

4 - Management and Human Resources

The expertise needed for running an operational research infrastructure is different from scientific research. Research in temporary projects can produce important data and knowledge but it is the well-managed international research infrastructures that can provide data and knowledge for big science. The starting point in running AnaEE is to have qualified RI staff to enable researchers to do their research using the sustained high quality facilities. Note that the European Code of Conduct for Researcher Integrity¹ presents general principles and requirements applicable especially to the researchers and their funders. Researchers represent the user group of the RI and hence are very important in the RI advisory and user boards.

Examples of needed skills from the staff of an European infrastructure are operational and human resource management, data management, data curation, and computing with big research data. There is increasing need for education in these emerging professions, e.g. infrastructure operators, research technologists with computational skills, and data scientists. This needs to be taken into account in career development issues. AnaEE aims to recruit the best RI professionals to provide the best services for its users. Hence, RI should not be run by the researchers nor post-docs or professors. AnaEE needs to provide competitive career opportunities for those who want to specialise in managing and operating a world class RI².

4.1 Employment and staffing

The AnaEE staff is expected to increase gradually during the first 5 years of operation, reaching a maximum of 17 individuals by the 5th year of operations. The staff will be distributed between the Central Hub and the Service Centres, and will work mostly full-time (Table 4.1).

The personnel needed for the Pre-operational Phase will be fully covered from national sources. Also the planning of the staff needed and recruitment will be organized nationally in this phase.

Upon becoming a Member of AnaEE, a country will have to indicate commitment to provide the necessary infrastructure and resources for the AnaEE National Platform operations and the AnaEE Central Service that it may host. The staff of the national platforms may benefit from exchange programs organized by the ERIC.

¹ <http://www.esf.org/coordinating-research/mo-fora/research-integrity.html>

² Note that the European Code of Conduct for Researcher Integrity (available at <http://www.esf.org/coordinating-research/mo-fora/research-integrity.html>) is not directly relevant in the context of RI personnel although it conveys good principles. The European Code of Conduct presents general principles and requirements applicable especially to the researchers and their funders.

	Pre-operational phase		Operation phase	
	2016-2018		2018-	
Central Hub	FTE	SC	FTE	SC
Set-up Team leader	1	(2)		
Science Coordinator	1	(4)		
Director General			1	(1)
Hub Manager	0.5	(3)	1	(3)
Software Engineer	0.5	(4)	1	(4)
Administrative/ Financial Engineer			1	(4)
Administrative secretary	0.5	(5)	1	(5)
Technology Centre				
Head of Centre	0.5	(2)	0.5	(2)
Centre Manager	0.5	(3)	1	(3)
Technology transfer / business Specialist	0.5	(4)	1	(4)
Technical Engineer	0.5	(4)	1	(4)
Data & Modelling Centre				
Head of Centre	0.5	(2)	0.5	(2)
Centre Manager	0.5	(3)	1	(3)
Software Engineer (Data)	0.5	(4)	1	(4)
Software Engineer (Modelling)	0.5	(4)	1	(4)
Synthesis and Interface Centre				
Head of Centre	0.5	(2)	0.5	(2)
Centre Manager	1	(3)	1	(3)
European Project Engineer			1	(4)
Communication Engineer			1	(4)
In Total	9		15.5	

Tab 4.1: Estimated staffing requirements of AnaEE in Pre-operational and Operational phases. The Full Time Equivalents (FTE) and the salary categories (SC) are reported for each position. SC (monthly gross salary based on Finnish salary level): 1) € 11600, 2) € 7000, 3) € 5000, 4) € 4000, 5) € 3500).

4.1.1 Human resources in the Pre-operational Phase

The selection procedure of the Service Centres will have been decided and initiated by the AnaEE PP decision-making body, i.e. the Steering Committee. The Pre-operational Assembly of Members can give recommendations but it will be up to the Hosting Country how to staff the national centre, based on a set of procedures and criteria agreed by the Steering Committee. In case the selection procedure is not finished at the end of the AnaEE PP, the Pre-operational Assembly of Members will establish a follow-up system for transparency with the Service Centre hosts already selected and will complete the selection for the services that would not have been selected yet.

The positions with the highest impact on setting up and operations to get started need to be hired first. The establishment and staffing of the Hub (after the selection of its Host) is crucial. Especially, the recruitment of interim Director General to lead activities for AnaEE until a long-term Director General is officially recruited should have a formally approved process: the country selected to host the Hub will make a proposal to the Pre-operational Assembly of Members. In order to lead the AnaEE towards the Operational Phase the interim Director has to have the trust and mandate of the Lol signatories (Pre-operational Assembly of Members).

The tasks of the interim Director General will include:

- managing the international negotiations towards the AnaEE inclusively, preparing the seat of the legal entity and overseeing the implementation of the Programme of Work;
- setting up the AnaEE Hub, directing the set up team;
- coordinating and integrating the RI implementation;
- securing funding and attracting new Members, and;
- representing AnaEE RI in international fora.

The Hosting Country and the interim Director General at the Hub will staff the Hub with the necessary people to combine the required skills. The following expertise, located in the pre-operational Hub itself or organized otherwise, is needed: management, financial, legal, organizational, RI admin, IT. (See Table 3 – Planned personnel for initiation.)

The Hub and set up team will play an important role in coordinating the implementation, which will be described in the Programme of Work. Central Hub functions include preparation of the legal and financial documents for the Operational Phase of AnaEE legal entity and being responsible for managing the recruitment process for the long-term AnaEE Director General.

The Director General of the ERIC is a key individual, and the success of the RI will, to a significant extent, depend on his/her abilities as a scientist, manager, spokesperson and diplomat. The Director General is an individual with experience and stature, chosen on the basis of reputation and excellence. To attract a person of sufficient calibre, it may be necessary to offer an employment contract of significant duration (say, five years with mid-term assessment), especially if the Director General and his/her family will have to move from another country. To fully support the European dimension of the ERIC, it is recommended that the Director General comes from another country than the Hosting Country.

The recruitment process of the Director General for AnaEE needs to start during the Pre-operational phase, but the Director General's contract will be only signed when ERIC is established by the Assembly of Members of the ERIC. The procedure to recruit the ERIC Director General and the selection criteria should be clarified by the Hub, as soon as selected, and approved by the decision-making body in place (the Pre-operational Assembly of Members). Similarly, the staff rules need to be drafted during the Pre-operational Phase to enable ERIC recruiting. See Appendix 2 for tentative contents for the staff rules.

4.1.2 Human Resources in the Operational Phase

The establishment of the AnaEE is the landmark of the official start of the Operational Phase. If, as proposed, the Centres are inside the ERIC then AnaEE recruitment and staff management rules apply in each Centre and the Hub. If a country selected to host a Centre would justify to have it outside the ERIC, in spite of the recommendation of AnaEE PP, AnaEE would have to make a contractual agreement with the Centre on all operational issues, including HR policies and required qualifications of the staff, to ensure complementarity between all Centres and the Hub.

All staff in the ERIC is recruited by the Director General and he/she is the superior for all ERIC staff. In the case all the Service Centres are in the ERIC legal entity, the Director General manages the recruitment of all staff, consulting with the Directors of the other Centres. The principle of Balance and Checks should be applied, whenever possible. There needs to be an open call for the positions in the ERIC.

The recruitment plan (level of activities and type of profiles) for the Operational Phase will be decided by the Assembly of Members based on the negotiated AnaEE budget and activities in the Service Centres. The personnel costs will take more than half of the ERIC budget, which will depend on the number of founding members. Thus, the staff will be recruited according to the decision of the founders in terms of budget and action plan.

4.2 Recruitment Strategy

AnaEE can get human resources, a labour force, by recruiting personnel directly, buying services from the institutes using its cash (from membership contributions), in-kind and by secondments.

The legal status of the Service Centres affects the recruitment, social security and insurances. Typical labour laws and codes that exist in different countries which need to be considered in HR recruitment and employment are e.g. contracts of employment act, collective agreement, regulations on annual leave and working hours, employee pension regulations, legislation on privacy etc.

A pan-European recruitment strategy is needed to ensure efficient management and operation of the AnaEE. Efforts will be devoted to extending local regional recruitment policies to a more global approach and comprehensive joined up strategy at an international scale, with the main aim of creating a coherent recruitment procedure for the ERIC. With this respect, the recruitment procedure should:

- Provide talent synergies at the pan-European scale
- Ensure a merit-based selection process on the broadest possible geographical basis
- Ensure fair and transparent competition for all vacancies
- Establish roles and the responsibilities of every authority involved in the process
- Guarantee checks mechanisms to safeguard the shareholders' interests
- Promote internationalization
- Promote equal opportunities and gender balance

Staff will be selected based on special attention to the scientific, technical, administrative and management skills.

4.3 Financial Management and Control Systems

The goal of the financial management is to run operations on a non-economic basis, efficiently and according to budget. Full transparency is applied on financial matters of AnaEE. AnaEE will be run according to the Host legislation on accounting standards and principles. The AnaEE AoM decides on the RI strategic orientation, policies and objectives.

Documents defining policies and rules of the AnaEE resources are:

- ERIC statutes (to be developed among the founding members)
- RI Internal Financial Rules (to be developed among the hosting countries)
- ERIC procurement rules
- Other internal rules deemed necessary by the AoM

Internal Financial Rules document to be approved by the AoM provides rules, procedures and management for all fiscal activities and related reporting in the RI. For the first five years AnaEE needs to make a balanced budget upon applying for the ERIC status.

During the first three years, AnaEE will handle a limited budget to cover its own administrative support function. While financial oversight will be of utmost importance, the scale of financial management will be relatively small. The Financial Engineer should be able to maintain and prepare the financial accounts to be submitted for annual audit.

A critical function of the Financial Engineer in the first three year Initial Start-up Phase will be to assist the DG in managing, reporting and controlling all revenues obtained from memberships. As AnaEE evolves, the financial function may expand to include responsibility for all Member States contributions, both Monetary and In-kind. This evolution will be subject to statutory approvals by the AoM, and conditional on AnaEE having sufficient operational capability to perform these functions.

The Intellectual Property Rights (IPR) Management Strategy needs to be written down in accordance with the “Implementing Rules of AnaEE” and a register of IPR ownership kept. The Central Hub may have an IPR dispute resolution role and procedures for dispute resolution need to be established, ensuring adequate financial control mechanisms in line with EU and national rules and reporting transparently on the efficient use of funds.

4.4 Employment Regulations

The legal relationship between AnaEE and its employees is governed by the Staff Rules and Regulations, which will be part of the Implementing Rules. The Staff Rules and Regulations will be adopted by the AoM. The DG will have the responsibility for their application. A legal nature of the AnaEE will be defined when the ERIC is registered in the country of its legal seat.

4.4.1 Secondment

Secondment corresponds to a model in which secondees may retain an affiliation with a national institution. Seconded national experts are staff members in the employ of a national, regional or local public administration, or an intergovernmental organisation, who are seconded to AnaEE so that the RI may benefit from their expertise in a particular field. For a secondee, working abroad is a step for professional growth. Using secondment facilitates the efficient transfer of know-how and experiences available at the shareholders / partner institutes in specific technologies, for example in development of measurement techniques, data analysis, and commercialization and innovation systems. If the ERIC gets HR from outside as secondments, it will expect total loyalty of the secondees to the ERIC Director General. In order to avoid any conflict of interests, the rights and obligations of seconded experts, as set out in the rules to be drafted, should ensure that they carry out their duties solely in the interests of the AnaEE RI.

The underlying principles and best practice to which AnaEE will adhere when considering recruitment and staff management issues and strategic actions are those set in the European Management Practices and Sustainable Organisational Performance [50] .

4.4.2 Equal opportunities and Gender Balance

The AnaEE will promote an equal opportunity policy for women and men and will implement a gender equality strategy, consistent with the European Charter for Researchers & Code of

Conduct for the Recruitment of Researchers. The DG will be responsible for implementing, monitoring and reporting on the gender equality strategy. All participating countries will be encouraged to implement processes and practices relating to gender including regulation, compliance and the development of human capital. Our aim is to have a balanced contribution from male and female in the AnaEE implementation. AnaEE will strongly encourage participation and integration of female in activities and projects and will actively support both genders in assuming positions of seniority and decision-making. All recruitment advertisements will indicate that women are actively encouraged to apply, however the ERIC is expected to appoint the most suitable candidate, irrespective of gender. Dissemination material will ensure balanced representation of genders in all images and visual.

4.5 Staff Training and mobility

Improved researcher mobility is a key goal of the European Research Area. External and internal mobility is encouraged, and connected to training of new staff, aiming at career development and continuous overlap between senior staff and junior trainees. The Assembly of Members can allocate resources to support staff mobility. However, AnaEE will encourage the staff of national platforms to actively participate in staff exchange programs that support the RI activities. Industry placement schemes can provide inspiring opportunities as part of the staff exchanges both on supranational and national RI levels.

At the platform level, AnaEE could act as mobility enhancer for the researchers through making the AnaEE platforms attractive places to conduct research. In this way AnaEE can ensure the cross-fertilisation and knowledge transfer of new technologies, best practices, approaches and policies of the National platforms. Exchange and training for the staff of the ERIC is crucial in this respect too. On the other hand the operation of the central services and the platforms need continuity, which pertains to the nature of the employment contract.

Mobility of the staff among the Central Hub, Service Centres, and National Platforms will be encouraged as part of a comprehensive human resource policy. The ERIC will ensure that the necessary administrative instruments are in place to allow the portability of both grants and social security provisions, in accordance with national legislation. Funding for mobility of the staff will be secured through dedicated *ad hoc* contribution from participating countries and through the promotion and extensive use of the resources made available at European level for this purpose (e.g., Marie Curie actions in Horizon 2020). In practical terms, the actions that will be undertaken to promote and oversee the mobility may include:

- Drafting of an annual mobility plan in order to constantly monitor exchanges of staff among the National Platforms;
- Present project proposals for mobility and training purposes on ad hoc EU-funded programmes and, if available, on national programmes;
- Seek agreements with the private sector to encourage project-specific collaborations involving mutual staff exchanges between academia and industry.

AnaEE encourages its staff to actively participate in RI-staff exchange programs. In Europe especially see <http://ritrain.eu/home>, a new EU-funded project to develop management and leadership training for research infrastructures in Europe.

Scientists working at AnaEE will undergo training in Project Management, and be supplemented by other professionals (e.g. finance, HR, legal). Staff of AnaEE will be sent to RI management

programs in the areas of project management, financial issues, legal and governance, and human resource policies. Another important field of continuous training of the RI staff is the e-infrastructures. Especially AnaEE RI will make its best and train its staff to build environments for big data through interoperability and e-infrastructures. In the future, AnaEE may need a budget for mandatory training as part of continued professional development, which needs to be decided by the AoM.

4.6 Staff Performance Management

Posts will be classified in different grades according to the applicable contract of AnaEE, which sets the nature of their functions and the responsibilities involved. The grade of the staff member shall depend on the level of the post he/she holds and on his/her ability. The ERIC will establish a system of periodical assessments of performance for all members of the personnel based on Key Performance Indicators, which will be specified in the Implementing Rules. Such assessments will be made at regular intervals and shall be based on criteria laid down in the Staff Rules and Regulations. Staff members will be entitled to claim an award from AnaEE in respect of outstanding performance. The nature of the award is decided by the DG in consultation with the Management Board, but it should be proportioned to the financial benefit accrued from the outstanding performance.