

Preparatory Phase for the pan-European Research Infrastructure DANUBIUS–RI "The International Centre for advanced studies on river-sea systems"

# Report of the governance structure of the RI

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# **Table of contents**

E	kecutiv	ve summary / abstract	5
1	Intro	duction	6
	1.1 distril	DANUBIUS – International Centre for Advanced Studies on River-Sea Systems – a pan- buted Research Infrastructure	European 6
	1.2	Objectives of this document	7
2	Co	mponents of DANUBIUS	8
	2.1	Definitions of "Component" and of "Partner Institution"	8
	2.2	Components' Governance	9
	2.3	Hub	10
	2.4	Nodes	10
	2.5	Supersites	12
	2.6	Data Centre	13
	2.7	Technology Transfer Office (TTO)	14
	2.8	e-Learning office	14
3.	Go	overnance structure of DANUBIUS	15
	3.1	General Assembly	16
	3.2	Director General	20
	3.3	Scientific Advisory Committee	21
	3.4	Ethics Advisory Committee	22
	3.5	Research Infrastructure Committee	23
4	Ор	otions for defining relationship between Components/Partners and DANUBIUS-ERIC	25
5	DA	NUBIUS-PP Board of Governmental Representatives	27
	5.1	Fourth version of the DANUBIUS-ERIC Statutes	27
	5.2	Towards a fifth version of the DANUBIUS-ERIC Statutes	27



## **Executive summary / abstract**

DANUBIUS-RI will be a pan-European Research Infrastructure; the Preparatory Phase (PP) identified the European Research Infrastructure Consortia (ERIC) as the most suitable legal entity for managing the distributed infrastructure.

A clear definition of the Components of the Research infrastructure is crucial and has been performed here.

An important aspect to obtain a satisfactory outcome of the efforts and resources invested in an RI is to define and distinguish the governance and the management structures, from the beginning and at all stages. This document presents these aspects and intends to clarify the roles of each body, presenting a coherent possible governance structure of the DANUBIUS-ERIC and the description of the main management bodies.

The dialogue with the Government Representatives might modify some aspects of the governance of the different Components of the DANUBIUS-RI significantly. In this document, where necessary, the possible options are presented.

The first hypotheses on the governance structure of the DANUBIUS-ERIC and the relations between the Components of the RI and the DANUBIUS-ERIC, were discussed during the meeting of the Board of Governmental Representatives (BGR) held in Brussels the 18-19 of June 2019: the results of this discussion are included in the present document.

The next step (milestone of DANUBIUS-PP), due in November 2019 (month 36), will be the preparation of:

Set of Statutes for legal entity

To be submitted to partner governments. The present document is also oriented to prepare their informed decisions. Some proposals for the Statutes text are included.



# **1. Introduction**

#### 1.1 DANUBIUS – International Centre for Advanced Studies on River-Sea Systems – a pan-European distributed Research Infrastructure

A fundamentally new approach to research is needed to advance the goal of a better-informed and holistically engaged environmental management of River- Sea (RS) systems, particularly at the freshwater-marine interface. This requires world-leading science, comprising research that has immediate societal relevance and impact, in facilitating interdisciplinary research in the freshwater and marine sciences. The research must span traditional disciplinary and geographic boundaries and be implemented in a consistent and quality-assured framework.

Recognizing these needs, the concept of DANUBIUS-RI was developed, positively evaluated and included on the 2016 Roadmap of the European Strategy Forum on Research Infrastructures (ESFRI).

The DANUBIUS Preparatory Phase (DANUBIUS-PP, Dec 2017-Nov 2019) aims to develop the structures and processes to ensure that DANUBIUS-RI can deliver an integrated understanding of the functioning of RS systems and be able to address the key societal challenges associated with, and opportunities of, RS systems.

DANUBIUS will be a distributed Research Infrastructure with elements located in some European countries and, as decided by the DANUBIUS-PP General Assembly, it aims to become operational as an ERIC (European Research Infrastructure Consortium) early in the next decade.

According to EU rules, to become an ERIC is necessary to follow a precise road-map. In particular, before the submission of the request to the EU, it's necessary to prepare the Statutes and the related Annexes.

Within the Preparatory Phase, a Board of Governmental Representatives (BGR) has been established, with the aim to discuss between countries at an appropriate ministerial level and decide/approve fundamental issues related to the DANUBIUS-ERIC such as: governance, legal aspects and financial principles, business plan, etc. The BGR is made of delegates from Ministries of the countries participating to DANUBIUS-PP. In general, for each participating country a person acting as "scientific reference" is present, too.



#### **1.2 Objectives of this document**

The present document:

- reports on the definition of:
  - Components of DANUBIUS-RI and
  - Partner Institutions of DANUBIUS-RI;
- reports on the Governance principles valid for all the Components;
- provides a brief description of the Components, as foreseen in the present moment;
- provides a description of the ERIC management bodies and the possible options for a decision, when not taken yet;
- provides a brief description of the main relationships between the Components, the DANUBIUS-ERIC and the Partner Institutions.

#### DISCLAIMER

The definitions, principles, description of management bodies here reported are provisional, as the final version of the Statutes can fix them also differently. They also might be different, in some parts, from those contained in previous project documents. In fact, they include the result of the discussions occurred in the BGR meetings, and they represent the present evolution of the thoughts in the DANUBIUS-PP.



# 2. Components of DANUBIUS

#### 2.1 Definitions of "Component" and of "Partner Institution"

The DANUBIUS Research Infrastructure will be "distributed", being its elements located in different countries in the European territory. The elements of this distributed infrastructure are called "<u>Components</u>", as they are parts of a single whole, DANUBIUS-RI. A Component can be physically located in a single area or in multiple locations and has a Coordinator Institution, which must be a Partner Institution specifically endorsed in its role by a Member of the ERIC Consortium.

Each Component will maintain its legal and administrative independence from the others and from the ERIC. The relationship between each Component and DANUBIUS-ERIC will be regulated by written rules (Service Level Agreement, MoU or contracts, according to the necessities).

All the Components shall maintain a similar governance structure, based on the principles and rules expressed in the section 2.2 below, and shall be able to act according to the DANUBIUS policies/commons.

<u>Partner Institutions</u> of DANUBIUS-RI are legal entities established in countries that are Members of the ERIC Consortium and endorsed by the same Member. The Partner Institution should be able to offer research facilities, services or competencies to one (or more than one) DANUBIUS-RI Component.

At the present day, the DANUBIUS-RI Components are (Fig. 1):

- 1 **Hub**, hosting the headquarters of the ERIC and some services for the Danube delta Supersite;
- 4 **Nodes**, i.e. facilities specialized in different areas of expertise relevant, located in different countries and coordinated by a Partner Institution;
- 12 Supersites, i.e. "natural laboratories" areas, where specific scientific equipment and expertise are present and available to DANUBIUS aims, located in different countries and coordinated by a Partner Institution;
- 1 Data Centre, located in Romania (University of Galați);
- 1 distributed Technology Transfer Office (TTO) in each ERIC Member country;
- 1 e-learning office, located in Barcelona, Spain.

In the future, the Components of DANUBIUS-RI may change, with additions or other changes, as decided by the General Assembly.





Figure 1. Scheme of the Danubius Research Infrastructure and its Components.

#### 2.2 Components' Governance

The governance of each Component shall be based on the following principles:

- a) Each Component shall have a Hosting Institution/Leading Laboratory, which is a Partner Institution of DANUBIUS, with operative functions and coordinating the activities performed by other associated Partner Institutions in that Component, if present.
- b) If more than one Partner Institutions is associated to a Component, a written agreement, MoU or a contract shall be signed between them, to regulate the Component's activities and their respective roles; this document is transmitted to DANUBIUS-ERIC. Each of the Partner Institutions associated to a Component shall nominate a Responsible (a physical person).
- c) Each Component shall have a Component Manager: a physical person, representative for the Component, interface with the DANUBIUS-RI Director General, leading the Component Team (if present) and working closely with the Responsible of the other Partner Institutions associated to that Component, if present.
- d) Each Component shall have a Component Scientific Committee, in charge with the completion of the scientific agenda, in order to support the correct implementation of the DANUBIUS principles, where at least one person for each Partner Institution is present. It



shall meet regularly (also in tele-conference) and shall be co-ordinated by the Component Manager.

- e) The staff structure (Component team) of each Component will be different, depending on the specific functions and needs. Staff secondments between Partner Institutions are strongly encouraged, as well as the opening of staff positions coming from all European countries.
- f) Each Hosting Institution/Leading Laboratory shall present every year a budget estimate and a final balance sheet for its activities for the Component and an indicative consolidated budget /final sheet of all the Partner Institutions associated to the Component.

#### 2.3 Hub

The Hub, located in Romania, is envisaged as a multi-functional component. In fact:

- it will serve as the DANUBIUS Headquarters, housing the ERIC Directorate General and the related ERIC offices.
- it will host research laboratories with the status of Accredited Service Providers to Nodes, including a Centre dedicated to eutrophication.
- it will act as the Hosting Institution for the Danube Delta Supersite.

The Hub will be able to provide key scientific, educational and analytical capabilities, as well as coordination and standardisation activities for the DANUBIUS-RI. It will be in charge also of communication with other RIs and major European stakeholders.

#### 2.4 Nodes

DANUBIUS Nodes will provide the Research Infrastructure with capability and capacity in selected disciplines, to provide a step-change in understanding of RS systems and promoting DANUBIUS-RI as a world -leading research facility. The Nodes, in concert with Hub and Supersites, will enable programs of R&I to be promoted and exploited across Europe and internationally.

The four Nodes, fundamental to the development and implementation of DANUBIUS-RI, are:

 <u>The Observation Node</u>: led by Plymouth Marine Laboratory and the University of Stirling (UK), it will comprise operational data processing and calibration, validation and training facilities, focused on RS systems. The Node will capitalise on the launch of the latest generation of operational Earth observation satellite sensors through the European Copernicus program, and will deploy sensors that can be networked to provide (near) realtime observation capability. The main aim is to address key challenges, including measures of standard water quality parameters, emerging pollutants and gas exchange at the wateratmosphere boundary. The Observation Node will be responsible for advising on standardisation of instrumented buoys and monitoring stations across the Supersite catchments and ensuring that telemetry is in place to enable real-time data capture, automated data processing, quality control and visualisation.

- 2. <u>The Analysis Node</u>: led by Federal Institute of Hydrology (DE), it facilitates access for the DANUBIUS-RI user community to state-of-the-art scientific expertise and highly innovative methodologies that enable the biotic and abiotic conditions and their associated interactions to be characterised. This includes expertise across disciplines in hydrology, hydromorphology, chemistry, biology, ecotoxicology and hygiene. Subject to the Analysis Node are all parts of a water-groundwater-soil-sediment system and all kinds of samples that may be relevant in the context of research undertaken in the frame of DANUBIUS-RI. Where analysis is devolved to the local Supersite level, the Analysis Node will also contribute with its expertise.
- 3. <u>The Modelling Node</u>: led by CNR-ISMAR (IT), it will provide access to a range of services, from modelling tools to expert support for modelling activities and associated techniques that will be applied in each of the (existing and future) Supersites. Data collected from the Supersites with the involvement of the Analysis, Observation and Impact Nodes will be integrated in models to simulate specific processes within each Supersite. The modelling data interpolate between available measurements and can be used to generate forecasts and "what-if" predictions. The numerical modelling tools are therefore essential pre-requisites in delivering a well-informed management process, especially in sensitive and complex areas, such as RS systems and transitional environments.
- 4. <u>The Impact Node</u>: led by Deltares (NL), it will facilitate scientific knowledge development at the interface between natural and social sciences; develop methodologies and tools that will help to solve problems in highly complex dynamic RS systems; and transfer scientific output and practical tools derived from DANUBIUS-RI to those engaged in the sustainable management and use of RS systems (to solve problems and to strengthen business in this area). The Impact Node has the primary focus of facilitating the development and testing of concepts, methods and instruments to realise this goal. Methods and instruments may be focused, for example, on accelerating design and decision making (e.g. by using a decision theatre), improving quality and decreasing the costs of spatial planning in river-sea systems. The Impact Node will provide in house as well as on site services to facilitate the achievement



of various types of impact. Services provided may include Assessments of potential social impact of knowledge developed by DANUBIUS, Reflective monitoring of learning, Design of stakeholder participation processes and Transfer of questions from society to science.

In addition to the Leading Institution, Nodes may also associate other Partner Institutions, if an increase in capability (technological, scientific or geographic) or capacity is needed to deliver services in the DANUBIUS-RI framework.

#### 2.5 Supersites

Supersites are the Components of the DANUBIUS-RI which are geographically located in areas of interest for the study of RS systems.

A DANUBIUS Supersite is a site:

- available for research and observation activities, managed by a Partner Institution, in a possible agreement with some other Partner Institutions, open to the research activities also of all the DA
- accessible by researchers, students and professionals across Europe and elsewhere;
- may be the national focus for DANUBIUS research community in the host country.

Supersites will provide natural laboratories for observation, research, modelling and innovation at locations of high scientific importance and opportunity, covering RS systems from river source to transitional waters and coastal seas. Ranging from the near pristine to the heavily impacted, the Supersites will be selected to provide contrasting systems across environmental, social and economic gradients that have been impacted, to varying degrees either directly or indirectly, by industrialisation, urbanisation, population expansion, land use change and farming. They will provide interdisciplinary research platforms and identify, model and define system states and conditions for naturally and anthropogenically triggered transitions in the physical, biogeochemical and biological states. They will provide excellent opportunities to undertake social and economic investigations in contrasting settings.

Furthermore, Supersites:

• provide access to a unique RS system -or part of a RS system- where unique scientific interesting/relevant aspects can be studied;

- do not duplicate existing monitoring/analysis efforts, but where offered, DANUBIUS will make use of already generated data (e.g. from routine monitoring) that are/or can be made available to the DANUBIUS community;
- build on/make use of existing infrastructure (incl. governance) and willingness to operate according the DANUBIUS Commons and to do extra analyses (i.e. additional sensors, measurements etc.);
- will involve many field sites/observatories/spots where the actual data gathering takes place;
- cover a geographical determined area, but not with pre-defined size: scientific arguments define the actual size of the area. This area can cover an entire (small) RS system or in a large RS system there maybe more than one Supersite;
- are open for all researchers and students, both from research institutions in DANUBIUS-RI member countries and from research institutions in other European countries and globally;
- are/provide "gateways" i.e. facilitate access for research in specific parts of RS system: "from the mountains to the sea". This includes helping to acquire any necessary permits/authorization for visiting the sampling sites, taking samples and doing experiments;
- there is willingness to store physical samples and/or to prepare such samples and then either store them locally or send them to a central storage facility at the Hub.

The present Supersites list is the following: DANUBE DELTA (Romania), MIDDLE DANUBE -SZIGETKÖZ (Hungary), UPPER DANUBE (Austria), ELBE-NORTH SEA (Germany), EBRO-LLOBREGAT DELTAIC SYSTEM (Spain), NESTOS (Greece), PO DELTA AND NORTH ADRIATIC LAGOONS (Italy), THAMES ESTUARY (United Kingdom). Another four proposals for Supersites were made and recently accepted by electronic voting of the General Assembly partners: TAY CATCHMENT (United Kingdom), MIDDLE RHINE (Germany), RHINE-MEUSE DELTA (the Netherlands) and GUADALQUIVIR ESTUARY (Spain).

#### 2.6 Data Centre

The DANUBIUS Data Centre will be the main facility of DANUBIUS-ERIC e-Infrastructure and will provide a set of services to the research community.

The Data Centre has to provide a set of services to the research and academic community: collect all gathered data from Supersites, other sites and Nodes involved or associated to the infrastructure, store the primary data, aggregate the data by different criteria, provide the necessary computing power and storage space for modelling the data or digital simulations, store and classify the results



of modelling with the associated metadata, classify all the datasets, provide search functionalities, and so on, specific services can be asked for, on demand, at any moment.

It will also be the connection with the other major e-infrastructure capacities in Europe and the world.

#### 2.7 Technology Transfer Office (TTO)

The aim of the DANUBIUS TTO is to ensure that the contracts between DANUBIUS-RI and external partners fully represent the best interests of DANUBIUS. As such its primary, though not only, role will be to leverage the Intellectual Property (IP) and infrastructural resources to engage relevant industries and increase the number of developments and innovations and ensure that are effectively exploited for the advantage of both individual innovators and DANUBIUS as a whole.

A distributed TTO's model has a TTO in Ireland, to act as a secretariat, and representatives for Tech Transfer in each of the constituent countries who would liaise with national Government, Industry and the Research Institutes and report back to a coordination committee.

It is recognised that the TTO primary role is to engage industry. As such the TTO will work closely with the DANUBIUS research communities to assist them in identifying opportunities and to ensure that all internal and external Intellectual Property opportunities are identified and, through effective management of the Intellectual Property Rights, are fully exploited using the appropriate instrument.

#### 2.8 e-Learning office

The Component "e-Learning office", strengthen the educational services, is an internet-based teaching system. For a distributed RI, such as DANUBIUS, involving many people working in different locations across Europe while following the same DANUBIUS Commons, a system of e-Learning is a requirement. It additionally provides a means of offering to institutions and research communities access to data from databases or experimentation sites located all around the world.

The design of such a system requires a defined platform to organise all related tasks such as the material content, the student-system-teacher communication protocols, the deliveries, the evaluation process and administration.



# 3. Governance structure of DANUBIUS

An important aspect to obtain a satisfactory outcome of the efforts and resources invested in an RI is to distinguish, from the beginning and in all phases, the governance (who develops the strategy and defines the rules, commits the resources needed to reach the scope and goals, and then evaluates the outcomes) and the management (who is given the executive power and bears the responsibility to obtain the results).<sup>1</sup>

The fact that an RI requires investments and resources beyond the typical functioning of an academic environment, and the fact that it must be oriented to serve external users, requires a structure (i.e. a dialectic balance between an Assembly (strategic) and a Board (executive)) to be set up ensuring the service to users and the correct use of the resources to this end, while applying the best practices to ensure scientific quality.<sup>1</sup>

The governance of DANUBIUS-ERIC shall comprise the following structures:

- Council,
- Independent evaluators,
- Executive board (the collaborators),
- Financial auditing/management performance.<sup>2</sup>

This general picture could be translated in the following DANUBIUS-ERIC' bodies:

- the General Assembly, dedicated to the Consortium Members;
- the Director General;
- the Scientific Advisory Committee;
- the Ethics Advisory Committee;
- the Research Infrastructure Committee.

The following scheme summarises the relations among the bodies and their roles. The panels and the boards are not showed in the Figure 2.

<sup>&</sup>lt;sup>1</sup> https://www.ceric-eric.eu/project/ramiri-handbook/chapter-3/#anchorintro

<sup>&</sup>lt;sup>2</sup> RAMIRI\_Ch3\_RI-Governance\_TW





Figure 2. Scheme of DANUBIUS-ERIC governing bodies and their role.

It is the interplay and relationship between the executive (Director General) and the governing body (General Assembly) that provides a good governance. The mutual respect of the different roles is fundamental.

#### 3.1 General Assembly

#### Definition and composition.

The General Assembly will be the governing body of DANUBIUS-ERIC and will be composed of representatives of the Members and Observers of DANUBIUS-ERIC.

Each Member shall nominate at least one, but not more than three, Representatives to the General Assembly. Each Observer shall nominate one or two Representative(s) to the General Assembly. Where a Member indicates more than one person, it shall indicate the Head of the delegation, too. The nomination as Member Representative is lasting for three years, even if it can be changed at any moment by the Member and can be renovated. The nomination of different persons to participate to every GA meeting is strongly discouraged.

Representatives to the General Assembly may be accompanied to the meeting by up to two experts per delegation, with the sole purpose of advising the delegation. Experts shall not express direct opinions during the meetings, unless they are invited to do so by the Member and were given permission by the Chair of the General Assembly.

#### Voting rights.



Each Member shall have one vote (independently from the number of persons attending to the GA), with all votes being of equal value. Members abstaining from voting shall be counted as absent. Observers will not have the right to vote.

#### Chairperson and a Vice-Chairperson.

The General Assembly shall elect a Chairperson and a Vice-Chairperson amongst the representatives of the members for a two-year term, renewable for the same period, twice. The Vice-Chairperson shall replace the Chairperson in his/her absence or in case of conflict of interest.

The Chairperson set the agenda of the meeting, respecting the indications of the Statute. She/he shall declare the opening and closing of each meeting of the General Assembly; he/she shall direct the discussions, ensure observance of the rules of procedure, accord the right to speak, put questions to the vote and announce decisions. He/she shall rule on points of order, shall control the proceedings and shall maintain order.

If the Chairperson finds it necessary to be absent during a meeting or any part thereof, his/her place shall be taken by one of the Vice Chairmen, who shall have the same powers and responsibilities as the Chairperson.

#### General Assembly Meetings.

The General Assembly shall be convened by the Chairperson at least once per calendar year; more meetings can be organized if necessary.

A meeting shall be quorate if at least two thirds of members are represented at the meeting. If the required quorum is not met, a second meeting shall be convened as soon as possible, following a new invitation with the same agenda. The second meeting shall be quorate if at least 50% of the members are represented at the meeting.

The working language of the GA shall be English and there is no obligation of providing translation in other languages, nor during the meetings, nor for the documents produced.

#### Competences.

The General Assembly shall be responsible for the overall direction of DANUBIUS-ERIC and supervision of the whole DANUBIUS-RI, including the strategic orientation of the DANUBIUS Components.

The following matters shall require approval of the General Assembly:

a) amendment of the Statutes of DANUBIUS-ERIC;



- b) winding up of DANUBIUS-ERIC;
- c) termination of a membership or observer status;
- d) approval of the annual budget and annual accounts of DANUBIUS-ERIC;
- e) approval of the annual activity report of DANUBIUS-ERIC, which will include an overview of the whole DANUBIUS-RI;
- f) approval of the annual work plan of DANUBIUS-ERIC which will include an overview of the whole DANUBIUS-RI;
- g) approval of a five years strategy and financial plans of DANUBIUS-ERIC;
- h) adoption or amendment of the internal rules;
- i) election of a Chairperson and a Vice-Chairperson, from the Member representatives
- j) appointment and dismissal of the DANUBIUS-ERIC Director General;
- k) appointment and dismissal of representatives to the advisory committees;
- I) acceptance of new members and observers and renewal of an observer status;
- m) establishment and elimination of advisory committees and other working groups;
- n) approve or remove a DANUBIUS Component.
- approve the Service Level Agreement or any other form or MoU or contract with the Danubius Components
- p) Update of the DANUBIUS Partner Institution List, admitting or cancelling the Partner Institutions
- q) setting the annual membership contribution for Members;

The intention is to manage the DANUBIUS -ERIC on the basis of the consensus of the Members. In case of need to vote, decisions are usually taken at simple majority of the members present in the GA meeting. There could be matters that would require approval by a qualified majority (2/3 or ½ of the members).

The definition of which decisions require a qualified majority will be defined afterwards, in agreement by the Board of Governmental Representatives.

#### Committees of the General Assembly.

As well as the Scientific Advisory Committee, the Ethical Advisory Committee, the Research Infrastructure Committee, defined in the Statutes, the General Assembly could appoint ad hoc Committees whose task shall be the preparation and examination of specific problems. Those ad hoc Committees will have a Chairperson and will report to the General Assembly.

Here below, some **examples** of possible Committees are reported.



- Finance Committee, which on one side advises the Director General in his/her operations, and on the other side ensures the General Assembly that the technical/financial aspects are correctly developed. This Committee is appointed by the General Assembly for a period of four years and may be re-appointed. It is made of four members, two of which are representatives at the General Assembly. The Finance Committee advises the General Assembly and the Director General on the financial health of the DANUBIUS-ERIC: DANUBIUS-ERIC shall operate within the principles of transparency and sound financial management. The Finance Committee's reports will be presented to the General Assembly and the Director General together with the report on the budgetary and financial management of the financial year. The Director General shall provide the external auditor with such information and assistance, as may be required, in order for the external auditor to perform its duties.
- Audit Committee: the activities of DANUBIUS-ERIC will be evaluated every five years by an independent panel, composed of international experts of the highest quality, appointed by the General Assembly. This Committee will evaluate the whole DANUBIUS-RI activities, i.e. the scientific and strategic orientation given by the ERIC, as well as the operations of the DANUBIUS Components. Special attention will be given to the fulfilment of User requirements. The results of the evaluations will be reported to the General Assembly.
- Expert-Practitioner Board (EPB). The broad role of the EPB is to encourage synergy and span boundaries between experts of different scientific disciplines and practitioners. Its aims are to support the DANUBIUS-ERIC governance bodies in:
  - the prioritization of the scientific findings of DANUBIUS-RI and the translation of these prioritized findings into information that is useable for practitioners;
  - the prioritization of the needs of practitioners and the translation of these prioritized needs into scientific questions that can be answered by DANUBIUS-RI.

EPB membership will be drawn across Europe from industrial and/or other entrepreneurial organizations, consultancy firms, governmental and non-governmental organizations and from research organizations (max 9 members). The EPB could be:

- a) an independent advisory board, with the aim to support and collaborate with the General Assembly, financially supported by the ERIC or,
- b) an independent advisory board which reports, advises and suggests to the RIC, not financed by ERIC.



Further Committees could be outlined. The definition on the number, role and composition of these Committees will be agreed within the Board of Governmental Representatives and/or detailed after the starting of DANUBIUS-RI operations.

#### 3.2 Director General

The Director General of DANUBIUS-ERIC will be appointed/dismissed by the General Assembly, after an international selection between high-quality candidates with proven scientific and managerial experience. The Director General will be the Chief Executive Officer of DANUBIUS-ERIC and should be employed by DANUBIUS-ERIC, with an appropriated salary.

The term for the Director General appointment will be chosen between three and five years, renewable. The Director General can be dismissed by the General Assembly before the end of this term, in case of motivated and severe reasons.

The Director General shall be based at the DANUBIUS-ERIC Headquarters, located in Romania.

#### Competences.

The Director General will carry out the day-to-day management of the DANUBIUS-ERIC and be responsible for the implementation of the decisions by the General Assembly, including annual work plan and yearly budget as well as five years strategy and financial plan. The Director General will actively contribute to the community building and fostering external relations and strategic partnerships.

The Director General will participate to the General Assemblies without right to vote, and will prepare, for submission to the GA:

- a) the five years strategy and financial plans,
- b) the annual budget and annual accounts,
- c) the annual activity report,
- d) the annual work plan,

The Director General will implement the strategies, decisions and policies adopted by the General Assembly and in particular she/he will:

- a) supervise the functioning of the entire DANUBIUS-RI;
- b) ensure the coordination and the collaboration with all the Committees established by the Statutes and by the General Assembly



- c) define and manage the contracts/agreements between the ERIC and the DANUBIUS Components
- d) ensure an effective collaboration between the ERIC and the DANUBIUS components;
- e) manage the Executive Office, including the selection of the staff and a proper financial internal control system, taking all necessary decisions for the day-to-day administration of DANUBIUS-ERIC;
- f) prepare other reports and in general will answer to the requests made by the General Assembly;

The Director-General, in agreement with the President of the General Assembly, will also represent DANUBIUS-ERIC in international meetings, projects or initiatives. This does not preclude any further national representation of Members.

The Director General will be assisted by the staff of the Executive Office.

<u>Executive Office</u>. The Director General will appoint the members of the Executive Office, which will be based in the ERIC Headquarters in Romania. The Executive Office will support and assist the Director General in implementation of his/her tasks. The General Assembly will define the resources available for the Executive Office.

#### 3.3 Scientific Advisory Committee

#### Definition and composition.

The General Assembly will appoint, for a term of 5 years, 7 persons to form the DANUBIUS-ERIC Scientific Advisory Committee (SAC), to be chosen among Scientists of recognized international experience.

The Scientific Advisory Committee will be an independent expert body, able to address the GA on scientific matters of strategic importance, like the five years strategy documents and the annual work plans and to provide to the GA both an evaluation of the past activities, as well as suggestions for the next one.

In case of withdrawn of a member during one term, the GA will elect another person for a mandate ending in the same date of the other persons.

The General Assembly will also vote the dismissal of the SAC.



#### Chairperson and a Vice-Chairperson.

The Scientific Advisory Committee shall elect a Chairperson amongst the members for a two-years term, renewable for the same period, twice.

#### Meetings.

The Scientific Advisory Committee shall be convened by the Chairperson at least once per calendar year, possibly at the DANUBIUS-ERIC Headquarters, located in Romania; more meeting can be organized if necessary.

#### Competences.

Scientific Advisory Bodies of the highest quality and independence are the real assets of a successful RI. The development of the correct strategy to attract scientists and give them the instruments to best produce high quality research needs external advice: the Scientific Advisory Committee is an independent expert body capable to perform international-level advice and evaluation both on the quality of the services and on the quality of the users allowed to access the RI.<sup>1</sup>

The Scientific Advisory Committee shall report to the General Assembly once a year. It shall:

- monitor scientific quality of the activity of DANUBIUS-ERIC and the DANUBIUS Components;
- provide feedback and make recommendations on actions to improve the effectiveness of DANUBIUS-ERIC and DANUBIUS Components outcomes in the scientific community with a view to further develop DANUBIUS-ERIC's scientific activities;
- etc.

#### 3.4 Ethics Advisory Committee

#### Definition and composition.

The General Assembly of DANUBIUS-ERIC will establish an independent Ethics Advisory Committee, whose representatives shall be appointed by the General Assembly. The General Assembly will also vote the dismissal of the Assembly.

The Ethics Advisory Committee comprises three to five public figures, independent and of good standing, which shall designate the respective Chairperson.



#### Meetings.

The Ethics Advisory Committee shall be convened by the Director General at least once per calendar year; the meetings can be virtual; more meeting can be organized if necessary.

#### Competences.

The Ethics Advisory Committee shall report to the General Assembly once a year. It shall:

- ensure that an adequate system exists for monitoring internally compliance with the Code of Ethics, and specifically assess the recommendations resulting from these monitoring activities;
- ensure the integrity of the research conducted under the DANUBIUS-ERIC and the DANUBIUS Components by giving feedback and making recommendations to develop the ethical aspects of DANUBIUS-ERIC and the research infrastructure activities;
- provide at least an annual report on ethical issues to the General Assembly and the Director General, concerning compliance with the requirements of the Code of Ethics, detailing any irregularities of which it is aware, together with the conclusions and proposals adopted in the cases considered;
- assess issues submitted to it by the Director General, the Research Infrastructure Committee and the Audit Committee in connection with compliance with the Code of Ethics, and also consider, in abstract terms, issues raised by any member of staff, customer or business partner ("Stakeholders");
- appraise and assess any situation which arises in relation to compliance with the requirements of the Code of Ethics involving any company officer.

### 3.5 Research Infrastructure Committee

#### Definition and composition.

The Research Infrastructure Committee (RIC) will be composed of one representative from each DANUBIUS Component and will be coordinated by the DANUBIUS-ERIC Director General.

The RIC is fundamental to manage in a unitary way, according to the common principles and policies, the distributed RI.



#### Meetings.

The RIC shall be convened by the Director General at least once a year, at the DANUBIUS-ERIC Headquarters. Other meetings will be convened using teleconferences, if necessary.

#### Competences.

The Research Infrastructure Committee will be the main managing body of the distributed RI to ensure consistency, coherence and stability of the services offered by the Components, and should be able to coordinate procedures, tools and practices occurring in the whole RI.

It must be consulted by the Director General for the preparation of strategic and operational plans before their submission to the GA.

The RIC should control the common adoption of the DANUBIUS principles/policies in all the Components and, when necessary, should propose their amendment/ updates, to improve the quality and efficiency of the services.

The work of the RIC could also be performed in sub-Committees on specific tasks/issues, if necessary.



# 4. Options for defining relationship between Components/Partners and DANUBIUS-ERIC

During the works of DANUBIUS-PP, the discussion around the structure of the DANUBIUS-ERIC evolved from a more "centralized" idea towards a more "distributed" one, where all the components, but the Hub, are outside the administrative border of the ERIC.

However, it is crystal clear that, in any case, the DANUBIUS Partner Institutions will have the central role to provide major scientific equipment, sets of instruments, research facilities, resources and related services to the DANUBIUS Components and to Users, enabling the conduct of top-level research in their respective fields.

It is also crystal clear that, once DANUBIUS-ERIC will be established, the participant States (i.e. the Members of the ERIC), must be in a strict relation, State by State, with the Partner Institutions.

In this frame, in order to link DANUBIUS-ERIC to the Partner Institutions, two ways are possible in principle:

- a) to engage each Partner Institution with the Component(s) they work in;
- b) to engage each Partner Institution directly with ERIC.

In both cases the engagement could occur through Service Level Agreements (SLA), which are contractual links between two or more separate legal entities, that specify the services provided by the Parts, one to the others and vice versa.

As an example, the image below schematically shows the two different options, applied to the Italian Supersite "Po Delta and North Adriatic Lagoons Supersite",



Figure 3. The two options about the relations between the Partners and the ERIC, related to a Supersite.



In the first case, the three institutions could sign a common MoU, that refers to the single SLA subscribed among the Hosting institution and the DANUBIUS-ERIC.

In the second case, three different SLAs link each Partner Institution to the ERIC. Possibly, also in this configuration a MoU between the three Institution is needed, for assuring a proper management of the SuperSite.

In the latter case (separate SLA for each Partner), once any change would occur in a service offered by one of the three institutions, this change will mean to readjust the MoU, the SLA of this Institution, but also probably the other two.

Instead, in the first configuration (one SLA per Component), in case of changes, the MoU will vary, and possibly only the single SLA, if needed (in fact, the internal readjustment of services between the participating institutions could produce no changes in the relationship with the ERIC).

The number of Components will be surely lower than the number of Partner Institutions, as many Partner Institutions will be active in more than one Components. The managing of a minor number of contracts is an evident advantage for the ERIC structure. To link the Components with the ERIC by means of a SLA put more emphasis on the services provided by the RI (What), instead of underlining the pedigree of the partners involved (Who).

In a nutshell, the solution a) -one SLA per Component- appears more flexible, clearer for the whole RI community and requires much less management work for the ERIC offices.



# 5. DANUBIUS-PP Board of Governmental Representatives

#### 5.1 Fourth version of the DANUBIUS-ERIC Statutes

The implementation of the Statutes, such as DANUBIUS-ERIC one, is based on the appropriate agreement between the parties involved: the scientific community and the future Members of the ERIC (EU Member States, associated countries, third countries other than associated countries and intergovernmental organisations). This arrangement must ensure the correct (and lasting) relationship between all stakeholders and the preparation, in a short period of time, of an agreed Statute.

With this aim, the DANUBIUS-PP Board of Governmental Representatives (BGR) was established; the governmental and scientific representatives of all the States which are involved in DANUBIUS-PP sit in it.

The 18<sup>th</sup> and 19<sup>th</sup> of June 2019 the Board of Governmental Representatives performed its 4<sup>th</sup> meeting, in Bruxelles. During the two days meeting, the third version of the Statute has been discussed and a fourth version has been agreed. The few articles left for a further discussion, in the 5th Meeting of September 2019, are related to the voting rights.

All the other suggestions and the requests made during Bruxelles meeting are in this document already accepted in this document. Further deepening is expected in the rules of procedures, which are not planned to be written during DANUBIUS-PP.

Finally, the relations among all the DANUBIUS components and DANUBIUS-ERIC were explained, included the two options presented in cap 4.

#### 5.2 Towards a fifth version of the DANUBIUS-ERIC Statutes

The Board of Governmental Representatives will further discuss in the next meetings the remaining part of the Statutes. However, it was clear since the beginning that a (limited) number of iterations, correcting what have been already agreed, could have been necessary.

Having this in mind and accepting the solution a) expressed in the previous chapter for the relationship between ERI-Components and partner Institutions (i.e. one SLA per Component), only few modest rephrasing of some pieces of Statutes' articles are needed.



Preparatory Phase for the pan-European Research Infrastructure DANUBIUS–RI "The International Centre for advanced studies on river-sea systems"



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