship.
- **Infrastructure and administration reserves:** these include reserves for delayed construction projects and for dedicated savings for specific infrastructure projects and administration projects.

Reserves without dedication

Unused funds for which there are no contractual or internal provisions in accordance with IPSAS are presented as reserves without dedication. They are not restricted in terms of time or purpose. Reserves must have been generated. They are recognised and released within the equity.

Accumulated surplus / deficit

The accumulated surplus / 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 (transfers in current period) in donations, grants and co-financing as well as reserves from associated entities and the allocations to and releases from the reserves (appropriation of reserves).

The surplus / deficit carried forward changes 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 taking account of foreign currency effects during the consolidation of foreign investments.

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 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 as well as contingent assets and liabilities

Provisions as well as contingent assets and liabilities involve a higher degree of estimation with respect to the probability and scale of cash inflows and outflows. As a result, they 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 540m (previous year: CHF 542m, 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.

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. The now existing KS21 cost study will be broken down to the affected units in 2023. This will be the time of the revaluation.

5 Comparison with the budget

Table 8: Statement of financial performance for the ETH Domain (consolidated) – Comparison between the 2021 statement and the final 2021 budget

CHF millions	Budget 2021			Actual 2021	Changes to B2021 Final absolute
	Approved	Reconciliation of federal financial contribution / IPSAS effects	Final		
Federal financial contribution	2,373	–	2,373	2,373	–
Federal contribution to accommodation	230	–	230	230	–
Total federal contribution	2,604	–	2,604	2,604	–
Tuition fees, continuing education	56	–	56	56	–
Swiss National Science Foundation (SNSF)	270	–	270	268	–2
Swiss Innovation Agency (Innosuisse)	51	–	51	41	–10
Special federal funding of applied research	84	–	84	87	3
EU Framework Programmes for Research and Innovation (EU-FPs)	156	–	156	160	4
Industry-oriented research (private sector)	151	–	151	136	–15
Other project-oriented third-party funding (incl. cantons, municipalities, international organisations)	85	–	85	95	10
Research contributions, mandates and scientific services	798	–	798	788	–10
Donations and bequests	79	–	79	122	44
Other revenue	122	–	122	127	5
Operating revenue	3,658	–	3,658	3,697	39
Personnel expenses	2,370	–27	2,343	2,426	83
Other operating expenses	958	–	958	893	–65
Depreciation	252	–	252	266	14
Transfer expenses	149	–	149	56	–93
Operating expenses	3,729	–27	3,702	3,641	–61
OPERATING RESULT	–71	27	–44	56	100
NET FINANCE INCOME / EXPENSE	–3	–	–3	26	29
Share of surplus / deficit of associated entities and joint ventures	–	–	–	28	28
SURPLUS (+) OR DEFICIT (–)	–74	27	–47	110	157

Table 9: Reallocation of funds ETH Domain, Budget 2021

CHF millions	ETH Board	ETH Zurich	EPFL	PSI	WSL	Empa	Eawag	Total Credit
Status as at 01.01.2021 (federal decree la as of 16.12.2020)	68.8	1,146.3	652.2	296.8	56.8	96.4	56.0	2,373.3
Changes:								
Internal credit shifts within the ETH Domain (in the year under review, there was no credit reallocation in favour of or against credit A202.0134 constructions of ETH Domain in acc. with FHV Art. 20 para. 5)	–	4.7	2.0	–0.4	–0.5	–9.3	3.5	–
Assignments by ETH Board:								
Strategic Proposals Teaching and Research	–15.9			4.3		11.6		–
Collaboration Projects/ Initiatives:								
A new electron-beam lithography system for the QT initiative	–2.0			2.0				–
Blue-Green Biodiversity (BGB)	–5.0				2.5		2.5	–
Engineering Humanitarian Aid	–5.0	3.0	2.0					–
Materials Discovery Initiative	–1.0	0.5		0.5				–
Rapid Access X-ray Chemical and Structural Analysis at SLS	–3.0			3.0				–
Synthetic Fuels from Renewable Resources (Synfuel)	–6.2			3.1		3.1		–
Credit reallocations within national research infrastructures and large-scale research projects:								
Catalysis Hub Cat+	–12.0	4.9	7.1					–
Credit reallocations within Strategic Focus Areas								
Personalized Health and Related Technologies	–11.3	8.5	1.8	0.7	–	0.3	–	–0.0
Advanced Manufacturing	–13.9	3.4	3.6	3.1	–	3.9	–	–
Data Science	–10.8	4.7	4.5	0.9	0.2	0.3	0.2	0.0
Various credit reallocations	–	–	–0.1	–	–	2.1	–2.0	–
Status as of 31.12.2021	–17.2	1,176.0	673.1	313.9	58.8	108.4	60.2	2,373.3

The budget for 2021 approved by Parliament on 16 December 2020 includes a financing contribution in the amount of CHF 2,373m (Volume 3 of the federal decrees). The consolidated surplus or deficit of the proposed budget for 2021, according to the ETH Board's 2021 Budget Report for the ETH Domain (June 2020) amounted to –CHF 74m.

The final budget for 2021 shows an adjustment compared to the approved budget for 2021, which led to the budgeted annual deficit of –CHF 47m for 2021. This relates to the recognition of net pension costs of –CHF 27m in accordance with IPSAS 39.

By contrast, the reallocation of funds as shown in Table 9 had no effect on the budgeted surplus or deficit for 2021, as revenue and expenses also changed to the same extent:

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 2021.

The other figures in the final 2021 budget reflect the approved budget in accordance with the 2021 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 10: Statement of financial performance 2021 by segments

CHF millions	2021							ETH Domain*
	ETH Zurich	EPFL	PSI	WSL	Empa	Eawag	ETH Board	
Federal financial contribution	1,176	673	314	59	108	60	-17	2,373
Federal contribution to accommodation	134	56	19	4	12	4	1	230
Total federal contribution	1,310	730	333	62	121	64	-17	2,604
Tuition fees, continuing education	36	18	2	-	-	-	-	56
Swiss National Science Foundation (SNSF)	135	97	16	7	8	5	-	268
Swiss Innovation Agency (Innosuisse)	18	11	1	-	10	-	-	41
Special federal funding of applied research	36	17	11	13	6	6	-	87
EU Framework Programmes for Research and Innovation (EU-FPs)	81	62	9	1	6	1	-	160
Industry-oriented research (private sector)	61	50	13	-	13	1	-	136
Other project-oriented third-party funding (incl. cantons, municipalities, international organisations)	34	44	14	3	4	1	-	95
Research contributions, mandates and scientific services	366	281	63	25	48	14	-	788
Donations and bequests	89	33	-	-	-	-	-	122
Other revenue	37	50	52	3	8	1	-	127
Operating revenue	1,837	1,113	450	90	177	79	-17	3,697
Personnel expenses	1,199	707	268	72	118	55	10	2,426
Other operating expenses	476	248	102	19	41	18	4	893
Depreciation	101	78	69	2	13	4	-	266
Transfer expenses	27	27	2	1	1	-	12	56
Operating expenses	1,803	1,060	442	94	173	78	26	3,641
OPERATING RESULT	34	52	9	-3	5	2	-42	56
NET FINANCE INCOME / EXPENSE	32	-6	-	-	-	-	-	26
Share of surplus / deficit of associated entities and joint ventures	27	-	1	-	-	-	-	28
SURPLUS (+) OR DEFICIT (-)	94	46	10	-3	5	1	-42	110

* Including consolidation entries (Research contributions, mandates and scientific services: -CHF 10m; donations and bequests: -CHF 1m; other revenue: -CHF 22m; personnel expenses: -CHF 3m; other operating expenses: -CHF 16m; transfer expenses: -CHF 15m)

Table 11: Statement of financial performance 2020 by segments

CHF millions	2020							ETH Domain*
	ETH Zurich	EPFL	PSI	WSL	Empa	Eawag	ETH Board	
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)

Balance sheet by segments

Table 12: Balance sheet as of 31 December 2021 by segments

CHF millions	31.12.2021							ETH Domain*
	ETH Zurich	EPFL	PSI	WSL	Empa	Eawag	ETH Board	
CURRENT ASSETS								
Cash and cash equivalents	821	629	142	40	106	51	72	1,862
Current receivables from non-exchange transactions	315	211	50	22	36	6	–	637
Current receivables from exchange transactions	32	17	24	1	3	1	–	73
Current financial assets and loans	355	17	–	42	46	28	–	488
Inventories	7	3	3	–	–	–	–	12
Prepaid expenses and accrued income	36	17	12	–	1	2	–	70
Total current assets	1,566	893	232	106	192	89	72	3,143
NON-CURRENT ASSETS								
Property, plant and equipment	660	392	881	10	67	21	–	2,032
Intangible assets	4	54	2	–	–	–	–	60
Non-current receivables from non-exchange transactions	631	214	111	20	42	7	–	979
Non-current receivables from exchange transactions	–	–	–	–	–	–	–	–
Investments in associated entities and joint ventures	230	34	7	–	–	–	–	271
Non-current financial assets and loans	7	8	2	–	1	–	52	64
Co-financing	43	64	–	–	6	–	–	114
Total non-current assets	1,574	766	1,003	30	116	28	52	3,518
TOTAL ASSETS	3,140	1,659	1,235	136	309	117	124	6,661
LIABILITIES								
Current liabilities	91	54	17	5	4	2	1	168
Current financial liabilities	–	14	–	–	–	–	–	14
Accrued expenses and deferred income	100	45	22	3	7	2	–	179
Short-term provisions	45	29	15	5	7	3	1	105
Short-term liabilities	237	142	54	13	17	8	2	466
Dedicated third-party funds	793	521	125	57	90	18	–	1,605
Non-current financial liabilities	19	314	–	–	–	–	46	327
Net defined benefit liabilities	286	165	83	23	39	15	4	615
Long-term provisions	25	15	554	3	4	2	–	604
Long-term liabilities	1,123	1,016	762	83	133	35	50	3,150
Total liabilities	1,361	1,157	816	96	150	42	52	3,616
EQUITY								
Valuation reserves	202	128	47	14	20	11	2	424
Reserves from associated entities	230	34	7	–	–	–	–	271
Donations, grants, co-financing	757	161	24	–	7	2	2	953
Other equity**	591	179	341	26	131	62	67	1,397
Total equity	1,780	502	419	40	158	75	71	3,045
TOTAL LIABILITIES AND EQUITY	3,140	1,659	1,235	136	309	117	124	6,661

* Including consolidation entries (current assets: –CHF 7m, non-current assets: –CHF 52m, liabilities: –CHF 58m)

** Details on the other equity of the ETH Domain can be found in the statement of changes in equity. Details for the individual segments are available in their published financial statements.

Table 13: Balance sheet as of 31 December 2020 by segments

CHF millions	31.12.2020							ETH Domain*
	ETH Zurich	EPFL	PSI	WSL	Empa	Eawag	ETH Board	
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
Reserves from associated entities	202	34	6	-	-	-	-	242
Donations, grants, co-financing**	713	164	24	-	8	2	2	912
Other equity**	569	135	330	29	125	64	109	1,360
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)

** The 2020 values do not correspond to the values published in the Financial Report 2020. They have been restated due to the retrospective amendment of the accounting and recognition requirements for the reserve categories newly defined in 2021. See the section "Restatement of prior-year figures" in Annex 2.

Cash flow statement by segments

Table 14: Cash flow statement 2021 by segments

CHF millions	2021							
	ETH Zurich	EPFL	PSI	WSL	Empa	Eawag	ETH Board	ETH Domain*
CASH FLOWS FROM OPERATING ACTIVITIES								
Surplus (+) or deficit (-)	94	46	10	-3	5	1	-42	110
Depreciation	101	78	69	2	13	4	-	266
Share of surplus / deficit of associated entities and joint ventures	-27	-	-1	-	-	-	-	-28
Net finance income / expense (non-cash)	-30	-1	-	-	-	-	-	-31
Increase / decrease in net working capital	-20	-4	-10	-2	-1	-2	-	-40
Increase / decrease in net defined benefit liabilities	-13	-7	-2	-1	-2	-	-	-24
Increase / decrease in provisions	-5	-3	-1	-	-	-	-	-9
Increase / decrease in non-current receivables	20	11	-22	3	-22	-2	-	-4
Increase / decrease in dedicated third-party funds	-22	-27	18	-1	26	2	-	-5
Reclassification and other (non-cash) income	-34	-3	1	-	-1	-	-	-37
Cash flows from operating activities	65	91	60	-2	17	2	-42	198
CASH FLOWS FROM INVESTING ACTIVITIES								
Investments								
Purchase of property, plant and equipment	-154	-70	-43	-2	-17	-3	-	-289
Purchase of intangible assets	-2	-1	-1	-	-	-	-	-4
Increase in co-financing	-	-	-	-	-	-	-	-
Increase in loans	-	-	-	-	-	-	-	-
Increase in current and non-current financial assets	-28	-1	-	-5	-6	-3	-11	-54
Total investments	-184	-72	-44	-7	-23	-6	-11	-348
Divestments								
Disposal of property, plant and equipment	-	-	1	-	-	-	-	1
Disposal of intangible assets	-	-	-	-	-	-	-	-
Decrease in co-financing	-	-	-	-	-	-	-	-
Decrease in loans	-	-	-	-	-	-	-	1
Decrease in current and non-current financial assets	27	1	21	-	-	-	3	52
Total divestments	27	1	21	-	-	-	3	53
Dividends received from associated entities and Joint Ventures	-	-	1	-	-	-	-	1
Cash flows from investing activities	-157	-71	-22	-7	-23	-6	-8	-295
CASH FLOWS FROM FINANCING ACTIVITIES								
Increase in short-term and long-term financial liabilities	-	-	-	-	-	-	11	-
Decrease in short-term and long-term financial liabilities	-	-9	-	-	-	-	-3	-10

Continuation of Table 14: Cash flow statement 2021 by segments

CHF millions	2021							ETH Domain*
	ETH Zurich	EPFL	PSI	WSL	Empa	Eawag	ETH Board	
Cash flows from financing activities	-	-9	-	-	-	-	8	-10
Total cash flow	-93	11	38	-9	-6	-4	-42	-106
Cash and cash equivalents at the beginning of the period	914	619	105	49	112	55	114	1,968
Total cash flow	-93	11	38	-9	-6	-4	-42	-106
Cash and cash equivalents at the end of the period	821	629	142	40	106	51	72	1,862
Net effect of currency translation on cash and cash equivalents	-	-	-	-	-	-	-	-
Contained in the cash flows from operating activities:								
Dividends received	5	-	-	-	-	-	-	5
Interest received	-	-	-	-	-	-	-	-
Interest paid	-1	-7	-	-	-	-	-	-8

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

Table 15: Cash flow statement 2020 by segments

CHF millions	2020							ETH Domain*
	ETH Zurich	EPFL	PSI	WSL	Empa	Eawag	ETH Board	
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

Continuation of Table 15: Cash flow statement 2020 by segments

CHF millions	2020							ETH Domain*
	ETH Zurich	EPFL	PSI	WSL	Empa	Eawag	ETH Board	
Cash flows from financing activities	–	–9	–	–	–	–	10	–9
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)

7 Total federal contribution

Federal financial contribution

Table 16: Federal financial contribution

CHF millions	2021	2020	Change absolute
Federal financial contribution	2,373	2,355	18

The available funds from the approved expenditure ceiling of the ETH Domain for the years 2021–2024 are processed via the two credit items “federal financial contribution” and “investment credit for ETH Domain buildings”. While the former is assigned to the Federal Department of Economic Affairs, Education and Research (EAER), the investment credit is allocated by the Federal Department of Finance (FDF) (AU 620 FOBL).

The consolidated financial statements of the ETH Domain only include the funds from the financial contribution credit that are used by the ETH Domain for the strategic objectives set by the Swiss Federal Council with ERI Dispatch for 2021–2024 (FCD dated 21 April 2021).

The financial contribution increased by CHF 18m or 1% compared to 2020. While during 2020 funds were shifted from the financial contribution to investment credit, there was no credit reallocation in 2021.

The financial contribution to the institutions of the ETH Domain were as follows:

- the **base budget** of CHF 2,246m (2020: CHF 2,230m) and
- the **strategic funds for projects in teaching and research** of CHF 167m (2020: CHF 123m) as well as
- the savings contribution for the financing of the **dismantling of the accelerator facilities** (CHF 11m).

The ETH Board used funds from the reserves in an amount of CHF 51m (2020: CHF 9m) in order to cover the expenditure surplus resulting from the allocation described above.

The **strategic funds for projects in teaching and research** were comprised as follows:

- the strategic focus areas in research:
 - “Personalized Health and Related Technologies”, “Advanced Manufacturing” and “Data Science” in the amount of CHF 36m (2020: CHF 25m)
- the major research infrastructures in accordance with Objective 3 of the strategic objectives:
 - CHF 23m for the upgrade of the “Sustained scientific user lab for simulation based science” at the CSCS in Lugano of ETH Zurich (HPCN-24) (2020: CHF 23m)
 - CHF 22m for the continuation of the “Blue Brain Project” at EPFL (2020: CHF 21m)
 - CHF 25m for the upgrade of the Swiss Light Source at the PSI (SLS 2.0)
 - CHF 12m for the development of the Catalysis Hub for the research of catalytic processes of ETH Zurich and EPFL
- a total of CHF 22m for six strategic cooperation projects within the ETH Domain and CHF 8m for the multi-year Empa Site Masterplan project (new campus facility)
- a total of CHF 19m for incentive and seed capital funding for strategic proposals for teaching and research (2020: CHF 19m).

In 2020, the following funds were available to the following strategic initiatives for the last time (end of ERI Dispatch 2017–2020):

- CHF 15m for the implementation of the Digitalisation Action Plan
- the major research infrastructures: CHF 13m for the ATHOS/SwissFEL beamline at the PSI and CHF 4m for the upgrade of the CMS detectors at CERN
- as well as the contribution of CHF 3m to the Swiss Plasma Center.

The Federal Government is **financing the dismantling of the accelerator facilities** and the disposal of radioactive components at the PSI. In the reporting period, the provisions established by the PSI (for activities up to and including deep geological disposal) totalled CHF 540m based on the cost estimate of the Federal Government from 2018. The annual savings contribution remained at CHF 11m (see Note 27 Provisions).

Federal contribution to accommodation

Table 17: Federal contribution to accommodation for the ETH Domain

CHF millions	2021	2020	Change absolute
Federal contribution to accommodation	230	244	-14

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). 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).

The interest was reduced relative to the previous year. The underlying imputed rate of return on average capital invested was 1.25% (previous year: 1.5%).

8 Tuition fees, continuing education

Table 18: Tuition fees, continuing education

CHF millions	2021	2020	Change absolute
Tuition fees, continuing education	56	50	6

Tuition fees and attendance fees for studies and continuing education programmes as well as other fees are regulated in the Ordinance of the ETH Board 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 36m (2020: CHF 31m) was attributable to ETH Zurich, CHF 18m (2020: CHF 17m) to EPFL and CHF 2m (2020: CHF 2m) to the PSI.

Revenue from tuition fees for Bachelor's and Master's programmes amounted to CHF 36m (ETH Zurich CHF 23m; EPFL CHF 13m) in the reporting period and CHF 33m in the previous year. The increase of CHF 3m compared to 2020 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 2020, as did the number of doctoral students (see Annual Report, Fig. 5: Students and doctoral students by academic level, p. 93). 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 of the ETH Domain, +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.

The total revenue also includes administration fees, in particular registration and examination fees or fees for the use of the libraries. They amount to CHF 5m in the reporting period (2020: CHF 5m).

Tuition fees and revenue from continuing education at both ETH Zurich and EPFL equate to just under 2% of the respective operating revenue in 2021.

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 there were increases in revenue from EU Framework Programmes for Research and Innovation and from special federal funding of applied research of 9% and 8%, respectively, there was a fall in revenue from Innosuisse funding (-18%). The other revenue categories were in line with the previous year. The total across all revenue categories exceeded the prior-year figure (CHF 14m or 2% up on the previous year).

Of the total revenue volume, CHF 628m or 80% was attributable to non-exchange transactions (IPSAS 23), generally research grants, and CHF 160m 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 project revenue from the **Swiss National Science Foundation (SNSF)**, which was already high in the previous year, increased by CHF 5m to CHF 268m in 2021 as a result of more research services. Around 87% of the revenue was once again allocated to the two Federal Institutes of Technology (ETH Zurich: CHF 135m; EPFL: CHF 97m).

Until the end of 2020, **Innosuisse** financed and regulated the operation of the Swiss Competence Centers for Energy Research (SCCERs). The conclusion of these projects is reflected in the lower revenue in the reporting period. The newly funded projects are only in the initial phase and therefore still only generated little revenue. The highest shares were once again recognised by ETH Zurich (2021: CHF 18m; 2020: CHF 22m), EPFL (2021: CHF 11m; 2020: CHF 15m) and Empa (2021: CHF 10m; 2020: CHF 10m).

The implementation of projects and mandates for **special federal funding** of applied research progressed positively during the reporting period, especially at ETH Zurich and EPFL (+CHF 11m and +CHF 3m, respectively). In contrast, revenue from research mandates of the Federal Government declined at the PSI and WSL (-CHF 4m and -CHF 2m, respectively). The decrease at WSL is due to the FOEN contribution for the avalanche warning system, which in 2021 was integrated in the federal financial contribution in favour of the ETH Domain.

The high level of implementation with respect to the **EU Framework Programmes for Research and Innovation (EU-FP)** significantly exceeded the previous year's level (2021: CHF 160m, 2020: CHF 146m). This reflects the higher realised progress in Horizon 2020 projects (2014-2020) as well as ERC Grants projects. The total revenue in the reporting period still includes a small amount of expiring revenue from the implementation of projects that were financed in previous years from federal funds via the State Secretariat for Education, Research and Innovation (SERI) (2021: CHF 1m; 2020: CHF 4m).

Table 19: Research contributions, mandates and scientific services

CHF millions	2021	of which revenues (IPSAS 23)	of which revenues (IPSAS 9)	2020	of which revenues (IPSAS 23)	of which revenues (IPSAS 9)	Change absolute
Swiss National Science Foundation (SNSF)	268	268	-	263	263	-	5
Swiss Innovation Agency (Innosuisse)	41	41	-	51	51	-	-9
Special federal funding of applied research	87	47	40	80	48	33	7
EU Framework Programmes for Research and Innovation (EU-FPs)	160	160	-	146	146	-	14
Industry-oriented research (private sector)	136	49	87	136	53	83	-
Other project-oriented third-party funding (incl. cantons, municipalities, international organisations)	95	63	32	98	63	36	-3
Total research contributions, mandates and scientific services	788	628	160	774	623	151	14

Revenue from **cooperation with the private sector** remained stable relative to the previous year for the entire ETH Domain. EPFL observed an increase, as it was able to record more revenue from projects funded by foundations. At the PSI, the pandemic resulted in a decline in revenue, while revenue at the other units either rose slightly or remained at the prior-year level. 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** comprises contributions from the cooperation with cantons, municipalities, public-law institutions and international organisations. EPFL was able to post a considerable increase in revenue (+CHF 13m), in part due to the cooperation with the University of Lausanne in connection with the Dubochet Center. In contrast, there was a decline in revenue at ETH Zurich, Empa and Eawag owing to the realisation of fewer projects compared to the previous year and fewer contributions (total -CHF 16m). The revenue at WSL also includes financial resources from the Canton of Graubünden for the new research centre in Davos.

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 20: Donations and bequests

CHF millions	2021	2020	Change absolute
Donations and bequests	122	142	-19

Fewer donations were agreed in the reporting period than in the previous year. The volume of revenue from donations, particularly at ETH Zurich, fell from CHF 117m in the previous year to the current figure of CHF 85m. EPFL concluded more donation agreements than in the previous year. Revenue in 2021 amounted to CHF 29m (2020: CHF 17m).

These donation agreements concluded in 2021 were recognised almost exclusively in the surplus or deficit in the year the contract was concluded.

The research institutes also benefited from donations. As in the previous year, their volume stood at CHF 1m in the reporting period.

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 4m relates to ETH Zurich, also chiefly in the form of donated rights (previous year: CHF 3m).

Table 21: In-kind contributions

CHF millions	2021	2020	Change absolute
Goods in-kind	-	-	-
Donated rights	8	8	-
Total in-kind contributions recognised as revenue	8	8	-
Services in-kind	-	-	-
Total in-kind contributions not recognised as revenue	-	-	-
Total in-kind contributions received	8	8	-

11 Other revenue

Table 22: Other revenue

CHF millions	2021	2020	Change absolute
Licences and patents	7	9	-2
Sales	13	11	2
Refunds	2	2	-
Other services	46	40	7
Real estate revenue	36	30	5
Revenue from real estate owned by the Federal Government left for use	1	4	-3
Profit from disposals (property, plant and equipment)	-	-	-
Own work capitalised	3	1	3
Other miscellaneous revenue	19	17	1
Total other revenue	127	114	13

The increase in other revenue in the reporting period is largely attributable to the rise in other services (CHF 7m) and real estate revenue (CHF 5m). The PSI, in particular, generated an increase in revenue from other services of around CHF 6m – thanks to the dismantling of nuclear installations and interim storage on the one hand, and from proton therapy and medical services on the other. The SwissTech Convention Center at EPFL increased its service revenue by CHF 1m by doubling the number of events relative to 2020.

The increase in real estate revenue is due to the fact that, on the one hand, rentals increased once more compared to the previous year and, on the other hand, that revenue from real estate owned by the Federal Government left for use was shifted to real estate revenue due to the change in the ordinance concerning transfer for use.

The decline seen in revenue from real estate owned by the Federal Government left for use of around CHF 3m relative to the previous year is related to Art. 33a-f of the Ordinance on Finance and Accounting of the ETH Domain (SR 414.123) concerning transfer for use, which came into force on 1 January 2021. The calculation system has been adjusted compared to the previous specification. The institutions must transfer 90% of the net revenue generated from such transfers for use that are not necessary for operating purposes to the Federal Government (see Note 13 Other operating expenses). The decline is reflected in an increase in "real estate revenue".

Similar to the previous year (CHF 28m), around CHF 30m of the other revenue in the reporting period is again attributable to the sub-consolidated EPFL entities, in particular Fondation EPFL Innovation Park (FEIP), Société du Quartier Nord de l'EPFL (SQNE) and Société du Quartier de l'Innovation (SQIE).

12 Personnel expenses

Table 23: Personnel expenses

CHF millions	2021	2020	Change absolute
Professors	218	217	1
Scientific personnel	982	952	30
Technical and administrative personnel, apprentices, trainees	825	801	24
IC, Suva and other refunds	-11	-9	-2
Total salaries and wages	2,014	1,961	53
Social insurances OASI/DI/IC/MB	130	126	4
Net pension costs	221	343	-122
Accident and sickness insurance Suva (BU/NBU/KTG)	8	8	-
Employer's contribution to Family Compensation Fund (FAK/FamZG)	31	30	1
Total social insurance schemes and pension expenses	390	507	-117
Other employer contributions	-	-	-
Temporary personnel	7	8	-1
Change in provisions for untaken leave and overtime	-2	1	-3
Change in provisions for contributions to long-service awards	-3	-7	4
Other personnel expenses	19	20	-1
Total personnel expenses	2,426	2,490	-64

The increase in salaries and wages can be attributed to the higher average number of full-time equivalents (FTEs) among scientific as well as technical and administrative personnel.

The average number of full-time equivalents (FTEs) (excluding apprentices) for the ETH Domain was 19,867 in the reporting period (previous year: 19,361 FTEs) and increased by 3%.*

As with the Federal Government, the decision was taken by the ETH Board not to grant a general salary increase or make an inflation adjustment. For individual salary adjustments (on the basis of performance and experience), 1.2% of the total salary payments was again at the disposal of employees under the Salary System (SS).

Overall, personnel expenses were below the previous year's level. In particular, this is because the actuarially calculated net pension costs were lower than in the prior-year period. Detailed information on the net pension costs can be found in Note 28 Net defined benefit liabilities.

Explanations on the changes in provisions are provided in Note 27 Provisions.

* The Annual Report does not show the annual average value but the year-end figure. This is 20,533.8 FTEs (including apprentices). The figure in the annual report also excludes the FTEs of the controlled entities.

13 Other operating expenses

Table 24: Other operating expenses

CHF millions	2021	2020	Change absolute
Expenses for goods and materials	159	145	14
Premises costs	333	356	-23
Energy costs	68	61	8
IT expenses	104	106	-2
Expenses for consultations, appraisals and guest lecturers	79	77	3
Library expenses	30	27	2
Other operating costs	120	113	7
Total other operating expenses	893	885	8

The rise in expenses for goods and materials and in other operating costs can be attributed to a further increase in business activities relative to the previous year and higher material prices, among other factors.

As was the case in the previous year, 69% of the premises costs comprise the accommodation expenditure for the state-owned real estate used by the institutions of the ETH Domain. This contribution was reduced by CHF 14m (for explanations, see Note 7 Total federal contribution). There was also a reduction in expenses for user extensions. In particular, this was due to expense-reducing additional capitalisation that took place in the course of the completion of major construction projects at ETH Zurich.

Due to the higher level of business activities and the resumption of face-to-face teaching, there was also an increase in energy costs relative to the previous year.

Other operating costs mainly include costs for expenses (2021: CHF 22m / 2020: CHF 21m), other services for third parties (2021: CHF 27m / 2020: CHF 28m) and the maintenance, repair and upkeep of movable assets (2021: CHF 26m / 2020: CHF 23m).

In the reporting period, a charge (CHF 1m; previous year: CHF 2m) was paid to the Federal Government again from the transfer of use of state-owned real estate to third parties (Art. 33a-f of the Ordinance on Finance and Accounting of the ETH Domain). The reduction in the charge relative to 2020 results from the amendment of provisions in the aforementioned Ordinance. The corresponding revenue of CHF 1m is disclosed under other revenue (see Note 11).

14 Transfer expenses

Table 25: Transfer expenses

CHF millions	2021	2020	Change absolute
Scholarships and grants to students and doctoral students	22	18	4
Contributions to research projects	21	19	1
Other transfer expenses	13	14	-1
Total transfer expenses	56	51	4

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

15 Net finance income / expense

Table 26: Net finance income/expense

CHF millions	2021	2020	Change absolute
FINANCE INCOME			
Interest income	3	5	-2
Income from investments	6	5	1
Changes in fair value of financial assets	31	29	3
Foreign currency gains	9	7	2
Other finance income	-	-	-
Total finance income	49	46	4
FINANCE EXPENSE			
Interest expense	9	9	-
Other financing costs for provision of capital	-	-	-
Changes in fair value of financial assets	4	12	-8
Foreign currency losses	9	12	-3
Impairment of loans and fixed deposits	-	-	-
Other finance expense	1	1	-
Total finance expense	23	34	-11
Total net finance income / expense	26	11	15

The development on the financial markets led to a positive performance on the investment capital employed in the reporting period. The foreign currency gains and losses were equal and thus had no impact on the financial result.

The interest income includes interest from the compounding of the receivables and loans to the tune of CHF 3m (previous year: CHF 5m).

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 27: Cash and cash equivalents

CHF millions	31.12.2021	31.12.2020	Change absolute
Cash	1	1	-
Swiss Post	88	214	-127
Bank	47	42	6
Short-term deposits (<90 days)	1,726	1,711	15
Total cash and cash equivalents	1,862	1,968	-106

CHF 1,726m or 100% of the short-term deposits are with the Federal Treasury in accordance with the applicable agreement 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. To avoid negative interest rates, postal assets were reallocated to short-term deposits (< 90 days) as well as to other current financial assets (three to twelve months). The additions to short-term deposits (< 90 days) were largely offset once more to cover additional liquidity requirements.

Value adjustments of receivables

Value adjustments of CHF 3m were recognised for at-risk trade accounts receivable at the end of 2021 (previous year: CHF 2m). Minor value adjustments are to be reported on receivables from non-exchange transactions.

18 Inventories

Table 30: Inventories

CHF millions	31.12.2021	31.12.2020	Change absolute
Inventories purchased	12	10	2
Inventories self-produced	–	–	–
Total inventories	12	10	2

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 31: Prepaid expenses and accrued income

CHF millions	31.12.2021	31.12.2020	Change absolute
Interest	–	–	–
Prepaid expenses	42	37	4
Other prepaid expenses and accrued income	28	25	3
Total prepaid expenses and accrued income	70	63	7

The largest deferrals for prepaid expenses concerned the library (CHF 12m), rental payments in advance (CHF 10m) and information technology services (CHF 7m).

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 21m, 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 32.

Table 32: Change in associated entities

CHF millions	2021	2020
As of 01.01.	242	208
Additions	–	–
Disposals	–	–
Dividends	–1	–
Share of the annual surplus or deficit	28	32
Share of items directly recognised in equity	1	2
As of 31.12.	271	242

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 33: 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
31.12.2021					
Reporting date used	31.12.2021	31.12.2020	31.12.2020	31.12.2020	31.12.2021
Current assets	339	4	3	11	8
Non-current assets	302	37	121	15	10
Short-term liabilities*	51	4	1	–	5
Long-term liabilities*	419	23	56	–	4
Revenue	10	5	13	–	28
Surplus (+) or deficit (-)	25	–	5	–1	2
Dividends received from the associated entity	–	–	–	–	–
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	–	–	–	–	–

* 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 51 CHF millions (short-term, previous year: 38 CHF millions) and 419 CHF millions (long-term, previous year: 433 CHF millions). They are already included in ETH Zurich's equity, where they make up a significant portion of donations, grants, co-financing.

** The figures disclosed as at 31 December 2019 include a material transaction in the 2020 financial year, which was therefore corrected accordingly in the following year.

Table 34: Aggregated information for individually immaterial associated entities

CHF millions	2021	2020
Revenue	41	33
Tax expense	1	–
Surplus (+) or deficit (-)	6	1

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 109m in the reporting period (previous year: CHF 94m). At the PSI, investments were made, in particular, in the two large-scale research facilities, namely the Swiss Light Source (SLS) (SLS 2.0 upgrade) and SwissFEL (ATHOS beamline and experimental end station). Examples of major investments this year by the universities include an oscilloscope and spectrometer at ETH Zurich and transmission electron microscopes at EPFL. At Empa, additional expansions were made to the NEST research and innovation building (construction of the "HiLo" and "Sprint" units), while further machinery and devices were acquired for 3D metal printing.

The reclassifications of CHF 47m 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 69m include scrapped, given away, derecognised or sold assets.

The carrying amount of the accelerator facilities at the PSI amounted to CHF 446m as at 31 December 2021 (previous year: CHF 457m).

Information and communication:

The information technology hardware and communication equipment acquired during the reporting period in the amount of CHF 25m primarily relates to the purchases of both universities.

The disposals (-CHF 38m) relate to scrapped, given away, derecognised or sold assets.

Table 35: Change in property, plant and equipment and intangible assets in 2021

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 01.01.2021	2,923	451	129	3,503	912	203	1,115	4,618	102
Additions	109	25	74	208	33	88	121	329	5
Reclassifications	47	4	-52	-	78	-78	-	-	-
Disposals	-69	-38	-1	-108	-10	-	-10	-118	-3
Value as of 31.12.2021	3,011	442	150	3,603	1,013	213	1,226	4,829	104
ACCUMULATED DEPRECIATION									
Value as of 01.01.2021	1,884	384	-	2,268	383	-	383	2,651	41
Depreciation	164	34	-	198	57	-	57	255	6
Impairments	-	-	-	-	-	-	-	-	-
Reversed impairments	-	-	-	-	-	-	-	-	-
Reclassifications	-	-	-	-	-	-	-	-	-
Disposals value adjustments	-66	-38	-	-104	-5	-	-5	-109	-3
Value as of 31.12.2021	1,982	380	-	2,362	435	-	435	2,797	44
Balance sheet value as of 31.12.2021	1,029	61	150	1,240	579	213	791	2,032	60
thereof leased assets				-			187	187	-

Advance payments, movable assets under construction:

The additions in this category in the amount of CHF 74m are divided into CHF 39m in investments in movable assets under construction and CHF 35m in advance payments made.

The reclassifications of CHF 52m relate to concluded projects that were allocated to the relevant asset category during the reporting period.

Immovable assets

Most of the real estate is owned by the Federal Government, meaning it is mainly leasehold improvements that are reported. The additions to leasehold improvements of CHF 33m include, in particular, additional capitalisation of ETH Zurich in the amount of CHF 22m (adjustment of the capitalisation practice as of 1 January 2019).

Leasehold improvements under construction show additions of CHF 88m in the reporting period. While the volume of capitalisation declined by CHF 17m compared to the previous year (CHF 105m), it remains at a high level due to the continued high volume of construction activity at ETH Zurich. In the reporting period, leasehold improvements were also made for the expansion of the "NO" building at Empa in the amount of CHF 3m.

The property, plant and equipment leased in the amount of CHF 187m 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 60m consists largely of the rights of use for the Microcity building at EPFL (CHF 51m). 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 35 and 36.

Table 36: 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	-

22 Financial assets and loans

Table 37: Financial assets and loans

CHF millions	31.12.2021	31.12.2020	Change absolute
CURRENT FINANCIAL ASSETS AND LOANS			
Securities, fixed deposits and investment funds	369	339	30
Positive replacement values	–	–	–
Other financial assets	119	124	–5
Loans	1	1	–1
Total current financial assets and loans	488	464	25
NON-CURRENT FINANCIAL ASSETS AND LOANS			
Securities and fixed deposits	–	–	–
Other financial assets	63	51	12
Loans	1	1	–
Total non-current financial assets and loans	64	52	12

Current financial assets are especially financed with third-party funds that are not used immediately. On the basis of the prevailing treasury relationships 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, primarily 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 reduction comprises a transfer of the PSI (–CHF 21m) to deposit accounts with the Federal Government with a term of less than three months and an increase at the other three research institutes (+CHF 13m).

Other non-current financial assets include investments which are available for sale (CHF 17m) and the non-current Federal Government deposit account (CHF 46m), to which CHF 8m 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), EPFL and the PSI. They are measured at their fair values.

About one third of the current and non-current loans, which totalled CHF 2m, consist of concessional 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 2021. No significant value adjustments were recognised in respect of loans.

Of the total financial assets at the end of 2021 (CHF 552m), CHF 162m (2020: CHF 161m) was invested with the Federal Government and CHF 371m (2020: CHF 339m) was placed with financial institutions.

23 Co-financing

Table 38: Co-financing

CHF millions	2021	2020	Change absolute
PURCHASE VALUE			
As of 01.01.	163	164	-1
Additions	-	-	-
Disposals	-	-1	1
As of 31.12.	163	163	-
ACCUMULATED DEPRECIATION			
As of 01.01.	45	40	4
Depreciation	5	5	-
Disposals	-	-1	1
As of 31.12.	49	45	5
Balance sheet value as of 31.12.	114	118	-5

After the depreciation of the co-financing (2021: CHF 5m) a carrying amount of CHF 114m resulted as of the end of 2021.

24 Current liabilities

Table 39: Current liabilities

CHF millions	31.12.2021	31.12.2020	Change absolute
Trade payables	63	61	3
Liabilities to social insurance institutions	28	28	-
Other current liabilities	76	100	-24
Total current liabilities	168	189	-21

The increase in trade payables can primarily be attributed to the increase at the PSI (+CHF 7m) and EPFL (+CHF 5m) and the decline at ETH Zurich (-CHF 7m).

The decrease in other current liabilities is attributable to the lower withholding tax due to the cantonal tax office as well as the lower financial obligations from projects towards the research partners involved in which the institutions of the ETH Domain are the leading houses.

25 Financial liabilities

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

CHF millions	31.12.2021	31.12.2020	Change absolute
CURRENT FINANCIAL LIABILITIES			
Liabilities to financial institutes	–	–	–
Finance lease liabilities	9	9	–
Negative replacement values	–	–	–
Other financial liabilities	5	9	–4
Total current financial liabilities	14	19	–4
NON-CURRENT FINANCIAL LIABILITIES			
Finance lease liabilities	258	267	–9
Other financial liabilities	69	68	2
Total non-current financial liabilities	327	335	–8

Table 41: Current and non-current financial liabilities – Change

CHF millions	2021			2,020		
	Current	Non-current	Total	Current	Non-current	Total
Financial liabilities as of 01.01.	19	335	353	15	350	365
Increase in short-term and long-term financial liabilities	–	–	–	–	1	1
Decrease in short-term and long-term financial liabilities	–9	–	–10	–10	–	–10
Total cash transactions	–9	–	–10	–10	1	–9
Changes in fair values	–	–	–	–	–	–
Reclassifications	8	–8	–	16	–16	–
Other changes	–2	–	–2	–2	–	–2
Total non-cash transactions	5	–8	–3	14	–16	–2
Financial liabilities as of 31.12.	14	327	341	19	335	353

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 51m, previous year: CHF 53m). The annual decrease corresponds to a service received periodically and is recognised as non-cash revenue from donations.

Table 42: 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
	2021	2021	2021	2020	2020	2020
Due dates						
Due within 1 year	17	8	9	17	8	9
Due within 1 to 5 years	68	28	41	68	29	39
Due after more than 5 years	276	59	217	294	66	228
As of 31.12.	362	95	267	379	103	276
			2021	2020		
LEASING EXPENSES						
Contingent lease payments expensed in period			–	–		
ADDITIONAL DETAILS						
Future revenue from sublease (from non-cancellable contracts)			18	29		

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 159m with SQNE and CHF 92m 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 43: Accrued expenses and deferred income

CHF millions	31.12.2021	31.12.2020	Change absolute
Interest	–	–	–
Deferred income	130	114	16
Other accrued expenses and deferred income	49	37	12
Total accrued expenses and deferred income	179	151	28

Deferred income especially includes service agreements and commissioned research from exchange transactions in accordance with IPSAS 9 (2021: CHF 123m; 2020: CHF 107m). 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 26m), EPFL (CHF 12m), the PSI (CHF 7m) and Empa (CHF 3m).

27 Provisions

Table 44: Provisions – Summary

CHF millions	31.12.2021	31.12.2020	Change absolute
Provisions for untaken leave and overtime	99	101	-2
Other long-term employee benefits (IPSAS 39)	61	64	-3
Dismantling	547	549	-2
Guarantees and warranties	-	-	-
Litigations	1	2	-2
Other provisions	2	2	-
Total provisions	709	718	-9

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 the PSI (+CHF 1m) and Empa (+CHF 1m) and reversed at ETH Zurich (-CHF 4m).

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 additions to and use of this provision are to be recognised separately.

The amount for dismantling includes CHF 540m (2020: CHF 542m) 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 2m (previous year: CHF 1m) 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 45: Provisions – Change 2021

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 01.01.2021	101	64	549	–	2	2	718
Additions to provisions	2	7	–	–	–	–	10
Reversal	–4	–	–	–	–1	–	–6
Use of provisions	–	–10	–2	–	–	–	–13
Reclassifications	–	–	–	–	–	–	–
Increase in present value	–	–	–	–	–	–	–
Value as of 31.12.2021	99	61	547	–	1	2	709
of which current	99	–	4	–	1	2	105
of which non-current	–	61	543	–	–	–	604

Table 46: 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
Additions to provisions	5	2	–	–	2	2	11
Reversal	–4	–	–	–	–1	–	–5
Use of provisions	–	–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

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 2021 includes obligations under other pension plans outside the ETH Domain's pension fund at PUBLICA amounting to CHF 1m (previous year: CHF 3m).

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 Parity Commission 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 Parity Commission 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 extra-ordinary 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 Parity Commission 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 Parity Commission 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 109,3% at the end of 2021 (2020: 107.9%). The definitive economic funding ratio for the ETH Domain's pension scheme at PUBLICA was 96,5% at the end of the year (2020: 88.9%).

Special events

In the current reporting period, the decision was taken to reduce the employer's participation in the financing of the bridging pension in accordance with the revised regulation found in the ETH Domain Personnel Ordinance. This adjustment is included as a negative past service cost in the IPSAS 39 measurement.

There were no other plan amendments, curtailments or settlements to be considered for the ETH Domain's pension plan at PUBLICA.

In the previous year, in keeping with the risk sharing between employer and employee, only that part of the defined benefit obligation that is likely to be borne by the employer was taken into account as of 31 December 2020. This provides a more true and fair view of the anticipated pension scheme costs for the ETH Domain.

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 (valuation reserves) as a change in the accounting estimate.

Table 47: Net defined benefit liabilities

CHF millions	31.12.2021	31.12.2020	Change absolute
Present value of defined benefit obligations	-8,761	-8,866	105
Fair value of plan assets	8,147	7,779	368
Recognised net defined benefit liabilities	-615	-1,087	473

The decrease in net defined benefit liabilities of CHF 473m results from a reduction in the present value of defined benefit obligations and an increase in the fair value of plan assets. The increase in the discount rate (31 December 2021: 0.4%/31 December 2020: 0.2%) and the adjustment of demographic assumptions led to a reduction in net defined benefit liabilities of CHF 168m and CHF 247m, respectively. Plan assets increased by CHF 331m due to the positive return on investment.

Of the total, CHF 1m (2020: CHF 3m) of the net defined benefit liabilities relate to pension plans outside the ETH Domain's pension fund at PUBLICA.

Table 48: Net pension costs

CHF millions	2021	2020	Change absolute
Current service cost (employer)	225	337	-112
Past service cost	-10	7	-17
Gains (-)/losses (+) from plan settlements	-	-	-
Interest expense from defined benefit obligations	18	-20	37
Interest income from plan assets	-16	15	-30
Administrative costs (excl. asset management costs)	4	4	-
Other	-	-	-
Total Net pension costs incl. interest expense recognised in statement of financial performance	221	343	-122

The net pension costs of the ETH Domain for the reporting period total CHF 221m (2020: CHF 343m). Of this figure, CHF 1m (2020: CHF 1m) relates to pension plans outside the ETH Domain's pension fund at PUBLICA. Net pension costs are CHF 122m lower than in the previous year. This decrease can primarily be attributed to both the lower current service cost (CHF -112m) and the negative past service cost (CHF -17m). The current service cost was reduced due to the increase in the discount rate (1 January 2021: 0.2% vs. 1 January 2020: -0.2%) as well as the first-time impact of the risk-sharing features in the statement of financial performance. As the switch to risk sharing took place at the end of 2020, no risk-sharing effects had to be taken into account in the prior year's net pension costs.

The past service cost includes the acquisitions made by professors at ETH Zurich and EPFL as well as a reduction owing to the amended ETH Domain Personnel Ordinance. In the current reporting period, the decision was taken to reduce the employer's participation in the financing of the bridging pension. This adjustment is incorporated in the calculations as a negative past service cost in the amount of CHF 15m.

As a consequence of the positive discount rate, the compounding of interest on the defined benefit liabilities results in an interest expense for the 2021 reporting period (previous year: interest income due to negative interest).

As was the case in the previous year, no deposits were transferred from the ETH Board to the ETH Domain's pension plan in the reporting period. Employer's contributions of CHF 240m and employees' contributions of CHF 133m are expected for the coming financial year.

Table 49: Revaluation recognised in equity

CHF millions	31.12.2021	31.12.2020	Change absolute
Actuarial gains (-) and losses (+)	-118	-1,081	963
from change in financial assumptions	-154	-905	751
from change in demographic assumptions	-247	-301	54
from experience adjustments	283	125	158
Return on plan assets excl. interest income (gains (-)/losses (+))	-331	-361	30
Other	-	-	-
Revaluation amount recognised in equity	-449	-1,442	993
Cumulative amount of revaluation recognised in equity (gain (-)/loss (+))	-417	31	-449

The revaluation gain recognised in equity in 2021 amounted to CHF 449m (2020: CHF 1,442m). This results in positive valuation reserves of CHF 417m as of 31 December 2021 (2020: negative valuation reserves of CHF 31m). Of this figure, revaluation gains of CHF 4m (2020: CHF 2m) 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 168m). They were mitigated slightly by the higher interest on retirement savings and the reduction in the expected salary development (actuarial loss of CHF 14m). The adjustment of demographic assumptions in line with the BVG 2020 technical basis led to actuarial gains in the amount of CHF 247m. Compensating for this, experience-based losses reduced the revaluation gains recognised in equity by CHF 283m.

The return on plan assets recognised in equity is attributable to the higher return on investment of 4.5% generated compared with the expected return (corresponds to discount rate of 0.2%).

Table 50: Change in present value of defined benefit obligations

CHF millions	2021	2020
Present value of defined benefit obligations as of 01.01.	8,866	9,842
Current service cost (employer)	225	337
Interest expense from defined benefit obligations	18	-20
Employee contributions	135	132
Benefits paid in (+) and paid out (-)	-355	-351
Past service cost	-10	7
Gains (-)/losses (+) from plan settlements	-	-
Actuarial gains (-)/losses (+)	-118	-1,081
Other	-	-
Present value of defined benefit obligations as of 31.12.	8,761	8,866

The weighted average term arising from defined benefit obligations is 13.4 years as of 31 December 2021 (2020: 14.2 years).

Table 51: Change in the fair value of plan assets

CHF millions	2021	2020
Fair value of plan assets as of 01.01.	7,779	7,419
Interest income from plan assets	16	-15
Employer contributions	245	237
Employee contributions	135	132
Benefits paid in (+) and paid out (-)	-355	-351
Gains (+)/losses (-) from plan settlements	-	-
Administrative costs (excl. asset management costs)	-4	-4
Return on plan assets excl. interest income (gains (+)/losses (-))	331	361
Other	-	-
Fair value of plan assets as of 31.12.	8,147	7,779

Table 52: Transition of net defined benefit liabilities

CHF millions	2021	2020
Net defined benefit liabilities as of 01.01.	-1,087	-2,423
Net pension costs incl. interest expense recognised in statement of financial performance	-221	-343
Revaluation amount recognised in equity	449	1,442
Employer contributions	245	237
Obligations paid directly by the entity	-	-
Other	-	-
Net defined benefit liabilities as of 31.12.	-615	-1,087

Table 53: Major categories of plan assets (in percentage)

Percentage	31.12.2021			31.12.2020		
	Listed	Not listed	Total	Listed	Not listed	Total
Liquidity	3	–	3	3	–	3
Bonds (in CHF) Confederation	5	–	5	6	–	6
Bonds (in CHF) ex. Confederation	9	–	9	10	–	10
Government bonds (in foreign currencies)	23	–	23	25	–	25
Corporate bonds (in foreign currencies)	9	–	9	10	–	10
Mortgages	2	–	2	1	–	1
Shares	28	–	28	26	–	26
Real estate	6	6	12	4	6	10
Commodities	2	–	2	2	–	2
Other	–	7	7	–	7	7
Total plan assets	87	13	100	87	13	100

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

Percentage	2021	2020
Discount rate as of 01.01.	0.20	–0.20
Discount rate as of 31.12.	0.40	0.20
Expected salary development	0.60	0.40
Expected pension development	0.00	0.00
Interest on retirement savings	0.40	0.30
Share of employee contribution to funding gap	36.00	36.00
Life expectancy at age 65 – women (no. of years)	24.37	24.76
Life expectancy at age 65 – men (no. of years)	22.57	22.72

As was the case in the previous year, the discount rate is based on the yield from fixed-interest high-quality corporate bonds and the expected cash flows of the ETH Domain's pension scheme at PUBLICA in accordance with existing prior-year 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 2020 are applied for assumptions about life expectancy.

Table 55: Sensitivity analysis (effect on present value of defined benefit obligations)

CHF millions	31.12.2021		31.12.2020	
	Increase in assumption	Decrease in assumption	Increase in assumption	Decrease in assumption
Discount rate (change +/- 0.25%)	-210	223	-233	248
Expected salary development (change +/- 0.25%)	23	-22	24	-23
Expected pension development (change +/- 0.25%)	170	n/a	193	n/a
Interest on retirement savings (change +/- 0.25%)	43	-43	42	-42
Share of employee contribution to funding gap (change +/- 10%)	-35	35	-100	100
Life expectancy (change +/- 1 year)	234	-237	239	-242

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 and not lowered for the reporting period, as a reduction of the pension benefit is not possible. 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 56: Dedicated third-party funds

CHF millions	31.12.2021	31.12.2020	Change absolute
Swiss National Science Foundation (SNSF)	664	684	-19
Swiss Innovation Agency (Innosuisse)	78	63	15
EU Framework Programmes for Research and Innovation (FP)	402	464	-62
Special federal funding of applied research	126	98	28
Industry-oriented research (private sector)	112	98	15
Other project-oriented third-party funding	122	96	27
Donations and bequests	100	106	-6
Total dedicated third-party funds	1,605	1,608	-3

The dedicated third-party funds correspond to the outstanding performance obligations on current research projects and mandates from contracts with non-exchange transactions. While the current availability of third-party funding to promote research in the ETH Domain remained unchanged overall, developments by funding category varied greatly.

In the case of the SNSF, there was a high level of project activity in 2021, while there was also a decline in the acquisition of project financing, including an absence of NCCR calls in 2021. Both together led to a decline in the volume of dedicated third-party funds and performance obligations vis-à-vis the SNSF.

Dedicated third-party funds from Innosuisse research contributions grew at all institutions, as more grants for new projects were obtained in the reporting period.

In the case of research contributions from the EU, dedicated third-party funds declined at all institutions with the exception of WSL and Eawag. Several factors contributed to the marked decline:

on the one hand, performance commitments decreased due to the progress of ongoing projects, and on the other hand, comparatively fewer projects were acquired in 2021, as Switzerland is presently considered a non-associated third country in the current Horizon Europe FP. The devaluation of the euro also placed pressure on the balance sheet.

The research contributions of the Federal Government increased in the reporting period. This increase was primarily related to the conclusion of new contracts for projects.

The rise in the volume of third-party funding from the private sector primarily related to a funding agreement concluded between Empa and the Werner Siemens Foundation in the reporting period.

Dedicated third-party funds in the category "Other project-oriented third-party funding" increased in most institutions owing to new projects that are financed by cantons as well as municipalities, public-law institutions and international organisations.

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 57 shows the maximum exposure to credit risk.

Table 57: 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 counterparties
	31.12.2021						
Cash and cash equivalents	1,862	1,727	–	–	21	114	–
Receivables from non-exchange transactions	1,616	116	297	532	–	–	670
Receivables from exchange transactions	73	11	–	1	–	–	62
Financial assets and loans	552	162	–	–	1	16	373
Prepaid expenses and accrued income	28	1	–	–	–	–	28
Total	4,132	2,017	297	533	22	131	1,133
	31.12.2020						
Total previous period	4,157	1,970	352	540	27	250	1,018

* The remaining receivables due from the Federal Government (State Secretariat for Education, Research and Innovation SERI) under the bridging programmes for Horizon 2020 and Horizon Europe as well as 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 58 shows the maturities of the financial liabilities.

The entities controlled by the institutions of the ETH Domain may raise funds on the financial market, the institutions may not do so themselves.

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

Table 58: 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
	31.12.2021				
Non-derivative financial liabilities					
Current liabilities	168	168	168	–	–
Leasing liabilities	267	362	17	68	276
Financial liabilities	74	74	5	23	47
Accrued expenses and deferred income	49	49	49	–	–
Derivative financial liabilities	–	–	–	–	–
Total	558	653	239	91	323
	31.12.2020				
Total previous period	578	681	251	87	342

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 17m.

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 36m.

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. 34c paragraph 2 of the ETH Act (SR 414.110), which came into effect on 1 August 2021. The two Federal Institutes of Technology and the four research institutes defined their own investment strategies on this basis. A model is operated 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.

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 59: Sensitivity to foreign currency risk

CHF millions	31.12.2021					31.12.2020				
	Total	CHF	EUR	USD	Other	Total	CHF	EUR	USD	Other
Net currency balance	2,947	2,869	37	10	30	2,910	2,852	21	9	28
Sensitivity affecting financial performance +/- 10%			4	1				2	1	
Closing rate			1.0359	0.9107				1.0817	0.8840	

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 60: 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
	31.12.2021					
Cash and cash equivalents	1,862				1,862	1,862
Receivables from non-exchange transactions	1,616				1,616	1,616
Receivables from exchange transactions	73				73	73
Financial assets and loans	164	371	17		552	552
Prepaid expenses and accrued income	28				28	28
Financial liabilities*	–	–	–	558	558	558
	31.12.2020					
Financial assets**	3,804	339	14	–	4,157	4,157
Financial liabilities*	–	–	–	578	578	578

* 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 61: Fair value hierarchy

CHF millions	31.12.2021				31.12.2020			
	Carrying amount / fair value	Level 1	Level 2	Level 3	Carrying amount / fair value	Level 1	Level 2	Level 3
Financial assets	388	370	9	9	353	339	7	7
Financial liabilities	–	–	–	–	–	–	–	–

ETH Zurich had other contingent liabilities of CHF 1m at the end of 2021 (as in the previous year) 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 64: Contingent assets

CHF millions	31.12.2021	31.12.2020	Change absolute
Off-balance sheet receivables	–	–	–
Other	–	–	–
Total contingent assets	–	–	–

ETH Zurich had two unquantifiable contingent assets at the end of 2021. 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 65: Financial commitments

CHF millions	31.12.2021	31.12.2020	Change absolute
Financial commitments <= 1 year	102	69	32
Financial commitments from 1 to 5 years	89	25	64
Financial commitments > 5 years	–	1	–1
No due date / indefinite	–	–	–
Total financial commitments	191	95	96

At the reporting date, the PSI had contractual obligations for the acquisition of goods and services in the amount of CHF 91m (of which CHF 77m short-term and CHF 14m long-term). The financial commitments relate, in particular, to various orders for plant construction projects in the area of SLS 2.0, CHART and ESS.

At ETH Zurich, financial commitments in the amount of CHF 81m existed at the end of 2021. These essentially relate to the acquisition of technical-scientific equipment, in particular for a planned purchase for the CSCS (supercomputer), and to the ETH Library for the accessing of digital publications.

Financial commitments for the acquisition of technical-scientific equipment and services have also been reported by EPFL (CHF 11m), Empa (CHF 5m) and Eawag (CHF 3m).

In addition, EPFL has contractually undertaken to bear the 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 66: Operating lease

CHF millions	2021	2020	Change absolute
DUE DATES			
Due within 1 year	43	44	-1
Due within 1 to 5 years	138	135	3
Due after more than 5 years	289	302	-13
Future minimum payments for non-cancellable operating lease as of 31.12.	470	480	-11
Leasing payments of current period	46	43	3
ADDITIONAL DETAILS			
Return from subleasing*	2	1	-
Future revenue from sublease (from non-cancellable contracts)	3	3	-

* In the Financial Report 2020, the return from subleasing was reported within leasing payments of current period.

In the reporting period, the lease agreements affected, in particular, ETH Zurich (future minimum lease payments of CHF 205m, -CHF 7m), PSI (future minimum lease payments of CHF 130m, no change relative to the previous year), EPFL (future minimum lease payments of CHF 127m, -CHF 7m) and Empa (future minimum lease payments of CHF 7m, +CHF 4m). 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 35m), EPFL (CHF 9m) and Empa (CHF 2m).

34 Remuneration of key management personnel

Table 67: Remuneration of key management personnel (rounded values)

CHF millions	2021	2020	Change absolute
ETH Board	1	1	-
Directorate	2	2	-
Remuneration of key personnel	3	3	-

Table 68: Key personnel

Full-time equivalent	2021	2020	Change absolute
ETH Board *	2.20	2.20	-
Directorate **	6.00	6.08	-0.08
Number of persons (in full-time positions)	8.20	8.28	-0.08

* Workload: President of the ETH Board: 80% (prior year 78%), Vice President of the ETH Board: 16%, President Audit Committee: 16% (1 January to 31 May 2021 as a dual mandate with the Vice President), one member of the ETH Board: 70%, remaining four (1 January to 31 May 2021: five) 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 69 are fully consolidated with all their locations.

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
- Swiss Federal Laboratories for Materials Testing and Research (Empa), Dübendorf
- Swiss Federal Institute of Aquatic Science and Technology (Eawag), Dübendorf

Table 69: Controlled entities

	Legal form	Nature of collaboration / business activity	Domicile	Jurisdiction	Currency	Proportion of voting rights or participating share (in %) 31.12.2021 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	31.03.2021
Rübel Geobotanical Research Institute Foundation ²	Founda-tion	Promoting geobotanical science (plant sociology, plant ecology, plant propagation, vegetation history)	Zurich	Switzer-land	CHF	57	100	31.12.2020
Fondation pour les Etudiants de l' EPFL	Founda-tion	The foundation supports students at EPFL if their financial circumstances are making it much more difficult for them to complete their degree.	Lausanne	Switzer-land	CHF	60	100	31.12.2021
EPFL Innovation Park Foundation	Founda-tion	The foundation owns and maintains buildings for promising start-ups (technology park).	Ecublens (VD)	Switzer-land	CHF	45	100	31.12.2021
Société du Quartier de l'Innovation (SQIE)	Simple partner-ship	The simple partnership maintains buildings on a finance lease basis for larger technology companies.	Ecublens (VD)	Switzer-land	CHF	100	100	31.12.2021
Société du Quartier Nord de l' EPFL (SQNE) ³	Simple partner-ship	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)	Switzer-land	CHF	80	100	31.12.2021

¹ With the exception of EPFL Innovation Park Foundation (42% of the voting rights in the previous year) and Société du Quartier Nord de l'EPFL (75% 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 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 70: Associated entities

	Legal form	Nature of collaboration / business activity	Domicile	Jurisdiction	Currency	Proportion of voting rights or participating share (in %) 31.12.2021 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	17	100
Student Housing Foundation	Foundation	Providing and operating low-cost housing for students in Zurich	Zurich	Switzerland	CHF	25	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 Albert Lück Foundation (20% of the voting rights in the previous year) and the Student Housing Foundation (22% 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

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:

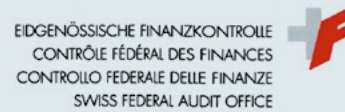
Table 71: Entities below the thresholds according to the Finance and Accounting Regulations of the ETH Domain

	31.12.2021	31.12.2020
Controlled entities		
Quantity	10	9
Total assets (CHF million)	21	20
Associated entities		
Quantity	15	15
Total assets (CHF million)	73	62

36 Events after the balance sheet date

The ETH Board agreed the 2021 consolidated financial statements of the ETH Domain on 9/10 March 2022. 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 2021 or any adjustment thereto.

Auditors' report



Reg. Nr. 932.21159.002

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 2021*

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 2021, the consolidated balance sheet as of 31 December 2021, 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 2021, 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, 10 March 2022

SWISS FEDERAL AUDIT OFFICE



Eric-Serge Jeannot
Licensed audit expert



Martin Köhli
Licensed audit expert

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