

D3.3: 5-year ACTRIS Financial plan, including stakeholder recommendation on financial integration

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1. Introduction

This document contains an *initial estimation* of the first 5-year Financial Plan for the ACTRIS ERIC for the years 2020 – 2024. It describes the aim and structure of the financial plan providing details on the framework and process adopted to prepare the indicative budget for the first five years of the Research Infrastructure (RI), which was included in the annex II of the Statutes submitted for the European Research Infrastructure Consortium (ERIC) Step 1 application.

During the 5th Interim ACTRIS Council (IAC) meeting, the IAC country delegates approved the main guiding principles for the funding model to ensure the RI financial sustainability. During the 6th IAC meeting, IAC country delegates started discussions about the specific rules for the calculation of the ACTRIS ERIC members', permanent observers' and observers' contributions to support the ACTRIS operations. The 5-year financial plan for the ERIC Step 1 was drawn up following the arrangements of the Council delegates, pending their decisions on the definitive rules for calculating the contributions of the Members, Permanent Observers and Observers.

In the end, the definitive calculation method of Members', Permanent Observers' and Observers' contributions, which will be laid down in the ACTRIS ERIC Internal Financial Rules (IFR), will be used to draw up the updated 5-year Financial Plan to be submitted for the European Research Infrastructure Consortium (ERIC) Step 2 application.

2. Aim and Scope of the 5-year Financial Plan

Financial planning is meant to provide a comprehensive evaluation of the ACTRIS ERIC future financial state by reporting future cash flows based upon estimated expenditures and revenues.

The 5-year Financial Plan provides insights on the ACTRIS ERIC finances over the medium-term and establishes Members', Permanent Observers' and Observers' commitments to the ACTRIS operation in the years of the considered budgetary cycle.

In particular, **the first 5-year Financial Plan reports the indicative plan of expenditures and revenues related to ACTRIS ERIC for the years 2020-2024** (Implementation Phase). Expenditures and revenues related to other parts of the whole ACTRIS are out of the scope of this 5-year financial plan, namely: National facilities, Central Facilities that are not operated as part of the ACTRIS ERIC except for the part to be supported by ACTRIS ERIC contribution, etc.

As regards the expenditures, the 5-year financial plan includes only the costs that will be incurred in to operate the Facilities during the considered period. Investment and implementation costs occurring in the same period 2020-2024 to construct the Facilities and implement the activities are excluded from this first 5-year Financial Plan.

It should be noted that the final perimeter of ACTRIS ERIC is not yet decided, thus in this document only the Head Office is considered as part of ACTRIS ERIC.

3. Structure of the 5-year Financial Plan

The 5-year financial plan is structured to report expenditures and revenues of the ACTRIS ERIC.

3.1 ACTRIS ERIC Expenditures

The expenditures of ACTRIS ERIC are the outgoing flows and mainly consist of:

- a) Operational Costs of the Central Facilities as part of the ERIC legal entity
- b) ERIC contribution to support the operational cost of the Central Facilities not part of the ERIC legal entity
- c) Other costs related to operating ACTRIS ERIC.

The main expenditures considered for the purposes of the preparation of the first 5-year Financial Plan (2020-2024) are the annual operational costs of the Central Facilities (points a and b of the previous list) for the quota identified with the arrangements made by the ACTRIS Interim ACTRIS Council under the framework of the ERIC Step 1 submission.

These operation costs were calculated considering the actual status and the different maturity levels of each Central Facility and considering the estimated ramp-up of their activities in the years 2020-2024 and up to the full operation. The full operational costs of the Central Facilities are reported in the ACTRIS Cost Book (ACTRS PPP Deliverable 3.1).

It is here assumed that the gross estimation made through the ramp-up of the costs already include a contingency reserve, to quantify the uncertainties and unforeseeable circumstances, and the inflation factor over the 5 years.

3.2 ACTRIS ERIC Revenues

The revenues of ACTRIS ERIC are the incoming flows and mainly consist of:

- d) Host Premium Contribution from the Member countries hosting the Central Facilities as part of the ERIC legal entity
- e) Membership Contribution from ACTRIS ERIC Members, Permanent Observers and Observers
- f) Third party contributions and grants
- g) Any other income.

The revenues considered for the purposes of the preparation of the first 5-year Financial Plan (2020-2024) are mainly made up of Host Premium contributions and Membership contributions (points d and e of previous list).

The definitions are those laid down in the IFR [ACTRS PPP Deliverable 3.2] and here reported for the convenience of the reader.

The **Host Premium Contribution** is the support provided by ACTRIS ERIC Members and permanent Observers for the functioning of Central Facilities as part of the ACTRIS ERIC and hosted in their own country.

At the time of the ERIC Step 1 application only the Head Office was planned to be part of the ACTRIS ERIC.

Membership contributions is the cash contribution to ACTRIS ERIC from all Members, Permanent Observers and Observers, that shall be used by ACTRIS ERIC to contribute to funding the Central Facilities' annual operational costs.

The annual Membership contribution is based on the main principles of the *inclusiveness* of ACTRIS and of *pay-per-use* (considering the support provided by ACTRIS to its Members, Permanent Observers and Observers).

The revenues reported in the 5-year financial plan follow the arrangements made by the ACTRIS Interim ACTRIS Council under the framework of the ERIC Step 1 submission. The revised calculation method for the membership contributions is currently under final discussion in the Interim ACTRIS Council.

4. 5-year Financial Plan for the ACTRIS ERIC for the years 2020 – 2024

For the first five-year period of ACTRIS ERIC, the indicative plan for ACTRIS ERIC revenue and expenditure is shown below (Table 1). The budget is in balance over the 5-year period.

Table 1. The plan for ACTRIS ERIC revenues and expenditures for the first 5 years (source: ERIC Step 1 application).

ACTRIS ERIC EXPENDITURES	2020	2021	2022	2023	2024
HEAD OFFICE	1 215 000	1 215 000	1 261 000	1 291 000	1 352 000
ERIC contribution to:					
DATA CENTER	614 000	716 000	819 000	921 000	1 024 000
AEROSOL IN SITU	339 000	422 000	488 000	592 000	613 000
AEROSOL REMOTE SENSING	579 000	662 000	744 000	827 000	827 000
CLOUD IN SITU	135 000	162 000	189 000	216 000	243 000
CLOUD REMOTE SENSING	200 000	240 000	281 000	321 000	361 000
REACTIVE TRACE GASES IN SITU	314 000	376 000	439 000	502 000	565 000
REACTIVE TRACE GASES REMOTE	78 000	156 000	312 000	364 000	468 000
TOTAL	3 474 000	3 949 000	4 533 000	5 034 000	5 453 000

ACTRIS ERIC REVENUES	2020	2021	2022	2023	2024
Membership Contribution	2 679 400	3 132 400	3 646 400	4 102 400	4 447 400
Host Premium Contribution for Head Office	851 000	851 000	883 000	904 000	946 000
TOTAL	3 530 400	3 983 400	4 529 400	5 006 400	5 393 400

5. Funding the ACTRIS Central Facilities

The operations of the Central Facilities that are part of the ACTRIS ERIC are partially funded by their hosting Countries and partially by ACTRIS ERIC through the membership contributions of the ACTRIS ERIC Members, Permanent Observers and Observers.

The operations of the Central Facilities not part of the ACTRIS ERIC are partially funded by their hosting Countries and partially by ACTRIS ERIC through reallocation of the membership contributions.

In the following table 3, all the contributions from ACTRIS ERIC participating Countries in the period 2020-2024 are reported as in ERIC Step 1 application, where the **Host Contribution** is the support provided by ACTRIS ERIC Members and Permanent Observers for the functioning of Central Facilities units not part of the ACTRIS ERIC and hosted in their own country. The information on the host contributions is currently being updated in the Interim ACTRIS Council for the ERIC Step 2 application.

Table 2 Estimated annual contributions for the first five years for the assumed participating Countries, that have signed the Letter of Intent and will be revised based on the final membership by the first GA (source: ERIC Step 1 application).

Country	Contribution	2020	2021	2022	2023	2024
AUSTRIA	Membership Contribution	76 000	86 000	97 000	108 000	117 000
	Host Contribution	130 000	184 000	272 000	314 000	379 000
BELGIUM	Membership Contribution	116 000	116 000	116 000	116 000	116 000
	Host Contribution	53 000	105 000	210 000	245 000	315 000
BULGARIA	Membership Contribution	42 000	47 000	52 000	58 000	62 000
	Host Contribution	-	-	-	-	-
CYPRUS	Membership Contribution	52 000	60 000	68 000	77 000	82 000
	Host Contribution	-	-	-	-	-
CZECH REPUBLIC	Membership Contribution	67 400	67 400	67 400	67 400	67 400
	Host Contribution	51 000	64 000	74 000	89 000	93 000
EU-JRC	Membership Contribution	66 000	75 000	84 000	93 000	100 000
	Host Contribution	26 000	32 000	37 000	45 000	47 000
FINLAND	Membership Contribution	243 000	287 000	330 000	379 000	410 000
	Host Contribution	495 000	590 000	680 000	783 000	858 000
	Host Premium Contribution (for Head Office)	700 000	700 000	700 000	700 000	700 000
FRANCE	Membership Contribution	242 000	284 000	329 000	372 000	404 000
	Host Contribution	1 153 000	1 389 000	1 645 000	1 882 000	2 060 000
GERMANY	Membership Contribution	513 000	633 000	795 000	904 000	1 012 000
	Host Contribution	1 425 000	1 728 000	2 048 000	2 360 000	2 559 000
GREECE	Membership Contribution	141 000	168 000	198 000	226 000	242 000

	Host Contribution	-	-	-	-	-
ITALY	Membership Contribution	272 000	320 000	371 000	419 000	450 000
	Host Contribution	594 000	693 000	788 000	892 000	935 000
	Host Premium Contribution (for Head Office)	151 000	151 000	183 000	204 000	246 000
NETHERLANDS	Membership Contribution	105 000	124 000	147 000	165 000	182 000
	Host Contribution	199 000	265 000	363 000	418 000	494 000
NORWAY	Membership Contribution	76 000	87 000	98 000	110 000	118 000
	Host Contribution	529 000	618 000	706 000	794 000	882 000
POLAND	Membership Contribution	127 000	146 000	164 000	184 000	194 000
	Host Contribution	-	-	-	-	-
ROMANIA	Membership Contribution	123 000	143 000	163 000	184 000	196 000
	Host Contribution	213 000	243 000	273 000	304 000	304 000
SPAIN	Membership Contribution	185 000	223 000	268 000	306 000	334 000
	Host Contribution	259 000	296 000	333 000	371 000	374 000
SWITZERLAND	Membership Contribution	85 000	97 000	109 000	122 000	132 000
	Host Contribution	48 000	58 000	67 000	77 000	86 000
UNITED KINGDOM	Membership Contribution	148 000	169 000	190 000	212 000	229 000
	Host Contribution	98 000	118 000	138 000	157 000	177 000
Membership Contribution total		2 679 400	3 132 400	3 646 400	4 102 400	4 447 400
Host Contribution total		5 273 000	6 383 000	7 634 000	8 731 000	9 563 000
Host Premium Contribution (for Head Office)		851 000	851 000	883 000	904 000	946 000

6. Recommendations for funding ACTRIS

As warned by the European Committee of Regions [5], the long-term sustainability is a key challenge that the RIs face, especially those large-scale pan-European infrastructures like ACTRIS, which are particularly expensive to construct, maintain and operate.

To encourage investments and research funding allocation by the government sector in the ACTRIS countries, a number of recommendations are here proposed for future ACTRIS financial planning:

- I. **Ensure coordination, synergies and complementarities between the different EU funds** such as the European Structural and Investment Funds (ESIF), Horizon 2020, and other EU programmes directly managed by the Commission in the areas of research, innovation and competitiveness, following the EC mandated by the funds regulations. As it is highlighted in the EU guidelines «Enabling synergies between European Structural and Investment Funds, Horizon 2020 and other research, innovation and competitiveness-related Union programmes» [6] *it is of utmost importance to ensure an optimal synergy between the funds to face the ever increasing competitive pressure from global markets and maximise impact and efficiency of public funding. ... This political will needs to permeate all layers of stakeholders, at Member State level as well as Commission services level, including intermediaries and facilitators' networks.*
- II. **Make profit of the forthcoming research and innovation framework programme (FP9 – 2021 - 2027)** that, as the previous one, foresees a dedicated attention to Research Infrastructures in the first Pillar oriented to promote the “Excellence in Science”. The new programme should also contribute to reinforcing *European innovation eco-systems*, in which ACTRIS is well positioned. Research Infrastructures, in fact, have a crucial role in strengthening research and innovation activities in Europe, as well as to contribute to the knowledge advancement and circulation. The FP9 could represent an adequate instrument to fund a specific ACTRIS access programme to promote and facilitate the access to ACTRIS facilities by researchers from, especially, private sector.
- III. **Include other funds to integrate the EU and national funds**, considering the different scope and potential of different funding categories:
 - International funding
Funding streams that originate from intergovernmental organisations and forums such as the UN or the G8 (GEOSS, etc.) to support and sustain and encourage the research connected to global challenges (climate change, natural disaster, health protection, security issues, etc.).
 - Donations
ERICs may be eligible to receive financial support from governmental agencies and philanthropic foundations. They usually provide sponsorships for individual researchers and financial support on the basis of programme-based grant agreements.
 - Private Sector
Good relationships with the private sector encourage technological development, knowledge transfer and promote innovation. The private sector may also benefit from the RI as a user of (often tailored) services and concern, e.g., instrument, testing, instrument comparisons or co-development of equipment, software, tools, services etc.

ACTRIS could therefore profit from the connections with private sector as a fundamental source for sustaining the physical and remote access to facilities and services and guarantee the constant improvement and development of technology.

Regional and local funds

By ensuring a greater involvement of local and regional authorities in the ACTRIS initiatives, due to the importance and the impact that ACTRIS could have for local and regional development.

- IV. **Sustain and develop a suitable and pertinent access program** for the ACTRIS operational phase, to ensure sustainability of physical and remote access to ACTRIS Central and National Facilities. Benefit from cooperation with private sector could promote the sustainability of access costs.
- V. **Setting aside a contingency budget** for a sound financial risk management, which is a requirement for a long-term sustainability. The contingency budget shall be used to face possible shortcomings, liabilities or challenges related, for instance, to a lack of funds/failure to secure financial contributions or to the imbalance in members' contributions.
- VI. **Guarantee an effective and sound evaluation of financial information** in conjunction with the annual activity plans and work programmes of the ACTRIS facilities to support financing decisions. This is a guarantee the quality of financial information available to national governments to support their willingness to engage in the RI development and ensure a growing allocation of capital.
- VII. **Maintaining a continuous stakeholder involvement** for the development, implementation and updating of the financial plans. Assisting countries in making the case for the RI when a national roadmap is being developed. Making sure the scientific community in any interested country is backing the plans. Assisting countries in applications for Structural Funds to finance all or part of the contributions.
- VIII. **Establish a proper methodology for the in-kind reliable evaluation**, considering that, in addition to monetary contributions, in-kind contributions may account for a substantial fraction of the national and regional funding. An in-kind contribution valuation methodology is therefore an important and complex issue that requires improvement in the short-term because, as a matter of fact, in-kind contributions from members are a crucial asset.

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