EISCAT Scientific Association
Registered as a Swedish non-profit organisation
Organisation number: 897300-2549

Annual financial report for the year 2023-01-01 – 2023-12-31

The EISCAT Council and the Director for the Association submits herewith the annual report for 2023.

# ADMINISTRATION REPORT

## Ownership, organisation and objective

The EISCAT Scientific Association was established in 1975 through an agreement between six European organisations. Japan joined in 1996 and the People's Republic of China in 2007.

The EISCAT Associates at 2023-12-31 are: China Research Institute of Radiowave Propagation (People's Republic of China), National Institute of Polar Research (Japan), Norges forskningsråd (Norway), Suomen Akatemia (Finland), UK Research and Innovation (United Kingdom of Great Britain and Northern Ireland) and Vetenskapsrådet (Sweden).

The now-running EISCAT Agreement came into force 2017-06-20, with all Associates making long term funding commitments to the Association. The Association has its formal seat in Kiruna, Sweden, and is registered as a non-profit organisation.

The aim of the Association is to make significant progress in the understanding of physical processes in geospace, in the high latitude atmosphere, and in the coupling between the high and low latitudes and altitudes. For this purpose, the Association has developed, constructed, and now operates, a number of radar facilities at high latitudes. At present, these comprise a system of stations at Tromsø (Norway), Kiruna (Sweden), Sodankylä (Finland), and Longyearbyen (Svalbard). The new system, EISCAT_3D, is currently being constructed.

The Association is fully funded by the Associates, but additional operations may also be funded by short term additional contributions from both Associate and non-Associate bodies. Depending on the available funding, scientific priorities and operational targets are adjusted on an annual basis.

The EISCAT Council is charged with the overall administration and supervision of the Association's activities. The Council appoints a Director, who is responsible for the daily management and operation of the facilities of the Association.

## Operation and scientific development

The EISCAT Radars systems operated reliably throughout the year and 1 957 hours were accounted in 2023 (2 007 hours in 2022).

Common Programmes amounted to 47.5% (38%) of the operations. Special Programmes amounted to 47.5% (52%) and other operations amounted to 5% (10%) of the total hours.

The German Affiliate made use of their access to the systems and totally 58 hours (140 hours) were accounted the affiliates. The Peer-Review Programme (PP) made it possible for user groups from Finland and USA to run experiments, at no cost, on the systems. PP-time amounted to 40 accounted hours (36 hours). The Transnational Access (TNA) project, PITHIA-NRF, did not fund any campaigns in 2023. Totally 0 hours (18 hours) were TNA-hours.

**Future operation and scientific development**
The current EISCAT systems are ready for users. These include the EISCAT Svalbard Radar, Heating and the UHF and VHF radars. Due to system failures, the tristatic VHF mode had to be cancelled in 2023. The two VHF receive sites in Finland and Sweden will be decommissioned in 2024. Tristatic, or rather multistatic, operations will again be possible when the new EISCAT_3D system is taken in use.

The EISCAT_3D radar system is soon to be completed. It will replace the current UHF and VHF radar systems. We plan for a first-light measurement mid-2024 and full operations in 2025.

The old mainland UHF and VHF radar systems, which will be replaced by the new EISCAT_3D system, will be decommissioned soon after the new system is operational.

**Project activities**
In 2023, two of the externally EU-funded projects came to a close; EGI-ACE and ENVRI-FAIR. PITHIA-NRF continues into 2025. Two new EU-funded projects start in 2024, ARC-TREE and INPROCAP. The EISCAT involvement in the two new projects are very small.

**EISCAT_3D project**
Most of the needed infrastructure for EISCAT_3D Stage 1 (E3DS1) was completed by the end of year. There are still few minor installations pending but the focus for 2024 is to install the radar electronics and later add the computer cluster needed for full scale data processing. Since Council decided to change the legal structure of the Association in the near future, it was also agreed that the process will be simpler if EISCAT_3D is kept as construction project until formally transferred into the EISCAT company.

**The work of the Council and its committees**
The EISCAT Council had two regular meetings and an extraordinary one in 2023. The first meeting in the year was a follow-on to the UK/hybrid autumn 2022 meeting. The regular spring meeting was a hybrid meeting with most members present in Skibotn and Tromsø, Norway. The regular autumn meeting was also held as hybrid with some members present in Qingdao, P. R. of China.

In the extraordinary meeting, the EISCAT Council committed *to transfer all of the Association's assets, operations, and commitments to a Swedish limited liability company to be owned by the three host countries, Finland, Norway, and Sweden.* The transfer is expected to happen in 2024. Sweden is taking the lead on detailing all necessary steps, legalities, etc.

The regular Council meetings during the year handled usual matters but also served as a forum for continued discussions about the future EISCAT company. The Council committees, the Administrative and Finance Committee (AFC) and the Scientific Advisory Committee (SAC) both had two hybrid meetings each during the year.

**Budget development during the year**
The 2023 operations ended below the budgeted target. One reason for the reduced operations was the problem with an antenna-gearbox on Svalbard which meant that experiments using different pointing directions could not be performed. A new gearbox was

ordered and has now arrived on Svalbard. Less operations meant reduced costs but funding from the Associates and Affiliates became less than planned. Reason being that one Associate had planned a funding increase for 2023, provided EISCAT_3D would be operational. Since that did not happen, the increase was not possible. This had also an effect on the EISCAT_3D finances, which needed to be adjusted to handle the reduced funding. In summary, the year ended in a balanced result.

**The long-term budget plan**

Since it is assumed that 2024 will be the last year for EISCAT Scientific Association, no long-term planning has been done. The budgeting and long-term planning for the EISCAT company will be handled by the new board and management.

**The result for 2023 and profit/loss handling**

The year ended in a balanced result.

## PROFIT AND LOSS ACCOUNTS

in thousands of Swedish Crowns

| | Note 1 | *2023* | *2022* |
|---|---|---|---|
| **Income from operations** | | | |
| Grants received | Note 2 | 139 726 | 157 694 |
| Revenue from operations | Note 3 | 0 | 0 |
| Other income from operations | Note 4 | 164 | 83 |
| | | 139 890 | 157 778 |
| **Expenses from operations** | | | |
| Operation costs | Note 5 | -8 500 | -17 541 |
| Administration costs | | -3 265 | -3 002 |
| Personnel costs | Note 6 | -28 357 | -29 581 |
| Depreciation of fixed assets | | -7 439 | -8 720 |
| | | -47 562 | -58 843 |
| **Operating profit/loss** | | **92 328** | **98 935** |
| **Financial items** | | | |
| Interest income | | 3 530 | 1 442 |
| Other financial income and cost | | 168 | -1 695 |
| | | 3 699 | -253 |
| **Other items** | | | |
| Income from sold inventory | | 11 | 37 |
| **Net profit/loss for the year** | | **96 037** | **98 718** |

| | | | |
|---|---|---|---|
| **Changes in designated funds** | Note 7 | | |
| Net profit/loss for the year | | 96 037 | 98 718 |
| Use of designated investment funds | | -70 583 | -75 099 |
| Use of other designated funds | | -247 | -1 002 |
| Allocation of unused designated investment and other funds | | -25 207 | -22 116 |
| **Net profit/loss for the year after redistributions** | | **0** | **501** |

## BALANCE SHEET

in thousands of Swedish Crowns

| | | *2023* | *2022* |
|---|---|---|---|
| **ASSETS** | | | |
| *Fixed assets* | | | |
| **Tangible fixed assets** | Note 8 | | |
| Buildings | | 104 357 | 84 976 |
| Radar systems | | 317 907 | 268 551 |
| Equipment and tools | | 4 374 | 2 538 |
| | | 426 638 | 356 065 |
| **Current assets** | | | |
| Receivables | | 10 248 | 4 394 |
| Prepayments and accrued income | Note 9 | 2 555 | 4 434 |
| Cash at bank and in hand | Note 10 | 139 166 | 232 988 |
| | | 151 969 | 241 816 |
| **Total assets** | | **578 607** | **597 881** |
| **CAPITAL AND LIABILITIES** | | | |
| **Capital** | | | |
| Funds invested | Note 11 | 426 638 | 356 065 |
| Designated funds | Note 12 | 81 559 | 76 452 |
| Net income for the year after redistribution | | 0 | 501 |
| | | 508 197 | 433 018 |
| **Current liabilities** | | | |
| Accounts payable, trade | | 7 400 | 33 682 |
| EISCAT_3D build grants received but not used | Note 13 | 59 345 | 125 395 |
| External project grants received but not used | Note 14 | 1 743 | 4 416 |
| Other liabilities | | 1 921 | 1 371 |
| | | 70 410 | 164 863 |
| **Total capital and liabilities** | | **578 607** | **597 881** |

## STATEMENT OF CASH FLOWS

in thousands of Swedish Crowns

| | *2023* | *2022* |
|---|---|---|
| **Operating activities** | | |
| Operating result before financial items | 92 328 | 98 935 |
| Depreciation of fixed assets | 7 439 | 8 720 |
| | | |
| Interest received | 3 530 | 1 442 |
| Financial income and cost | 168 | -1 695 |
| Other income and cost | 11 | 37 |
| | | |
| Increase/decrease of receivables | -5 854 | -2 425 |
| Increase/decrease of prepayments and accrued income | 1 879 | -1 425 |
| Increase/decrease of creditors and liabilities | -94 453 | -99 028 |
| Adjustment for items not included in cash flow | -20 848 | -16 067 |
| | | |
| **Cash flow from operations** | **-15 800** | **-11 507** |
| | | |
| **Investment activities** | | |
| Investments in tangible assets | -78 022 | -83 819 |
| | | |
| **Cash flow from investment activities** | **-78 022** | **-83 819** |
| | | |
| **Cash flow for the year** | **-93 822** | **-95 326** |
| | | |
| **Liquid assets at the beginning of the year** | **232 988** | **328 314** |
| | | |
| **Liquid assets at the end of the year** | **139 166** | **232 988** |

| NOTES | 2023 | 2022 |
|---|---|---|

**Note 1** *Accounting principles*

The accounting and valuation principles applied are consistent with the provisions of the Swedish Annual Accounts Act and generally accepted accounting principles (for 2017 onwards, bokföringsnämnden allmänna råd och vägledningar, BFNAR 2012:1 K3).

All amounts are in thousands of Swedish kronor (SEK) unless otherwise stated.

*Income*

Received grants are reported as income in the period when they were claimed or received. Conditional grants are recognised as income when the associated conditions have been met. Income and revenue from operations, which include own-account funds, are reported as income when they were claimed or received. Grants and other income in foreign currencies have been accounted in the amounts estimated to be received, based on individual assessment.

*Employee benefits*

Ongoing remuneration to employees, either direct employed or provided via host agreements, in the form of salaries, social security, contributions to pension schemes and staff related insurances are accounted as personnel costs. Other remunerations, in cash, like travel subsistences or as benefits in-kind, like clothing, training and health care are also accounted as personnel costs. Overhead cost on host provided personnel is considered as external services accounted as administration cost.

*Financial income*

Dividends and interest income are accounted when credited the account.

*Receivables*

Receivables are stated at the amounts estimated to be received, based on individual assessment.

*Receivables and payables in foreign currencies*

Receivables and payables in foreign currencies are valued at the closing day rate. Where hedging measures have been used, such as forwarding contracts, the agreed exchange rate is applied. Gains and losses relating to operations are accounted for under other financial income and cost.

*Bank accounts in foreign currencies*

Bank balances in foreign currencies are valued at the closing day rate.

*Fixed assets*

Tangible fixed assets are stated at their original acquisition values after deduction of depreciation according to plan. Assets are depreciated systematically over their estimated useful lives. The following periods of depreciation are applied: Buildings 5 - 50 years, Radar systems 3 - 30 years and Equipment and tools 1 - 5 years.

**Note 2** *Grants received*

The Associates contributed to the operation during the year in accordance with the EISCAT agreement and later additions. The Affiliates contributed according to agreed annual commitments. Income from European Commission (EC) funded projects were also accounted as received grants. The E3DS1 project started 2017-09-01 and the resulting projects costs were covered by the Associates (see Note 13) and other funds. Received project grants from the Associates are first accounted as prefinancing. Project costs are thereafter covered by withdrawals from prefinancing and at that time accounted as income from operations.

| | 2023 | 2022 |
|---|---|---|
| Associates | 40 814 | 40 874 |
| Affiliates | 1 403 | 1 585 |
| Project grants, EC | 2 804 | 3 853 |
| Project grant, E3DS1 | 94 705 | 111 382 |
| | 139 726 | 157 694 |

*Accumulated Associate contributions status as of 2023-12-31*

Annual contributions included and for 2023, Finland, Japan (in-kind) and Norway were credited for providing E3DS1 project-related funds. These sums are used for EISCATs ownership and time-share calculation

| | | |
|---|---|---|
| Associate P. R. of China | 62 162 | 57 710 |
| Associate Finland | 208 070 | 173 587 |
| Associate Japan | 129 104 | 126 684 |
| Associate Norway | 463 963 | 416 481 |
| Associate Sweden | 328 937 | 317 597 |
| Associate UK | 323 304 | 320 465 |
| Previous Associates | 382 168 | 382 168 |
| | 1 897 708 | 1 794 691 |

**Note 3** *Revenue from operations*

The Association can, at rates related to the costs involved and as available, sell observation hours to Associates, Affiliates and other parties. Income from such selling of time are considered to be revenue. In 2023, no time-buyers used the systems.

| | | |
|---|---|---|
| Income from time-buyers | 0 | 0 |

**Note 4** *Other income from operations*

The Association supports visiting users by offering site accommodation and equipment hosting for either campaign brought instruments or for longer deployments. Educational support is done by providing teachers and/or other resources (like laboratory support).

| | | |
|---|---|---|
| Accommodation | 107 | 33 |
| Instrument hosting agreements | 21 | 21 |
| Educational support | 23 | 23 |
| Other income | 14 | 7 |
| | 164 | 83 |

**Note 5** *Operations*

The operating target for 2023 was 2 250 hours and the outcome became 1 952 hours. Passive hours come in addition. Such hours have a minimal effect on cost since the systems do not draw more electricity than in an off mode. Accounted hours are usually lower than the sum of operating hours since some systems have a charge rate that is less than 1-to-1.

| *Active hours (high-power), per system* | *Hours* | *Hours* |
|---|---|---|
| EISCAT Svalbard Radar | 685 | 637 |
| UHF system | 932 | 896 |
| VHF system | 288 | 384 |
| Heating system | 48 | 49 |
| | 1 952 | 1 966 |
| *Passive hours (receive only)* | | |
| UHF system | 4 | 0 |
| Kiruna receiver system | 0 | 132 |
| Sodankylä receiver system | 0 | 132 |
| | 4 | 264 |

| | 2023 | 2022 |
|---|---|---|
| *Accounted hours* | *Hours* | *Hours* |
| Common programmes | 929 | 768 |
| Special programmes | 930 | 1 046 |
| Other hours | 98 | 194 |
| | 1 957 | 2 007 |
| | | |
| *Distribution of special programme hours between Associates* | | |
| Associate P. R. of China | 15 | 59 |
| Associate Finland | 145 | 153 |
| Associate Japan | 103 | 123 |
| Associate Norway | 267 | 254 |
| Associate Sweden | 181 | 208 |
| Associate UK | 173 | 153 |
| All Associates, AA-runs | 48 | 96 |
| | 930 | 1 046 |
| | | |
| *Distribution, other hours* | | |
| Affiliates | 58 | 140 |
| EISCAT staff and tests | 0 | 0 |
| Peer-reviewed and TNA campaigns | 40 | 54 |
| Timebuyers | 0 | 0 |
| | 98 | 194 |

**Note 6** *Personnel costs and average number of employees*

The Association employs directly Headquarters and most project staff, currently about 18 positions, including the Director. The Headquarters is located in Kiruna, Sweden. The personnel working at the Kiruna (Sweden), Sodankylä (Finland), Svalbard and Tromsø (Norway) sites are normally not employed by the Association. Instead, the personnel are provided via site contracts by the Swedish Institute of Space Physics (Kiruna site staff but currently none), Oulu University (Sodankylä staff) and the Arctic University of Norway (Tromsø and Svalbard staff). The Association refunds all expenses related to the provided staff, as well as an additional overhead.

| | | |
|---|---|---|
| *Personnel costs in total* | | |
| Salaries and emoluments paid to the Director | 1 647 | 2 418 |
| | | |
| Other personnel, employed and provided via site contracts | 17 466 | 17 553 |
| | | |
| Social security contributions amounted to | 8 676 | 9 064 |
| *of which for pension costs* | *4 068* | *4 318* |
| | | |
| Other personnel costs | 568 | 546 |

The current Director is Dr. Axel Steuwer. He assumed the role as Director 2023-01-01. His employment is for initially five years.

Of the pension costs, 294 kSEK (373 kSEK) relates to the Director. The Director and all other directly employed staff are included in individual occupational pension plans. For the personnel provided via site contracts, the pension plans are handled by their respective employer.

The members of the board (EISCAT Council) and members of committees, who represents Associates and Affiliates, do not receive remunerations from the Association. Travel expenses in connection with Council and committee meetings are normally covered by the Associates and Affiliates. The Association reimburses though the travel costs for Committee Chairpersons and external members.

| | 2023 | 2022 |
|---|---|---|
| *Salaries and emoluments and average number of staff per country* | | |
| Finland | | |
| Salaries and emoluments | 620 | 718 |
| Average number of staff - men and women | 1 + 0 | 1 + 0 |
| | | |
| Norway (including Svalbard) | | |
| Salaries and emoluments | 4 425 | 4 612 |
| Average number of staff - men and women | 6 + 0 | 7 + 0 |
| | | |
| Sweden | | |
| Salaries and emoluments | 14 067 | 14 641 |
| Average number of staff - men and women | 14 + 4 | 15 + 4 |

*Members of the board and Directors at year-end - men and women*

The board consist of delegations from every Associate country each having a Delegate (formal member) and up to two Representatives.

| | | |
|---|---|---|
| Board members (EISCAT Council) | 10 + 4 | 11 + 3 |
| Directors | 1 + 0 | 1 + 0 |

**Note 7** *Changes in designated funds*

Positive numbers - use of designated funds. Negative - transfer to the designated reserves or funds for later use.

| | | |
|---|---|---|
| Net profit/loss for the year | 96 037 | 98 718 |
| Transfers between regular EISCAT and EISCAT_3D construction project | -20 848 | -16 067 |
| Changes to capital operating reserve | -231 | -100 |
| Changes to decommissioning fund | -2 484 | -2 651 |
| Changes to E3D construction reserve | -3 182 | -3 397 |
| Changes to five-year operating reserve | 1 306 | 0 |
| Changes to funds invested | -70 583 | -75 099 |
| Changes to spare parts reserve | -16 | -15 |
| Changes to surplus fund | 0 | -887 |
| | 0 | 501 |

**Note 8** *Tangible fixed assets*

Changes in tangible fixed assets.

| | | |
|---|---|---|
| Buildings | | |
| Opening acquisition value | 127 135 | 115 783 |
| Acquisitions during the year | 19 885 | 11 353 |
| Disposals during the year | -10 | 0 |
| Closing acquisition value | 147 010 | 127 135 |
| | | |
| Opening accumulated depreciation | -42 160 | -41 668 |
| Depreciations during the year | -494 | -491 |
| Disposals during the year | 0 | 0 |
| Closing accumulated depreciation | -42 653 | -42 160 |
| | | |
| Closing residual value | 104 357 | 84 976 |
| | | |
| Radar systems | | |
| Opening acquisition value | 547 611 | 476 572 |
| Acquisitions during the year | 55 269 | 71 039 |
| Disposals during the year | 0 | 0 |
| Closing acquisition value | 602 880 | 547 611 |
| | | |
| Opening accumulated depreciation | -279 061 | -271 830 |
| Depreciations during the year | -5 913 | -7 231 |
| Disposals during the year | 0 | 0 |
| Closing accumulated depreciation | -284 974 | -279 061 |
| | | |
| Closing residual value | 317 907 | 268 551 |

| | 2023 | 2022 |
|---|---|---|
| Equipment and tools | | |
| Opening acquisition value | 37 424 | 36 557 |
| Acquisitions during the year | 2 868 | 1 427 |
| Disposals during the year | -7 | -559 |
| Closing acquisition value | 40 285 | 37 424 |
| | | |
| Opening accumulated depreciation | -34 886 | -34 448 |
| Depreciations during the year | -1 032 | -997 |
| Disposals during the year | 7 | 559 |
| Closing accumulated depreciation | -35 911 | -34 886 |
| | | |
| Closing residual value | 4 374 | 2 538 |
| | | |
| Sum tangible fixed assets | 426 638 | 356 065 |

**Note 9** *Prepayments and accrued income*

Resources in staff and direct costs spent in ongoing externally funded projects are covered by accrued income until settled by submission of periodic report claims. In 2023, both EGI-ACE and ENVRI-FAIR had final report claims.

| | | |
|---|---|---|
| Prepaid rents | 4 | 9 |
| Prepaid insurances | 355 | 1 107 |
| Accrued income, EGI-ACE project | 0 | 245 |
| Accrued income, ENVRI-FAIR project | 0 | 1 488 |
| Accrued income, PITHIA-NRF project | 1 673 | 342 |
| Accrued income, other projects | 128 | 24 |
| Other items | 394 | 1 220 |
| | 2 555 | 4 434 |

**Note 10** *Bank balances status*

| | | |
|---|---|---|
| Nordea | 139 166 | 232 988 |
| Cash in hand | 0 | 0 |
| | 139 166 | 232 988 |

**Note 11** *Funds invested status*

| | | |
|---|---|---|
| Buildings | 104 357 | 84 976 |
| Radar Systems | 317 907 | 268 551 |
| Equipment and Tools | 4 374 | 2 538 |
| | 426 638 | 356 065 |

**Note 12** *Designated funds*

The designated funds are divided into funds and reserves. The Surplus fund and Five-year operating reserve are used for budget transfers between periods in the five years plan. The other funds are earmarked for specific purposes. The 2022 net profit was added to the surplus fund.

| | | |
|---|---|---|
| Capital operating reserve | 3 485 | 3 254 |
| E3D construction reserve | 18 365 | 15 183 |
| Decommissioning fund | 14 333 | 11 850 |
| Equipment repair fund | 754 | 754 |
| Five-year operating reserve | 14 194 | 15 500 |
| Investment fund | 7 753 | 7 753 |
| Restructuring reserve | 4 101 | 4 101 |
| Spare parts reserve | 111 | 95 |
| Surplus fund | 18 463 | 17 962 |
| | 81 559 | 76 452 |

**Note 13** *EISCAT_3D build grants received but not used*

The construction project, E3DS1, started 2017-09-01 and the completion of the first phase, Stage 1, is delayed. Most of the construction works were completed in 2023, but some remain and radar electronics will only be installed in 2024.

| | 2023 | 2022 |
|---|---|---|

Most Associates have committed to its realisation. An E3DS1 specific funding payment was received from Japan in 2023 and a transfer from the regular budget to the construction project was done, though less than planned. Associate funds are kept as prefinancing until used in the project. Funds spent are deducted from the different funding sources in accordance with the agreed funding plan.

Changes in EISCAT_3D build grants received but not used

| | | |
|---|---|---|
| Associate Finland | | |
| Opening balance | 43 009 | 62 567 |
| Received during the year | 0 | 0 |
| Used during the year | -16 981 | -19 557 |
| Closing balance | 26 028 | 43 009 |
| | | |
| Associate Japan | | |
| Opening balance | 10 214 | 16 367 |
| Received during the year | 2 585 | 1 108 |
| Used during the year | 0 | -7 261 |
| Closing balance | 12 799 | 10 214 |
| | | |
| Associate Norway | | |
| Opening balance | 36 753 | 110 432 |
| Received during the year | 0 | 0 |
| Used during the year | -35 629 | -73 679 |
| Closing balance | 1 124 | 36 753 |
| | | |
| Associate Sweden | | |
| Opening balance | 0 | 10 884 |
| Received during the year | 0 | 0 |
| Used during the year | 0 | -10 884 |
| Closing balance | 0 | 0 |
| | | |
| Regular EISCAT | | |
| Opening balance | 16 263 | 0 |
| Received during the year | 18 072 | 16 263 |
| Used during the year | -33 155 | 0 |
| Closing balance | 1 179 | 16 263 |
| | | |
| E3DS1 project finances, gains/losses | | |
| Opening balance | 9 364 | 9 560 |
| Changes during the year | 2 776 | -196 |
| Closing balance | 12 141 | 9 364 |
| | | |
| Local taxes Sweden contribution | | |
| Opening balance | 9 792 | 22 073 |
| Received during the year | 0 | 0 |
| Used during the year | -3 718 | -12 281 |
| Closing balance | 6 074 | 9 792 |
| | | |
| Sum EISCAT_3D received build grants | 59 345 | 125 395 |

**Note 14** *External project grants received but not used*

Most externally funded projects work with prefinancing. For European Commission projects, these are in EUR's. The prefinancing is used to cover reported and approved costs. The EGI-ACE and ENVRI-FAIR projects will be financially closed in 2024.

| | | |
|---|---|---|
| EGI-ACE H2020 prefinancing | -249 | -42 |
| ENVRI-FAIR H2020 prefinancing | -1 294 | 1 169 |
| PITHIA-NRF H2020 prefinancing | 3 285 | 3 289 |
| | 1 743 | 4 416 |

Tokyo, 2024-06-04

Dr. Mervyn Freeman

Prof. Hiroshi Miyaoka

Dr. Kati Sulonen

Dr. Pål Sørgaard

Dr. Maria Thuveson

Prof. Jian Wu

Dr. Axel Steuwer
Director

Our audit report was issued on 2024-06-17
Öhrlings PricewaterhouseCoopers AB

Mr. Jonas Åkerlund
Authorised Public Accountant

# Auditor's report

To the council of EISCAT Scientific Association, corporate identity number 897300-2549

## Report on the annual accounts

### *Opinions*

We have audited the annual accounts of EISCAT Scientific Association for the year 2023.

In our opinion, the annual accounts have been prepared in accordance with the Annual Accounts Act and present fairly, in all material respects, the financial position of EISCAT Scientific Association as of 31 December 2023 and its financial performance and cash flow for the year then ended in accordance with the Annual Accounts Act. The statutory administration report is consistent with the other parts of the annual accounts.

### *Basis for Opinions*

We conducted our audit in accordance with International Standards on Auditing (ISA) and generally accepted auditing standards in Sweden. Our responsibilities under those standards are further described in the *Auditor's Responsibilities* section. We are independent of EISCAT Scientific Association in accordance with professional ethics for accountants in Sweden and have otherwise fulfilled our 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 opinions.

### *Responsibilities of the council and the director*

The council and the director are responsible for the preparation of the annual accounts and that they give a fair presentation in accordance with the Annual Accounts Act. The council and the director are also responsible for such internal control as they determine is necessary to enable the preparation of annual accounts that are free from material misstatement, whether due to fraud or error.

In preparing the annual accounts, the council and the director are responsible for the assessment of the association's ability to continue as a going concern. They disclose, as applicable, matters related to going concern and using the going concern basis of accounting. The going concern basis of accounting is however not applied if the council and the director intends to liquidate the association, to cease operations, or has no realistic alternative but to do so.

### *Auditor's responsibility*

Our objectives are to obtain reasonable assurance about whether the annual accounts as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinions. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs and generally accepted auditing standards in Sweden 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 annual accounts.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the annual accounts, 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 opinions. 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 the association's internal control relevant to our 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 association's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the council and the director.
- Conclude on the appropriateness of the councils' and the director's use of the going concern basis of accounting in preparing the annual accounts. We also draw a conclusion, based on the audit evidence obtained, as to whether any material uncertainty exists related to events or conditions that may cast significant doubt on the association's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in out auditor's report to the related disclosures in the annual accounts or, if such disclosures are inadequate, to modify our opinion about the annual accounts. 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 association to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the annual accounts, including the disclosures, and whether the annual accounts represent the underlying transactions and events in a manner that achieves fair presentation.

We must inform the council, among other matters, the planned scope and timing of the audit. We must also inform of significant audit findings during our audit, including any significant deficiencies in internal control that we identified.

## Report on other legal and regulatory requirements

### *Opinions*

In addition to our audit of the annual accounts, we have also audited the administration of the council and the director of EISCAT Scientific Association for the year 2023. The council and the director have not acted in contravention of the statutes.

### *Basis for Opinions*

We conducted the audit in accordance with generally accepted auditing standards in Sweden. Our responsibilities under those standards are further described in the *Auditor's Responsibilities* section. We are independent of EISCAT Scientific Association in accordance with professional ethics for accountants in Sweden and have otherwise fulfilled our 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 opinions.

### *Responsibilities of the Council and the director*

The council and the director are responsible for the association's organization and the administration of the association's affairs.

*Auditor's responsibility*

Our objective concerning the audit of the administration, and thereby our opinion about discharge from liability, is to obtain audit evidence to assess with a reasonable degree of assurance whether any member of the council or the director in any material respect:

- has undertaken any action or been guilty of any omission which can give rise to liability to the association, or
- in any other way has acted in contravention of the Annual Accounts Act or the statutes.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with generally accepted auditing standards in Sweden will always detect actions or omissions that can give rise to liability to the association.

As part of an audit in accordance with generally accepted auditing standards in Sweden, we exercise professional judgment and maintain professional scepticism throughout the audit. The examination of the administration is based primarily on the audit of the accounts. Additional audit procedures performed are based on our professional judgment with starting point in risk and materiality. This means that we focus the examination on such actions, areas and relationships that are material for the operations and where deviations and violations would have particular importance for the association's situation. We examine and test decisions undertaken, support for decisions, actions taken and other circumstances that are relevant to our opinion.

Gävle, 2024-06-17

Öhrlings PricewaterhouseCoopers AB

Jonas Åkerlund
Authorised Public Accountant