

# CHAPTER VI

## THIRTY-FIRST GENERAL ASSEMBLY

### EXECUTIVE COMMITTEE REPORT

Teresa Lago, General Secretary

#### 1. Introduction

The main actions of the Executive Committee during 2019–2021 period have been summarized below:

- Sustain and expand the activities of the IAU Offices: OAD, OAE, OAO, OYA
- Improve the efficiency and transparency of the IAU Administration
- Promote the junior astronomers and improve the gender balance of the individual members
- Maintain a strong link between the Executive Committee and the IAU Divisions
- Continue and improve the support to Symposia and Regional Meetings.

#### 2. Activities of the IAU Offices

The Offices are funded by the IAU jointly with NOAJ for the OAO, the Norwegian Academy of Sciences and Letters for the ISYA, the Max Planck Institut for the OAE, and the NRF for the OAD. All Offices held sessions at the GA.

##### 2.1. Office of Astronomy for Development (OAD)

During the COVID-19 pandemic, the OAD took swift action by expediting a call for project proposals in April-May 2020 and presenting work on “Astronomy and COVID-19” at various virtual meetings and events. Additionally, four agreements were renewed between the International Astronomical Union (IAU) and various regional offices, including those in the Arab World, West Africa, East Africa, and South West and Central Asia.

##### 2.2. Office of Astronomy for Education (OAE)

The OAE continued its Shaw-IAU Workshops on Astronomy for Education. It is expanding its network of National Astronomy Education Coordinator (NAEC) teams as well as overseeing regional Centers in China, Egypt, India, and Italy and a Node in the Republic of Korea. It continues to develop its translation projects and astronomy resources.

##### 2.3. Office of Astronomy Outreach (OAO)

In 2022, the IAU celebrated the 10th anniversary of its OAO. The OAO led the NARIT-NAOJ/IAU Astronomy Outreach training programme, and was responsible for the publication of the CAP (Communicating Astronomy to the Public) Journal and of

the organization of the CAP Conferences. The management of a number of activities led by the network of National Outreach Coordinators (NOCs) was overseen by the OAO.

#### **2.4. Office of Young Astronomers (OYA)**

OYA's activities were severely impacted by travel restrictions associated with COVID-19 pandemic. The OYA IAU Schools for Young Astronomers (ISYA) will resume in 2023.

### **3. Financial Report 2019–2021 and Budget Projection 2022–2024**

This section contains a summary of the financial evolution of the IAU budget and assets during the triennium 2019–2021 and the draft of the financial projection of the IAU for the next triennium 2022–24. In compliance with the IAU Bye-Laws (VII.29), the 2021 Financial Report covers the financial performance of the Union in 2021, presented at the EC#107 along with the recommendations of the Finance Committee and then approved at the EC#108 (August 1, 2022).

#### **3.1. The Rationale for the Forecast**

In order to understand the rationale of the budget projection the following points should be noted:

- The main income of the Union is represented by the annual payment of the NM dues.
- The ground rule for a non-profit NGO like the IAU is to keep a bank reserve roughly equivalent to one-year income.
- Every effort should be made to keep the expenditures for the operation and business meeting to a minimum.
- The largest possible fraction of the budget should be invested in scientific, educational and outreach activities.
- In previous triennia the IAU budget had a typical trend in which the net result (income minus expenditures) is positive in the non-GA years and slightly negative in the GA year. This trend is clearly visible in Table 7 that shows the oscillation of the IAU bank assets for the period 2021–2024.
- The next triennium (2022–2024) is slightly different because it has to take into account two GA in 2022 and 2024.

#### **3.2. Information on the management of the accounts**

The International Astronomical Union (IAU) manages its financial transactions through a system that categorizes them using two codes: one indicating the transaction type (e.g., Voyages) and the other specifying its purpose (e.g., EC Meeting). As the IAU is based in Paris, it follows French financial regulations, with its accounting software, SAGE, using French terminology (Comptabilité général for type and Comptabilité analytique for purpose). Each transaction is logged in SAGE in chronological order, along with the assigned codes and a brief description.

The Head of Administration (HoA) oversees the financial document database and handles bank statement reconciliation. The General Secretary (GS) regularly reviews current expenses against the annual budget, using SAGE data provided by the HoA. Additionally, an external accountant manages monthly payroll calculations, taxes, and account closure, preparing summary accounts for an annual external audit. These

summary accounts adhere to French financial regulations, facilitating a quick assessment of administrative compliance by external auditors.

The annual audit is carried out by the company Praxor with two primary objectives: ensuring compliance with French financial laws and rules and verifying the accuracy of recorded liabilities, assets, invoices, and bank statements through sampling.

### 3.3. Bank Assets as of December 31, 2021

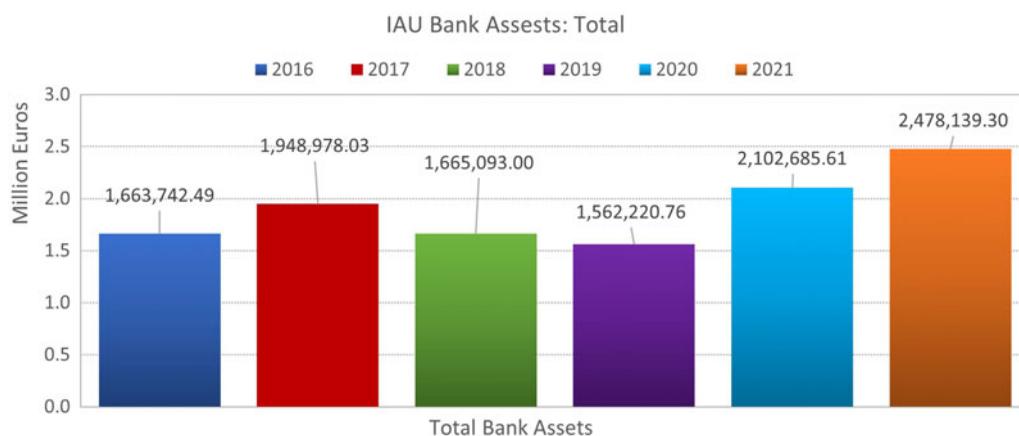
The assets of the IAU bank accounts for the 2019–2021 are listed in Table 1 and shown in Figure 1, which also includes the previous triennium for reference.

The IAU holds and operates 3 current bank accounts and 2 saving accounts. All accounts are in euros and are held by HSBC Bank. One of the two current accounts is used for internal administrative transactions (salaries, taxes, bills, administrative charges, etc.), the other for transactions involving the community (National Member dues, expenditures for Symposia, the General Assembly, etc.). In addition, the IAU holds a PayPal account for payments such as software subscriptions and revenue from proceedings of Cambridge University Press.

Unlike the current accounts, the two savings accounts receive a modest amount of interests. An additional savings account, D.A.T. Renouvelable, was closed in 2021, since it did not provide significant return. The €350,000 balance from D.A.T. Renouvelable has been temporarily moved to the HSBC II current account (accounting for the increase in that account in 2021, and the corresponding decrease in the savings total, see Table 1), but is in the process of being transferred to one of the two existing savings accounts. Note that IAU's holdings exceed the maximum allowed balance of an individual HSBC savings accounts, hence the reason for two such accounts.

The vast majority of the financial transactions are carried through online banking. The authorization to operate bank accounts is exclusive to the GS. Credit-card transactions can be signed both by the GS and the HoA.

The IAU total bank assets shown in Figure 1 (from 2016 to 2021) largely follows the usual “wave pattern”, with funds increasing leading to the year of the GA, at which point



**Figure 1.** IAU Total Bank Assets from 2016–2021. Credit: T. Lago

**Table 1.** Overview of IAU Bank Assets for 2019–2021, 2018 has been included for reference. Credit: T. Lago

Overview of IAU Bank Assets 2018 - 2021				
<b>Currents Accounts (EUR)</b>	<b>31/12/2018</b>	<b>31/12/2019</b>	<b>31/12/2020</b>	<b>31/12/2021</b>
HSBC I Administration	35,321.00	48,994.73	23,120.23	34,991.64
HSBC II Scientific Operations*	66,007.00	544,227.64	1,110,566.99	1,817,910.13
PayPal Account				5,243.59
<b>Balance Current Accounts</b>	<b>€ 698,328.00</b>	<b>593,222.37</b>	<b>1,133,687.22</b>	<b>1,858,145.36</b>
<b>Savings Accounts (EUR)</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
HSBC Livret "A"	85,318.00	85,957.40	85,957.40	86,405.10
HSBC Compte sur livret	531,447.00	533,040.00	533,040.99	533,588.84
D. A. T. Renouvelable†	350,000.00	350,000.00	350,000.00	0.00
<b>Balance Saving Accounts</b>	<b>966,765.00</b>	<b>968,998.39</b>	<b>968,998.39</b>	<b>619,993.94</b>
<b>Total Bank Assets</b>	<b>1,665,093.00</b>	<b>1,562,220.76</b>	<b>2,102,685.61</b>	<b>2,478,139.30</b>
* Balance includes €350000,00 transferred from D.A.T. Renouvelable savings account. † Account was closed in 31/12/2021				

assets normally show a sharp decrease. The anomalous increase in assets in 2021 results from the postponement of the 2021 GA, most symposia, and other activities as a result of the restrictions imposed by the COVID-19 pandemic. Since many of these activities are postponed to 2022/2023, we expect the assets to decrease accordingly in those years.

### 3.4. Sources of Income

The 2021 actual income is reported in Table 2, including the projected income for the years 2022–2024. The various sources of income are discussed below.

#### a. Contributions from National Members

National Member (NM) dues are the Union's main source of income. They are calculated based on the NM's "Category" and the associated number of "units of contribution" (Bye-Laws §25). The value of one "unit" for 2021 is €3221, and was approved at the 2018 XXX IAU GA. In 2021, the actual income from NM dues exceeded the forecast by €45k, due to several NMs settling payment for dues in arrears. Such large deviation is not expected in future years. In 2022, 2023 and 2024, the value of one "unit" is €3285, €3351 and €3418, respectively, as established at the XXXI virtual GA in 2021.

#### b. Cambridge University Press Royalties

The IAU has a contract with Cambridge University Press (CUP) for the publication of the IAU Symposia, *Astronomy in Focus* and *GA Transactions*. The contract establishes that the annual net profit obtained from the sale of the Symposia Proceedings is divided equally between CUP and the IAU. The annual instalment is paid by CUP in pound sterling, and is normally credited to the IAU at the end of April two years following the symposia (i.e. in any given year, the IAU receives revenue from the publication of the proceeding of symposia held two years prior). Royalties from CUP are received by the IAU only once a minimum number of proceedings have been published; due to the cancellation of several symposia, royalties for 2019 are therefore expected to be received in 2023 at the earliest.

**Table 2.** The first column lists the income source, while the second shows the actual income for 2021 approved at the EC#108 (August 2022). The columns shaded in green show the projected income for the years 2022–2024 approved at the EC#105 (April 2021). Credit: T. Lago

Source of Income (in Eur)	Year			
	2021	2022	2023	2024
National Members dues	1,078,037.48	1,058,000.00	1,079,500.00	1,100,900.20
<b>Grants/Sponsor Funds</b>				
NASL for ISYA 2021†	25,718.13	27,000.00	27,000.00	27,000.00
The Shaw Prize Foundation Workshop “Astronomy for Education”**†	34,966.00	34,000.00	34,000.00	34,000.00
Donations	2,309.03	15,000.00	15,000.00	15,000.00
<b>Publications/Royalties</b>				
Cambridge Univ. Press (2019)	-	60,000.00	60,000.00	60,000.00
Springer	564.24	55.00	55.00	55.00
<b>Funds in Transit</b>				
The Gruber Foundation Fellowship*	62,667.82	62,700.00	62,700.00	62,700.00
Kavli Global Coordination of Large Facilities Meeting*	-	-	38,250.00	-
Kavli-IAU/interdisciplinary symposium*	-	34,000.00	34,000.00	34,000.00
SKAO for OAO projects in transit	6,405.00	-	-	-
Fundraising	-	60,000.00	90,000.00	100,000.00
Bank Revenues	542.91	2,200.00	2,200.00	2,200.00
<b>Total Income</b>	<b>€ 1,211,210.61</b>	<b>1,352,995.00</b>	<b>1,442,705.00</b>	<b>1,435,855.20</b>
* Funds received in a foreign currency and converted to euros based on current conversion rates.				
† The Shaw Prize and the NASL are considered in transit for the collaboration with our Offices (OAE and ISYA).				

### c. Other contributions - Funds in transit

Contributions paid to the IAU for a specific use (e.g. donations to support student fellowships) are designated as “funds in transit”, since their impact on the overall balance is nil. Other contributions (e.g. some private donations) do not have a specific designation and can be allocated to different tasks. Funds in transit received in 2021 and forecasted for 2022–2024 are:

- US\$30k (€25,718,00) from the Norwegian Academy of Science and Letters (NASL) to support the International School of Young Astronomers (ISYA) (yearly).
- US\$40k (€34,966,00) from the Shaw Prize Foundation to support the annual Shaw Prize IAU “Workshop on Astronomy for Education”, in accordance with the agreement signed in 2019 (yearly).
- US\$75k (€62,666,82) from the Gruber Foundation for the TGF Fellowship programme (yearly).
- €6.405 from the SKAO Institute to support the Office for Astronomy Outreach (OAO) in 2021.
- US\$40k (≈ 34,000) from the Kavli Foundation to support an annual Kavli-IAU interdisciplinary symposium, one of the 9 symposia in 2022, 2023 and 2024, according to an Agreement signed in November 2020.
- US\$45k (≈ 38,250) from the Kavli Foundation to support the Global Coordination of Large Facilities Workshop in 2023.

Additional, non-earmarked, contributions include €2,309.03 donations from anonymous donors.

#### d. Fundraising

Fundraising efforts started in 2020 with the hiring of a part-time professional fundraiser. In 2021, a fundraising target of 100,000 euros was set, but fundraising efforts exceeded expectations by securing over half a million dollars. However, Table 2 may incorrectly suggest that fundraising was not successful, as the funds obtained in 2021 were not reflected in the 2021 budget since they were deposited in the IAU accounts in early 2022.

#### e. Bank revenues

This source of income is very limited given the low bank interest rates.

### 3.5. Expenditures

Expenditures are grouped into four main categories:

- I. Scientific activities cover all IAU scientific meetings, co-sponsored meetings, cooperation with other Unions and Scientific Organizations, and support for Divisions, Commissions and Working Groups;
- II. Education and outreach covers the operations and expenditures associated with the four IAU offices: the Office for Young Astronomers (OYA), the Office of Astronomy for Development (OAD), the Office of Astronomy Outreach (OAO) and the Office of Astronomy for Education (OAE);
- III. Executive Committee and Communication covers expenditures incurred by the IAU Officers and EC in performing their IAU duties. It also covers expenditures for the IAU Press Office and IAU Publications;
- IV. Administration & operations cover salaries and expenditures of the IAU Secretariat in Paris, costs associated with outsourced tasks (e.g. the external audit), and small miscellaneous expenditures.

Each of these categories is divided into subcategories to make the accounts more transparent. Expenditure for each category/subcategory are listed in Tables 3-6.

#### I. Scientific activities

Expenditures classified as scientific activities are presented in Table 3.

The main differences between predicted and actual expenses were primarily due to COVID-19 travel restrictions, which forced the postponement of most planned meetings from 2021 to 2022/2023. It's important to note that the forecast, already adjusted during EC Meeting 105, significantly reduced expenses related to the 2021 GA in anticipation of its postponement to 2022. However, in hindsight, the forecast for non-GA symposia, including some postponed from 2020 due to the pandemic, was not adequately reduced.

#### II. Education and Outreach

Expenditures in this category (and subcategories), are listed in Table 4. They include annual contributions for the operation of the four IAU offices, but also support for their various activities; for example, Schools and Training (ISYA/OYA) which are supported by the IAU and the Norwegian Academy of Sciences and Literature (NASL) with an

**Table 3.** Scientific Expenditures for 2021 approved at the EC#108 (August 2022). The columns shaded in green show the projected expenditure for the years 2022–2024 approved at the EC#105 (April 2021). Credit: T. Lago

Scientific Activities	Year			
Source of Income (in Eur)	2021	2022	2023	2024
<b>General Assembly</b>				
Preparation & organization	-	30,000.00	10,000.00	30,000.00
GA Grants	-	450,000.00	-	450,000.00
Other	1,383.87	5,000.00	-	5,000.00
<b>Total General Assembly</b>	<b>1,383.87</b>	<b>485,000.00</b>	<b>10,000.00</b>	<b>485,000.00</b>
<b>Scientific Activities</b>				
IAU Symposia	25,718.13	50,000.00	180,000.00	50,000.00
Regional IAU Meetings	34,966.00	20,000.00	40,000.00	-
Other Co-sponsored Meetings	2,309.03	15,000.00	15,000.00	15,000.00
<b>Sub-total Sponsored Meetings</b>	<b>26,675.62</b>	<b>85,000.00</b>	<b>235,000.00</b>	<b>65,000.00</b>
<b>Working Groups</b>				
EC Working Groups	-	20,000.00	20,000.00	20,000.00
Junior Members	895.38	-	-	-
Others	-	-	-	-
Divisions & Commissions WGs	-	15,000.00	15,000.00	15,000.00
Astronomy/UNESCO World Heritage	-	5,000.00	5,000.00	5,000.00
<b>Sub-total Working Groups</b>	<b>895.38</b>	<b>40,000.00</b>	<b>40,000.00</b>	<b>40,000.00</b>
<b>Cooperation: Unions &amp; Others#</b>				
Delegates Travels	-	2,000.00	2,000.00	2,000.00
ISC Dues	24,582.00	25,074.00	25,575.00	26,087.00
Dark & Quiet Skies	6575.11	-	-	-
Gender Equality in Science	-	300.00	300.00	300.00
Others (IUCAF, COSPAR, etc.)	-	11,000.00	11,000.00	11,000.00
<b>Sub-total Cooperation</b>	<b>31,157.11</b>	<b>38,374.00</b>	<b>38,875.00</b>	<b>39,387.00</b>
<b>Total Scientific Activities</b>	<b>€ 60,111.98</b>	<b>€ 648,374.00</b>	<b>€ 323,875.00</b>	<b>€ 629,387.00</b>

annual grant of US\$30K, OAO projects funded by the IAU and involving the National Outreach Coordinators (NOCs), the OAD projects involving the Regional Offices of the OAD (ROADs) and funded by the IAU, and the annual Shaw Prize-IAU “Workshop on Astronomy for Education” funded by the Shaw Prize Foundation with an annual grant of US\$40K.

It is worth noting that OYA is the only office entirely supported by volunteers, while OAD, OAO and OAE employ salaried staff. Most of OYA’s activities revolve around schools that are meant to be held in person and to encourage social interaction, in particular in developing countries. More so than those of the other Offices, OYA’s activities were severely impacted by the travel restriction associated with the COVID-19 pandemic.

The Offices’ budget is earmarked and unspent funds are carried over consecutive calendar years. This is particularly important for the OAO and OAD, as the fiscal year for Japan and South Africa, where the offices are located, ends in March, while the IAU financial year ends in December. Additionally, carrying the Offices budgets across the calendar year boundary is crucial in a year like 2021, when most of the offices’ regular activities had to be postponed or canceled because of the COVID-19 pandemic.

**Table 4.** Education and Outreach Expenditures for 2021 and the columns shaded in green show the projected expenditure for 2022–2024. Credit: T. Lago

\**ISYA* are funds in transit designated specifically to support OYA's schools that were cancelled in 2021.

Educational Activities		Year			
Source of Income (in Eur)	2021	2022	2023	2024	
<b>OYA</b>					
ISYA*	-	55,000.00	55,000.00	55,000.00	
ISYA Preparation and Coordination	-	3,000.00	3,000.00	3,000.00	
Various	-	3,000.00	3,000.00	3,000.00	
Steering Committee Meeting	-	3,000.00	3,000.00	3,000.00	
Support archive/data management	-	10,000.00	10,000.00	10,000.00	
<b>Sub-total OYA</b>	<b>-</b>	<b>74,000.00</b>	<b>74,000.00</b>	<b>74,000.00</b>	
<b>OAD</b>					
IAU Contribution to OAD Operation	70,000.00	70,000.00	70,000.00	70,000.00	
OAD Projects	114,880.00	120,000.00	120,000.00	120,000.00	
Steering Committee Meeting	-	3,000.00	3,000.00	3,000.00	
Start up contribution to ROADS	-	-	-	-	
OAD Review	-	-	5,000.00	-	
<b>Sub-total OAD</b>	<b>184,880.00</b>	<b>193,000.00</b>	<b>198,000.00</b>	<b>193,000.00</b>	
<b>OAO</b>					
IAU Contribution to OAO Operation	60,000.00	60,000.00	60,000.00	60,000.00	
CAP Conference	3,699.51	5,000.00	-	5,000.00	
CAP Journal	-	-	-	-	
OAO NOC Projects	14,670.00	25,000.00	25,000.00	25,000.00	
OAO Review	-	-	5,000.00	-	
Steering Committee Meeting	-	3,000.00	3,000.00	3,000.00	
<b>Sub-total OAO</b>	<b>78,369.51</b>	<b>93,000.00</b>	<b>93,000.00</b>	<b>93,000.00</b>	
<b>OAE</b>					
IAU Contribution to OAE Operation	60,000.00	60,000.00	60,000.00	60,000.00	
Travel	-	5,000.00	5,000.00	5,000.00	
Shaw-IAU Workshop "Astronomy for Education"	34,966.00	33,600.00	33,600.00	33,600.00	
Projects	-	20,000.00	20,000.00	20,000.00	
OAE SAEs	-	5,000.00	5,000.00	5,000.00	
Web/learning platform customization	14,500.00	6,500.00	6,500.00	6,500.00	
Steering Committee Meeting	-	3,000.00	3,000.00	3,000.00	
OAE Review	-	-	5,000.00	-	
<b>Sub-total OAE</b>	<b>109,466.00</b>	<b>133,100.00</b>	<b>138,100.00</b>	<b>133,100.00</b>	
<b>Total Educational Activities</b>	<b>€ 435,383.33</b>	<b>493,100.00</b>	<b>503,100.00</b>	<b>493,100.00</b>	
<b>Education and Research Support Funds in transit</b>					
Gruber Foundation Fellowship	62,667.82	62,700.00	62,700.00	62,700.00	
Gruber support GA	-	-	-	-	
Kavli/Global Coordination Workshop	-	-	38,250.00	-	
Kavli/IAU interdisciplinary symposium	-	34,000.00	34,000.00	34,000.00	
<b>Sub-total Funds in transit</b>	<b>-</b>	<b>96,700.00</b>	<b>134,950.00</b>	<b>96,700.00</b>	
<b>Outreach Activities</b>					
Inspiring Stars	2,552.00	-	-	-	
<b>Total Educational and Outreach</b>	<b>€ 437,935.33</b>	<b>€ 589,800.00</b>	<b>€ 638,050.00</b>	<b>€ 589,800.00</b>	

### III. Executive Committee and Communication

The expenditure forecast in the area of Executive Committee and Publications for the years 2021–2024 is reported in Table 5. Since 2021 was supposed to be the year of IAU's GA, the triennial budget approved at the 2018 XXX GA included a €100K line

item for GA related expenditures (travel, etc.) incurred by the Officers and the EC. By the time of the EC#105 meeting (April 2021), it had been decided that the 2021 GA would be postponed to 2022, therefore this line item was zeroed-out for 2021, and will instead be included in the 2022 budget. Beyond the GA, duty travel for the Officers was reduced in 2021 compared to pre-pandemic levels, leading to a significant deviation of the EC expenditures in relation to the budgeted amount.

Due to the pandemic, the Paris Office was closed and has since reopened. The annual meeting of the officers (March 2021) and the annual meeting of the executive committee (April 2021), were organised in virtual format, contributing to a significant reduction in the expenses of the Executive Committee planned for 2021.

**Table 5.** Expenses of the Executive committee & Publications for 2021 and the columns shaded in green show the projections for 2022, 2023 and 2024. Credit: T. Lago

Executive Committee & Officers		Year			
Source of Income (in Eur)	2021	2022	2023	2024	
<b>Executive Committee Meeting</b>					
EC Travel	-	20,000.00	15,000.00	20,000.00	
EC Accommodation	-	30,000.00	60,000.00	60,000.00	
EC Other Expenses	-	10,000.00	3,000.00	10,000.00	
<b>Sub-total EC Meetings</b>	-	<b>60,000.00</b>	<b>78,000.00</b>	<b>90,000.00</b>	
<b>Officers Meetings</b>	-	<b>12,000.00</b>	<b>12,000.00</b>	<b>12,000.00</b>	
<b>Officers Expenditures</b>					
General Secretary					
GS Paris Duty (flat, electricity, wifi)	16,543.45	17,000.00	17,000.00	17,000.00	
GS Paris Duty (travel & per diem)	2,233.62	6,000.00	6,000.00	6,000.00	
GS other Duties	548.81	8,000.00	8,000.00	8,000.00	
AGS Expenditures	-	2,000.00	2,000.00	2,000.00	
President Expenses	-	4,000.00	4,000.00	4,000.00	
President Elect Expenses	206.95	2,000.00	2,000.00	2,000.00	
Advisors Expenses	-	2,000.00	2,000.00	2,000.00	
<b>Sub-total Officers Expenditures</b>	<b>19,532.83</b>	<b>41,000.00</b>	<b>41,000.00</b>	<b>41,000.00</b>	
Press Office	5,899.00	14,000.00	4,000.00	14,000.00	
Publications	-	5,000.00	5,000.00	5,000.00	
<b>Total Executive Committee and Publications</b>	<b>€ 25,431.83</b>	<b>€ 132,000.00</b>	<b>€ 140,000.00</b>	<b>€ 162,000.00</b>	

#### IV. Administrative and Operations

Expenditures in this category are reported in Table 6.

Outsourced tasks listed in Table 6 include:

- Salary and expenditures for the IAU Fundraiser (*the IAU and the Leiden Observatory signed an agreement in April 2020 to hire a part-time fundraiser for the IAU, based at the Leiden Observatory.*) The fundraiser salary was not foreseen in the triennium budget approved at the 2018 GA. In 2021, as a result of the fundraiser's efforts, funding was secured from the Gordon and Betty Moore Foundation to sponsor the IHOW programme. The funds were received by the IAU in February 2022, in the amount of 296,298 Euros, and will be reflected in

**Table 6.** Administration and Operations Expenditures for 2021 and the columns shaded in green show the projections for 2022, 2023 and 2024. \*The rent of the premises is still under discussion. Credit: T. Lago

Administration and Operations		Year			
Source of Income (in Eur)	2021	2022	2023	2024	
<b>Secretariat &amp; Administration</b>					
Secretariat salaries	122,560.88	116,265.00	117,544.00	118,837.00	
Taxes & charges	63,869.89	50,000.00	50,000.00	50,000.00	
<b>Sub-total Salaries &amp; Charges</b>	<b>186,430.77</b>	<b>166,265.00</b>	<b>167,544.00</b>	<b>168,837.00</b>	
<b>Secretariat Training &amp; Travel</b>					
Staff training	-	2,000.00	2,000.00	2,000.00	
Secretariat travel	360.81	1,000.00	1,000.00	1,000.00	
<b>Sub-total Secretariat Training &amp; Travel</b>	<b>360.81</b>	<b>3,000.00</b>	<b>3,000.00</b>	<b>3,000.00</b>	
<b>Outsourced tasks</b>					
Web development ESO	20,000.00	20,400.00	20,400.00	20,400.00	
Web maintenance ESO	29,914.00	29,000.00	29,000.00	29,000.00	
Personnel administration (payslips, etc)	1,104.00	1,100.00	1,100.00	1,100.00	
Accounting	5,688.00	4,000.00	4,000.00	4,000.00	
External Auditing	5,280.00	5,300.00	5,300.00	5,300.00	
Legal Support	-	1,000.00	1,000.00	1,000.00	
Mi-Voice e-voting subscription	3,000.00	-	-	2,600.00	
IAU Fundariser salary, travel & expenditures	41,881.53	53,000.00	53,000.00	53,000.00	
<b>Sub-total Outsourced tasks</b>	<b>106,867.53</b>	<b>113,800.00</b>	<b>113,800.00</b>	<b>116,400.00</b>	
<b>Office General Expenditure</b>					
Post	380.17	400.00	400.00	400.00	
Telephone and Internet	490.91	650.00	650.00	650.00	
Rent CNRS/IAP, Paris*	-	-	-	-	
IT support from IAP	-	1,800.00	1,800.00	1,800.00	
Office maintenance	-	300.00	300.00	300.00	
Hardware & Software	4,192.45	5,000.00	5,000.00	5,000.00	
Printer/photocopier (rent & consumables)	2,245.45	3,300.00	4,000.00	1,000.00	
Miscellaneous (fees for translations)	216.04	300.00	300.00	300.00	
Office consumables	-	200.00	200.00	200.00	
Bank charges	4,245.71	5,000.00	5,000.00	5,000.00	
<b>Sub-total General Office</b>	<b>11,770.73</b>	<b>16,950.00</b>	<b>17,650.00</b>	<b>14,650.00</b>	
<b>Entertainment and Gifts</b>					
Restaurants and catering	256.76	800.00	800.00	800.00	
Contributions (IAP)	-	300.00	300.00	300.00	
<b>Sub-total Entertainment and Gifts</b>	<b>256.76</b>	<b>1,100.00</b>	<b>1,100.00</b>	<b>1,100.00</b>	
Taxes on Bank interests	-	400	400	400	
<b>Total Administration and Operations</b>	<b>€ 305,686.60</b>	<b>€ 301,515.00</b>	<b>€ 303,494.00</b>	<b>€ 304,387.00</b>	

the 2022 budget report. The first IHOW on-hands workshop is expected to take place in Chile in 2022.

- Tasks outsourced to ESO (*The agreement between the IAU and ESO was signed in November 2021 and covers the period 2022–2024*), including the development and maintenance of the Web and the maintenance of the IAU reference database;
- Support for the external accountant, who is responsible for the monthly payrolls and associated taxes/overheads, the regular checking of the accounts, and their closure in preparation for the external audit.
- The contract with Democracy Technology Ltd for the use of the Mi-Voice electronic voting platform. This contract exempts the IAU from paying the annual license,

except in the year of the GA (elections). The current contract covers the period 2019–2021, and the electronic voting was used in 2021 for the elections of the Divisions and Commissions; it is assumed that a similar contract will be renewed for the next three years.

None of the activities under Administration and Operations were affected by the pandemic, and the actual expenditures in this category are well aligned with the Forecast. The large deviation compared to the 2018 Projection is due to increase in the secretariat salaries and bonuses, and to the salary of the IAU fundraiser, a position that was not foreseen in 2018.

### 3.6. Summary

A summary of the total income and expenditure for 2021 and corresponding projections for 2022–2024 is presented in Table 7.

Higher than normal deviations, particularly in projected expenses, are due to unusual circumstances; many of the activities that could not take place in 2021 (e.g. the IAU GA) have been postponed to 2022 or 2023. Some approved non-GA scientific symposia have been postponed so that they can be held in person, leading to expected extra spending in upcoming years. Other activities (e.g., Officer travel/visits to the Offices) have been postponed. The projection outlined for the 2022–2024 triennium is founded on the assumption that some degree of normalcy will have been restored. Nevertheless, the trajectory of the ongoing health crisis and the pace at which we can return to what we consider “normal life” remain highly uncertain, and the worldwide repercussions of the pandemic are still unpredictable. Nevertheless, the IAU is committed to upholding its mission, which is “to promote and safeguard astronomy in all its aspects (including research, communication, education and development) through international cooperation.”

**Table 7.** A summary of the total income, total expenses in each of the four categories and total overall expenditure, as well as the net result. This also includes the corresponding projections for 2022, 2023 and 2024 approved at EC#105 (2021). Credit: T. Lago

2021 Summary and Forecast for 2022-2024				
	2021	2022	2023	2024
Income	€ 1,211,210.61	€ 1,352,955.00	€ 1,442,705.00	€ 1,435,855.00
Expenditures				
Science	60,111.98	648,374.00	323,875.00	629,387.00
Education & Outreach	437,935.33	589,800.00	638,050.00	589,800.00
Executive Committee	25,431.83	132,000.00	140,000.00	162,000.00
Administration & Operation	305,686.00	301,515.00	303,494.00	304,387.00
<b>Total Expenditure</b>	<b>829,165.14</b>	<b>1,671,689.00</b>	<b>1,405,419.00</b>	<b>1,685,574.00</b>
<b>Net result</b>	<b>€ 382,045.47</b>	<b>-€ 318,734.00</b>	<b>€ 37,286.00</b>	<b>-€ 249,719.00</b>

### 3.7. IAU Fundraising Activities 2019–2022

*Ewine van Dishoeck, President*

This section provides an overview of the Fundraising efforts in the 2019–2022 period.

The possibility of fundraising for IAU activities has a long history within the IAU. In fact, at the establishment of each of the four IAU Offices and their regional offices, significant local funding has been raised. Nevertheless, support for a more global IAU fundraiser has been part of the IAU-NRF agreements for the OAD. To honor this agreement, and using the momentum and experience of IAU100 which raised €346k (augmented by in-kind support) in 2017–2019 to enable 5000 activities worldwide, an open advertisement for a fundraiser position was placed in late 2019.

Since fundraising needs to be done at the highest level of an organization, the location of the fundraiser was chosen to be at the IAU President's institute, in this period Leiden Observatory, the Netherlands. Leiden Observatory generously contributed 50% of the funds for a position with a starting date in 2020 and ending just after the GA in October 2022. Genevieve Marshall headed the position April 2020–February 2022, and Katya Frantseva from March–October 2022, both co-supervised by Pedro Russo. Note that Covid-19 hit just as these activities were started in 2020, greatly limiting the possibility for in-person meetings that are often key to successful fundraising.

Early work in 2020–2021 focused on creating IAU messaging and a brochure aimed at funders; establishing an online donation functionality; strengthening relationships with warm donors; training workshops for OAD-funded projects to enhance their local fundraising capacity; cross-Offices meetings to develop plans and setting priorities; and giving various online presentations and papers at international meetings.

Strategically, following brainstorm meetings with colleagues with fund-raising experience across all continents, it was decided to focus on Foundations with which astronomy has good connections and at government funding (e.g., European Union), rather than at corporate or philanthropic levels. It was also recognized that lead times are long, typically at least 2 years from first contact to a major donation. Other hurdles include restrictions on whether funding can leave the country of the donor and reach the IAU accounts in Paris, France, or whether it needs to be spend locally. Also, in contrast with big universities, IAU does not have “alumni”, who often provide the majority of unrestricted donations.

Several (prioritized) flagship programs for fundraising were developed by the IAU Offices, in discussions with the Officers and fundraiser. By summer 2022, more than €1 million had been raised. The most notable successes include:

- Agreement with the Shaw Prize Foundation to fund the Shaw-IAU workshops on Astronomy for Education at the newly established OAE for 5 years in 2019–2024, for a total of \$200k

- Agreement with the Kavli Foundation to fund multidisciplinary Kavli-IAU symposia (1 per year for 3 years) and to enter into a Kavli-IAU Public Engagement partnership providing funding for the CAP conference as well as to develop a training program to enhance young astronomer's skills to engage with the public, for a total of \$220k

- Agreement with the Kavli Foundation to continue the Global Coordination of Ground and Space Astrophysics workshops once every 3 years funded at \$50-100k each; the workshop on “Multi-Messenger Transient Observations in the 2020's and beyond” took place in January 2020 in Cape Town, South Africa

- Agreement with the Gordon & Betty Moore Foundation to support the new IAU Hands-on Workshops (I-HOW) for young astronomers at 2 per year for 3 years, for a total of \$296k

- Agreement with the Heising-Simons Foundation to support outside speakers at a Junior Members (JM) meeting associated with the GA as well as travel for JMs from underrepresented groups to the GA; and enhancing the activities at the annual Women in Astronomy day with micro-grants, for a total of \$126k
- Agreement with the Visegrad fund to support Eastern European student exchange for three years, for a total of €146k
- European Union's Erasmus+ Grants of €200k for 5 years for cooperation and research capacity building between Europe, Armenia, Colombia, Ethiopia, Georgia, Nigeria and Ukraine.
- In kind support to establish, in partnership with "Stars Shine for Everyone" (Ghent University, Belgium) and Leiden Observatory, the "Telescopes for All" program that enables the OAO to make an annual call for underrepresented groups to obtain a small telescope for educational and outreach purposes.

Finally, an IAU fundraising working group containing astronomers that could serve as ambassadors for the IAU was established, and terms of reference drafted. A first meeting of the working group was held at GAS 2022 in Busan, where also a fundraising event for potential Korean donors was organized. Following the GA 2022, leadership of the fundraising activities shifted to the next IAU President, Debra Elmegreen.