



INTERNATIONAL CENTRE FOR ADVANCED STUDIES ON RIVER-SEA SYSTEMS – PREPARATORY PHASE (DANUBIUS-PP)

First Meeting (Kick Off) of General Assembly, 12-13 December 2016,
Academia Romana, Bucharest, Romania

MINUTES

Participants

Adrian Stănică (National Institute of Marine Geology and Geoecology, RO, Chair)
Michael Schultz (National Institute of Marine Geology and Geoecology, RO, Co-chair)

Anton Anton (National Institute of Marine Geology and Geoecology, RO)
Ekaterina Batchavarova (Bulgarian Academy of Sciences, BG)
Debora Bellafiore (CNR Institute of Marine Sciences, IT)
Nikolai Berlinsky (Odessa State Environmental University, UA)
Justus van Beusekom (Helmholtz Centre Geesthacht, DE)
Oleg Bogdevich (Academy of Sciences of Moldova, MD)
Mike Bowes (NERC Centre for Ecology and Hydrology, UK)
Chris Bradley (University of Birmingham, UK)
Jos Brils (Deltares, NL)
Franck Brottier (Euroopportunities OÚ, EE)
Miklos Bulla (Széchenyi István University, HU)
Pierpaolo Campostrini (CORILA, IT)
Molagic Catalin (UEFISCDI, RO)
Caterina Dabala (CORILA, IT)
Vignati Davide (University of Lorraine, FR)
Linsey Dickson (University of Stirling, UK)
Mihai Robert Dima (National Authority for Scientific Research Romania, RO)
Lars Duester (German Federal Institute of Hydrology, DE)
Paolo Favali (EMSO)
Jana Friedrich (Helmholtz Centre Geesthacht, DE)
Jeremy Gault (University College Cork, IE)
Sylaios Georgios (Democritus University of Thrace, EL)
Ecaterina Ghita (UEFISCDI, RO)
Barbara Giuponi (CORILA, IT)
Vicente Gracia Garcia (UPC, ES)
Daniel Gonzalez-Marco (UPC, ES)
Mike Grant (Plymouth Marine Laboratory, UK)
Steve Groom (Plymouth Marine Laboratory, UK)
Thomas Hein (WasserCluster Lunz, AT)
Peter Heininger (German Federal Institute of Hydrology, DE)
Maria Ionescu (National Institute of Marine Geology and Geoecology, RO)
Hans-Jörg Isemer (Helmholtz Centre Geesthacht, DE)
Dimitar Ivanov (Bulgarian Academy of Sciences, BG)
Valeriy Khokhlov (Odessa State Environmental University, UA)

Inna Khomenko (Odessa State Environmental University, UA)
Panos Michalopoulos (Hellenic Centre for Marine Research, EL)
Henriette Otter (Deltares, NL)
Vangelis Papathanasiou (Hellenic Centre for Marine Research, EL)
Francesca de Pascalis (CNR Institute of Marine Sciences, IT)
Iona Popescu (UNESCO-IHE)
Albert Scrieciu (National Institute of Marine Geology and Geoecology, RO)
Octavian Serban (Romanian Ministry for European Funds, RO)
Manuela Sidoroff (National Institute for Biological Sciences, RO)
Mihaela Paun (National Institute for Biological Sciences, RO)
Iris Tusa (National Institute for Biological Sciences, RO)
Corina Itcus (National Institute for Biological Sciences, RO)
Ladislav Šigut (CzechGlobe, CZ)
Antonio Torralba (University of Seville, ES)
Andrew Tyler (University of Stirling, UK)
Georg Umgieser (CNR Institute of Marine Sciences, IT)
Daniela Vasile (National Institute of Marine Geology and Geoecology, RO)
Cristiana Voicar (National Institute of Marine Geology and Geoecology, RO)
Dzaak Volker (Helmholtz Centre Geesthacht, DE)
Elena Zubcova (Academy of Sciences of Moldova, MD)
Mihaela Stan (Romanian Ministry for European Funds, RO)
Igor Liska (ICDPR)
Octavian Rusu (RoEduNet,RO)
Paul Gasner (RoEduNet,RO)

Welcome addresses

Welcome addresses were given by: Professor Mihai Robert Dima (President of the Romanian National Authority for Scientific Research and Innovation), Dr Octavian Serban (Senior Adviser, Romanian Ministry for European Funds), Dr Manuela Sidoroff (Director General, Romanian National Institute for Biological Sciences) and Dr Adrian Stănică (Project Coordinator, and Scientific Director Romanian National Institute of Marine Geology and Geoecology).

ESFRI project overview

A short overview of the development of the research infrastructure over 20 years, leading to the acceptance of DANUBIUS-RI on the ESFRI Roadmap, was given by Michael Schultz and Adrian Stanica.

Brief updates were given by representatives of partner countries.

Ireland – Dr. Jeremy Gault has been nominated as representative of the Irish Environmental Protection Agency in the ESFRI Environment Strategic Working Group.

UK – contact had been made with both the national funding agency (NERC) and Scottish Funding Council. There was encouragement to submit DANUBIUS-RI to the next UK infrastructure Roadmap.

Spain – Support of the Spanish Government, based on the premises explained in the Letter of Support issued by the Spanish Secretary of State for Research, Development and Innovation dated 23rd March 2015.

France – new to the consortium; a lot to be done, contacts to be made with local agencies and interaction with members of councils and Europe in general.

Germany – three ministries involved; discussions ongoing but no final decisions.

Netherlands – connected with three ministries; connections to be made with institutes. Issues of how to build a national user community and an ERIC. Discussions with EPOS and ICOS.

Italy – Scientific community formed. Started to talk to stakeholders, local authorities, funding agencies. At regional level needs to be seen how to get funds for research and not only for business.

Austria – positive feedback from ministries of science and economy but no official commitment yet. Good links at regional level. Interest from other institutions to join. Educational network with exchange with central European countries.

Bulgaria – many institutes involved from various disciplines

Greece – two linked partners – in the process of building the national users network. Trying to get DANUBIUS-RI on the national roadmap

Moldova – government, three ministries – scientific community contacts and network established.

Ukraine – information provided on academic and other organisations, in Odessa and elsewhere, with interest in DANUBIUS-RI.

EMSO ERIC – long process to become an ERIC. EMSO on roadmap 2006 – became ERIC ten years later. The links between community at national and international levels are important.

An update was given on recent discussions on collaboration with EU initiatives in the Black Sea region and the Mekong region of South-East Asia.

Adrian Stanica reported on ICRI 2016, the biennial conference of international research infrastructures, where attendance is only by invitation. The participation of DANUBIUS-RI (Adrian Stanica/Maria Ionescu) was a sign of excellence and a catalyst to becoming a global distributed research infrastructure.

An update was given on recent discussions on collaboration with EU initiatives in the Black Sea region and the Mekong region of South-East Asia. DANUBIUS-RI's presence on the ESFRI 2016 roadmap had been noted by the unit in EC DG R&I that was starting development of a strategic R&I cooperation initiative between the EU and ASEAN (Association of Southeast Asian Nations, <http://asean.org/>), with a focus on the Mekong. With engagement encouraged by the EC, DANUBIUS-RI participated in meetings in Brussels (January 2016, Jos Brils/Adrian Stanica), Hanoi (May 2016, Jos Brils), Changsha (October 2016, Manuela Sidoroff) and Ruse (December 2016, Adrian Stanica). At these meetings useful contacts were made with key Asian personnel, including the new CEO of the Mekong River Commission (MRC). Resulting from these meetings there is considerable enthusiasm for DANUBIUS-Mekong collaboration, although the specifics have yet to be agreed. There is a proposal for a H2020 Coordination and Support Action (CSA) call to collate and review state-of-the-art in Mekong science, policy and management and explore the possible role of DANUBIUS-RI.

DANUBIUS-RI – the architecture

Observation Node (UK)

Overall aims: capitalise on the launch of the next generation, operational Earth Observation satellites; capitalise on *in situ* observatories; provide expertise on *in situ* techniques and sampling protocols; provide calibration and training activities; promote citizen science.

Existing projects: UK GloboLakes/Calimnis/LIMNADES; EC Copernicus Global Land/Copernicus Marine; UK Western Channel Observatory.

Seeking additional funding: EC H2020, ESA, UK Global Challenges Research Fund, Scottish Funding Council, NERC. BREXIT: the UK is a member of the EC until at least 2019. Until then the UK is paying into the EC and H2020 so current projects can continue. Any projects that start until 2019 can include the UK.

Analysis Node (DE)

Seven major topics were identified as crucial for the understanding of the nature of river-sea systems, to describe and explain the entity of their abiotic and biotic conditions: geology, hydrology, hydromorphology, chemistry, biology, ecotoxicology, hygiene. DANUBIUS Commons will define the flows of samples, data, methodologies in all disciplines for all partners).

There is a series of criteria for analysis node partners: adhere to DANUBIUS-RI commons, have scientific excellence proven, employ highly trained employees, offer excellent experimental facilities, offer facilities with innovative programmes for multi-disciplinary training.

Activities: document and provide methodologies, advise in analysis and methodology, provide training, cooperate with DANUBIUS-RI components, conduct research and development, provide analytical service in top research area.

Modelling Node (IT)

Model as an accurate representation of the physical, chemical and ecological status.
Science/Tools/Services exchange

Building the Node: Defining the partners involved in modeling issues; checking what is available, for each partner, at national level (national consortia): software, hardware and infrastructure; clarifying the key words for integration: connectivity, interoperability, identification of already existing services, standardization of products; identifying gaps from the beginning; identifying potential stakeholders to be involved from the very beginning on Node build up and activities

Open issues: products and services proposed by the modelling node, long term sustainability of the Modelling Node, open source or proprietary software, copyright issues, how to create physical connection with the Hub, computing centres, other models.

Impact Node (NL)

Agreed new name for previous Economic and Social Node. Impact: interdisciplinarity, interfacing, innovations. Working across boundaries: science, policy, decision-making, business, education, general public. Connecting people.

Innovation – tools, methods to support activities to be in forefront of research.

What's next: further development of the Node, expand network and make connections, identify forefront scientists, groups, institutes in interdisciplinary research.

Technology Transfer Office (IE)

Objective: to bring the intellectual property generated by DANUBIUS-RI into public use as efficiently and effectively as possible whilst protecting academic and research freedom *and* providing a financial return to the RI, inventors and innovators and generating economic growth and employment.

Aim: The primary objective of the TTO will be to increase the number of developments and innovations and ensure these are effectively exploited for the advantage of both individual innovators and DANUBIUS-RI as a whole, including the development and agreement of an efficient *operating strategy* with all partners *and* stimulating cultural change to encourage an effective and efficient communication of ideas in order to maximise the potential benefits from innovation opportunities.

Process: DANUBIUS-PP will build upon existing technology transfer expertise in University College Cork (and other Consortium Partners) and to facilitate this process. Contacts will be established with European industries to foster the development of collaborative research agreements. Entrepreneurial/business stakeholders will be consulted (through WP9) to ensure that any products developed address their policy needs. Measures will be developed to protect (and exploit) DANUBIUS-RI Intellectual Property and to ensure its scientific and

technological reputation. Support will be given to members of the Consortium to develop potential spinout companies.

Data Centre (RO)

e-Infrastructure resources – develop common standards and open access to data and the harmonisation of data requirements in particular related to European Strategies. Regulation on data usage

Resources to be made available – open access doesn't mean free or immediate access. DANUBIUS-RI strategy part of the ERIC statute should be implemented. Data should be made accessible to the countries who pay ERIC fee.

How will the data be stored? We need a list of the types of data. Standards are going to be defined. Cloud services.

We should have an IT specialised team to take care of the Data Centre and everything in the background (software, services, storage...).

Hub (RO)

The Romanian Government signed on October 19th the Memorandum that approves and supports the activities needed for the preparation and starting phase of the Romanian components of DANUBIUS-RI.

The Hub will house the hosting laboratory for the Danube Delta Supersite.

The first module of the Hub was financed by the Romanian Ministry of Education/National Authority for Scientific Research and Innovation, was completed in 2015 and was officially opened on September 23rd, 2015. The module is configured as a small scale research base, with a single building comprising an underground floor and a first floor, with a foot print of 647, 85 sq. m, total built area is 913, 95 sq. m. The construction aims to showcase the reinterpretation of traditional local architectural values, in the area of the Danube Delta Biosphere Reserve.

Discussion is open on the type of research that will be undertaken at the Hub? This should be specific for the Hub, rather than a blend of different things from different Nodes.

Nestos Supersite (EL)

Emphasis on: river-delta-coastal biogeochemistry processes and modeling, data acquisition for modeling of anthropogenic impact in river-delta-coastal systems, testing of river-coastal sensor systems, natural resources (fisheries, aquaculture in transitional environments), transfer of solid and solute material from land to sea by a small mountainous river system, organic/inorganic carbon dynamics, coastal aquifer seawater intrusion, direct groundwater seepage to the sea.

Partners: HCMR, Fisheries Research Institute, DUTH.

Proposed field instrumentation: network of six biogeochemical observation stations with data telemetry, sampling network of automated solid-solute sampling stations and sediment trap analysis, network of instrumented coastal boreholes.

Upper Danube – Lake Lunz Supersite (AU)

Cooperation of three universities (research and education). Studies on a wide range of aquatic ecosystems. LTER site – Lake Lunz (pre-alpine lake, with low impacted catchment). Long term data on lake (since 1921). Research on Upper Danube floodplains (>20 years). Variety of high level experimental facilities (mesocosms, flumes, fish tanks). High end laboratories – GC, HPLC, IRMS, CLSM. More than 120 science publications since 2010.

Key elements: strategic location – Alpine and Danube region, broad range of expertise – freshwater ecology. Key topics: climate change, flow alterations, carbon cycling, water quality, biodiversity; LTER and long term investigations in Lake Lunz catchment and Upper Danube floodplains; experimental expertise and facilities – mesocosms and flumes; high end laboratory infrastructure; educational activities – university courses, summer schools; part of networks – GLEON, several COST actions, CEEPUS, IAD.

Po Delta and Venice Lagoon Supersite (IT)

Partners: ISMAR-CNR, IAMC-CNR, INGV, OGS, CORILA.

Research focus – hydromorphological process, tidal flat/salt marshes, suspended matter, ecological impacts, water quality and pollution.

Anthropogenic activities in the Venice Lagoon: most heavily altered lagoons in the whole Mediterranean, major changes to the lagoon environment, construction of mobile barriers.

The lagoons of Venice and of Marano-Grado, are located in the north-eastern part of the Adriatic Sea (Italy), bordered by the North Adriatic river system (Brenta, Adige, Piave, Livenza, Isonzo and Tagliamento rivers).

Thames Estuary Supersite (UK)

Thames catchment includes one fifth of the UK population, two thirds of London drinking water. Largest towns and cities along the river. Upper catchment – rural.

Problems: high population density, pollution, drought, flooding, invasive species, algal blooms.

Ongoing research: algal bloom prediction, droughts and floods, antimicrobial resistance, pathogens, nanoparticles/microplastics, pharmaceutical/slug-pellet pollution, zooplankton grazing, nutrient and phytoplankton modelling, endocrine disrupting chemicals, evaluation of new field monitoring equipment, biodiversity/genomics, hydrological modelling, carbon speciation (fluorescence).

Elbe Estuary Supersite (DE)

Infrastructure: models, HZG, BfG, Technical University Hamburg Harburg, University of Hamburg, Wasser und Schifffahrtsamt Hamburg, BSH

Observation network: HZG/COSYNA/Copernicus/Sentinel, BfG, TERENO, BSH/MarNet, Hamburg Environmental Agency/Port Authority, River Basin Community Elbe (Long-term data going back to the 1950s), Federal Monitoring (BLMP).

Laboratory and Ship Facilities: HZG, AWI , University Hamburg.

Vision: a backbone (network) of continuous measurements and models linking riverine, estuarine and marine systems, improved models with dedicated research, observe and understand the effects of extreme events, separate anthropogenic and natural effects on estuarine and coastal ecosystems.

Ebro-Llobregat Deltaic System Supersite (ES) (ES)

Two sites corresponding to the coastal area comprised between the Ebro and the Llobregat Deltas. In order to have a wider coverage, the Spanish members of the Consortium have proposed to add the Guadalquivir River Mouth Estuarine System, including the Sevilla harbour.

Supersite structure: Multi variable observing stations (Ebro Delta, Pont del Petroli, but also to be included in the future supersite - Sevilla harbour and Guadalquivir Estuary), large scale laboratory (ICTS Spain), numerical modelling operational and off line databases and remote access (data laboratories, etc), with previous applications and data (historical time series) for scientific and societal problem solving. The Supersite includes links to the Spanish meteo-oceanographic centres such as Puertos del Estado. The Spanish contribution will benefit from access to super computing centres such as BSC-ICTS and the Cloud Data in collaboration with LifeWatch ERIC ICT e-Infrastructure (through the creation of the proper Virtual Research Environments ICT e-Infrastructure Office for applications, to be established in WP5) and access structure for receiving EU researchers. In addition, the participating universities are committed to incorporate DANUBIUS-RI into their Master and PhD programmes and offer joint activities with other DANUBIUS-RI partners.

Connections and support: Connections to river and coastal and port authorities (Barcelona, and also Sevilla), in addition to a Ministerial and Council of State of Spain and LifeWatch ERIC high level support.

Szigetkoz Supersite (HU)

Partners: Széchenyi István University (SZE), Eötvös Loránd University (ELTE), Hungarian Academy of Sciences (MTA).

Background: inner delta highly affected by the diversion (1992) of the main branch, runoff and subsurface water levels decreased, river bed clogging accelerated 'simulated' drought conditions, assessment of the surface–subsurface water interactions, derivation of hydrological models for the drought conditions anticipated due to climate change scenarios, exploration of an anthropogenically effected environment: a river-shallow groundwater system, water supply - riverbank filtration (RBF), environment contamination (e.g. soil, groundwater), social changes and models.

The obtained results should be implemented into the socio-ecological-economic setting of the Danube River-Delta-Sea system (from spring to sea).

Financial Issues on H2020 DANUBIUS-PP

Main changes from FP7: Single reimbursement rate, more flexible rules for third parties and subcontracting costs, differentiation between contracts and subcontracts, unique flat rate of 25% for indirect costs, three options for determining annual productive hours, clearer and simpler obligations on time records, more flexibility for average personnel costs, provisions on additional remuneration.

Eligibility of non-deductible VAT. Attention to:

***article 6** of the GA – eligible and ineligible costs;

***article 13** of the GA – implementation of action tasks by subcontractors

***Table 3.4b**

Direct costs are costs that are directly linked to the action's implementation and can be attributed to it directly. They must not include any indirect costs. Direct costs are costs that have been caused in full by the action or costs that have been caused in full by several actions and the attribution to a single action can, and has been, directly measured (e.g. not allocated via cost drivers) Must be justified by sufficient persuasive evidence showing the direct link to the action.

Reporting: Details will be presented during the next General Assembly, in 2017, six months prior to the Financial Report. Clear instructions will be sent. Electronic submission requested with allocation of FSIGN for DANUBIUS-PP project.

Project Overview

DANUBIUS-PP is three year CSA (Coordination and Support) project – not research and innovation project. It aims to raise DANUBIUS-RI to the legal, financial and technical maturity required for successful implementation and development.

Specific objectives: to bring together key stakeholders at different levels, and strengthen the Consortium through a process of wide engagement; to refine the scientific and innovation agenda, the legal framework, governance and management, and policies for access and data management; to refine financial requirements of the RI to assist funding agencies as they consider future spending priorities; to develop structures and processes to ensure that DANUBIUS-RI strengthens scientific performance by providing a sustainable basis for future

operation, delivering key services to the different user communities; to occupy and strengthen a critical role in the landscape of pan-European RIs of global importance – and reach for the world in cooperation with existing other entities.

Key deliverables of DANUBIUS-PP include development of the legal and financial agreements for the components of the Research Infrastructure (including Hub, Nodes and Supersites), their governance, and internal organisation which will be confirmed via a Memorandum of Understanding signed by Governments.

Final result: all needed documents (Memorandum and annexes) to give birth to a single research infrastructure, with a unitary agenda, with a common set of rules, standards and procedures, giving open access to and promoting high quality research on river-sea systems. The project will end on Nov 30, 2019 with the Statutes for the new RI legal entity agreed, with all annexes accepted. Any delay in this will be due to bureaucratic procedures.

Work Packages

WP1 – Project management and coordination

Set up the decision-making structure necessary to provide prompt and coordinated communication within the Consortium and clearly defined levels of responsibility.

Specific WP objectives: manage communication flow within the consortium and between the consortium and the EC, handle the overall legal, contractual, financial and administrative issues, monitor the project to ensure the achievement of high quality results.

Tasks: Day-to-day support of PC and PM, overall project coordination (technical and financial), control and monitoring of project activities, proposing strategic decisions, good communication at Consortium level (at WP level and between the WPs), good communication between the Consortium and EU representatives (Project Officer, Financial Officer, Legal Officer, etc.).

Steering Committee Members include: Project Coordinator, Project Manager, Financial Coordinator, WP leaders.

WP2 – Science and innovation agenda

Objectives: update the Science Plan for the RI; confirm the critical scientific parameters for the RI (with WPs 5, 6), determine current (2020) and emerging environmental problems of river – sea systems to ensure that key societal challenges and associated scientific and policy needs are addressed; engage with the wider community to maximise awareness of developments relevant to the RI; interacting with other national and international RIs to ensure complementarity and collaboration (with WPs 9,10); establish mechanisms by which DANUBIUS-RI can take the lead in driving the science and innovation agenda (in context of national and European research priorities); deliver a state-of-the-art scientific research and innovation agenda at the end of the preparatory phase to inform subsequent RI design and funding mechanisms (with WPs 4, 5, 6).

Next steps: informal feedback (Dec 2016), synthesis at national level (by March 2017), one day meeting in Vienna @ EGU (April 2017), first deliverable (working document) May 2017, potential synthesis paper outline(s) (June 2017).

WP3 – Defining the DANUBIUS-RI legal entity

Objectives: decide whether to apply for ERIC status or another legal entity model; develop strategies, policies and procedures for management and operation of the RI; draw up a set of statutes and internal rules as requires for establishing and managing the legal entity/-ies (DANUBIUS-RI components will have two legal possibilities: either part of the ERIC, or in close connection with the ERIC maintaining the previous legal position); a common procedures for public purchase of equipment, goods and services; HR policies that will ensure the promotion of equity and equal opportunities; the statutes for the legal entity. Government (ministries) should be involved immediately. Each partner should maintain continual links with ministries and funding agencies, with at least an annual meeting. Identify who can sign the ERICs (at national not institutional level), and keep them informed. RIs need funding sustainability that can be sustained only by having the support of the Member States. Connections should also be maintained between countries

WP4 – Developing the funding model of DANUBIUS-RI

WP4 aims to foster the financial sustainability of DANUBIUS-RI through the following objectives: defining an access policy that is a good compromise between scientific excellence, revenue generation and full use of resources under a constraint of sustainability, and identifying long-term funding from all available sources; evaluating the socio-economic impact of DANUBIUS-RI; supporting DANUBIUS-PP in negotiating with funding agencies.

Assistance in updating the budget for the Hub, Nodes and Supersite. Assistance in addressing local ecosystems, to maximize DANUBIUS-RI future impact and collaborative research opportunities.

Identification of relevant sources of funds for the implementation of Nodes/Supersites. Development of Funding Matrix. Support in building up a strong case to initiate negotiations with funding agencies, e.g. integrating considerations for Smart Specialisation Strategies in the overall DANUBIUS-RI project, and at site level. Proposals for access policy models

WP5 – Architecture

Objectives: define the roles and contribution of the component parts of DANUBIUS-RI and their interactions; draw up the criteria for internal functioning, interaction and changing or extending these in future;

Many reports and interactions – communication between Nodes – questions all the time in order to be able to build this kind of architecture. Practical functioning of the infrastructure. We have to decide on how to communicate. Working groups will be defined. We have principles – we need to make procedures in 24 months.

WP 6 – DANUBIUS Commons

Overall set of standards, protocols and rules to be implemented throughout DANUBIUS-RI built on best internationally accepted standards. Standards to which all new partners must adhere.

Ensure the compatibility of work methodologies throughout the entire RI. Ensure comparable data sets across the RI. Ensure continuing excellence in sampling, field and laboratory data acquisition, sample and data processing and reporting. Ensure the quality of data as a prerequisite of scientific excellence and of maximum value for all science, policy and societal groups. Facilitate the integration of DANUBIUS-RI with complementary RIs and programs.

How we will keep track of the data that will be produced – WP 7 and 8 will take care of data that will be produced.

WP 7 – Data protocols and handling

Identify, collate and catalogue formats, standards and protocols for data, metadata, samples storage and security in use; build data sharing connections with international programmes.

WP7 partners will do the bulk of the work, but need small amounts of input from everyone
What's out there? How's it kept? Who wants it (where)?

When: Main reports @ M12. Deliverables are reports and standards, ending in the DANUBIUS Commons. Expect contact early in 2017.

WP8 – ICT e-infrastructure and digital data storage cloud

Objectives: to provide the necessary computing, storage and communication infrastructure and simulation tools for RI; to provide the tools and techniques for the development of all computing elements (research, development, innovation and education oriented); how to make data and services available; how to connect with GEANT; develop adequate computational tools for storage; define procedures for managing data; development of analysis tools for data processing; interactions with e-IRG to identify/implement best practices to fit end users' needs (e.g. authentication); implementation of interfaces and services to enable ICT e-infrastructure and e-learning centre.

WP 9 – Capacity building

Develop a common language to facilitate communication between all partners. Develop the Human Resources Strategy for Researchers for the RI. Develop guidance on how to engage stakeholders.

Discussion - Opportunities to start new project, cooperation should be spotted. After completion of DANUBIUS PP, the Consortium should apply for a Marie Curie ITN network.

WP 10 – Dissemination and communication

Prepare draft dissemination and communication plan and circulate for comments to all partners. Strategy to be agreed with SC and implemented in the project lifetime.

Communicate functions and services of DANUBIUS-RI. Create awareness and establish recognition of DANUBIUS-RI for future use of the RI by the scientific community and stakeholders. Make a strong case to regional and national authorities and policy-makers on the added value DANUBIUS-RI (as distributed RI) and the need for financial support. Promote linkages and connections of DANUBIUS-PP with other initiatives, projects, actions that will help to align the vision and strategy for RSS. Establish early engagement with local stakeholders, crucial for the long term sustainability and societal impact of the RI. Citizen science

Break out event – stakeholders at break out event? Or at the GA? Should they be combined? DANUBIUS week in month 6? (May). Different approach needed for communication to break out event. Homework needed.

Ambassadors: one for each country to be able to communicate effectively what we are going to do. He/She will not be a scientist. Ambassadors should be there from the break out event. Ambassadors need not be similar types of people. Appoint them individually, then bring together as a group.

First press release will probably be at the event with stakeholders.

Discussion of the Consortium Agreement

Comments from HZG and Deltares on the draft Consortium Agreement were discussed. During the meeting comments were received from EMSO ERIC and UPC. It was agreed that all partners should send comments by the end of the year. The draft Agreement will then be revised and circulated to all partners as soon as possible.

DANUBIUS-PP advisory groups and supporting committees

Future meeting dates

The GA approved the provisional schedule, recommended by the Steering Committee, for future meetings of the GA and other DANUBIUS-PP advisory groups and committees:

GA2 in Venice (provisionally 8-12 May 2017): 2-day GA, 1 day funding agencies, 1 day field trip, 1 day other meetings. Possibly to be combined with break out event.

GA3 in Germany, Berlin (December 2017)

GA4 in Greece, Kavala (May 2018)

GA5 in Ireland, Cork (November 2018)

GA6 in Romania (May 2019)

GA7 in Romania or Brussels (November 2019)

The next meeting of the Steering Committee will be held in Stirling, UK in March 2017.

A full schedule for future meetings of GA and other groups will be drawn up by Steering Committee.

Science and Technology Advisory Board (STAB) membership

The GA approved the Steering Committee's recommendations for the STAB. There should be about seven members of STAB, appointed for the full term of DANUBIUS-PP. STAB membership should comprise outstanding individual scientists and should take account of gender balance. The following names proposed by the Steering Committee would be considered by Partners, together with other names to be propose:

- Klement Tochner, Director, Leibniz-Institute of Freshwater Ecology and Inland Fisheries; Professor for Aquatic Ecology, Freie Universität Berlin
- Johan Rockström, Executive Director, Stockholm Resilience Centre
- Eric Wolanski, coastal oceanographer and ecohydrologist
- Alberto Basset, Professor of Ecology, University of Salento.
- Wong Poh Poh, retired associate professor of geography, National University of Singapore
- Steven Greb, hydrologist at Wisconsin Department of Natural Resources
- Angel Perez Ruzafa, Professor, University of Murcia
- John D Liu, Environmental Education Media Project
- Claudia Pahl-Wostl, Professor for resources management and Director, Institute for - Environmental Systems Research, University of Osnabrück
- James Syvitsky, Professor of Atmospheric and Oceanic Sciences, University of Boulder Colorado
- Chip Groat, Water Institute of the Gulf
- Enrique Alonso García, Honorary Professor and Researcher, Permanent Councilor of State of the Spanish Government President of the Division of Environmental, Rural and Marine Affairs & Science at the Council of State in Spain
- Jesús Marco de Lucas, Professor and Researcher at CSIC, Member of the LifeWatch International ICT e-Infrastructure working team

Partners should propose additional names by close of play on 14 January. There would then be an electronic vote by Partners.

Stakeholder Committee (ShC) membership

The GA approved the Steering Committee’s recommendation that the ShC should have a larger and more flexible membership that could change during the course of DANUBIUS-PP. In this way it would be more akin to a forum than formal committee.

The GA also approved the recommendation that the ShC should include ESFRI delegates and funding agencies from each country, together with representatives from: JPI Water, JPI Oceans, ICPDR, SEDNET, Future Earth Coasts (LOICZ), UN, GEMS Water, WMO, WSSTP, reinsurance companies, EEA, Climate-KIC.

Each partner should send membership proposals for both STAB and ShC (name, institution, description) by 14 January. When a list of proposals has been drawn up, it will be circulated to partners for voting on membership of STAB.

Actions arising

1. Send abstracts for Lakes and enclosed seas seminar in Wien to Jana Friedrich by 11 January. **(All)**
2. Send proposals for members of STAB and ShC to Maria Ionescu by 14 January. **(All)**
3. Set up Dropbox account **(Maria Ionescu – completed)**
4. Compile list of all individuals from each partner involved in each Task **(Work Package Leaders)**
5. Select and establish communication system **(Project Team)**
6. Send identity national contact points to Maria Ionescu **(Partners)**
7. Obtain and circulate up-to-date ESFRI Environment membership list **(Maria Ionescu)**
8. Send comments on draft Consortium Agreement to Dana Vasile **(All)**

ANNEX

List of deliverables to be finished in the first 12 months of the project

Deliverable	Description	Partner	Month
D1.1	Report from kick off meeting report	GEOECOMAR	2
D1.9	Communication reports	GEOECOMAR	2
D10.1	Dissemination and communication plan	HCMR	3
D1.8	Project web page including a special area for partners	GEOECOMAR	4
D9.1	DANUBIUS-RI ontology reference document - draft	Deltares	4
D2.1	Working document on research needs in river-sea systems, actors and events for science developments, relevant for the innovation process of DANUBIUS-RI	HZG	6
D4.1	Non-scientific demand analysis	Deltares	6
D5.1	Review existing major European distributed research facility organisational models	GEOECOMAR	6
D8.1	Review of Research Infrastructure service offerings relevant to DANUBIUS-RI	UPC-PoS	6
D1.2	Six month management meeting report 1	GEOECOMAR	7
D1.10	Communication reports - 1 update	GEOECOMAR	7
D3.1	Review report on existing offer of legal identities for distributed Research Infrastructures and preferred legal model for DANUBIUS-RI	CORILA	8

D5.2	Working model of the DANUBIUS-RI components and their interactions	GEOECOMAR	8
D5.3	Draft Report on the role and operation of the Hub	INSB	8
D5.5	Draft Report on the role and operation of Nodes. Rules for selection and development of the Leading Laboratories of Nodes and of Accredited Service Providers	USTIR	8
D5.7	List of Accredited Service Providers required - draft	USTIR	8
D5.9	Report on the role and operation of Supersites. Rules for selection and development of Supersite Hosting Laboratories and associated facilities	GEOECOMAR	8
D5.11	Draft Report on the role and architecture of the Data Centre and data portal	ROEDU	8
D5.15	Draft Report defining technology transfer and IP considerations	UCC	8
D5.17	Draft Report on the role and operation of an ICT e-infrastructure and e-Learning Office for applications to use DANUBIUS-RI	UPC-PoS	8
D10.2	Results of the Breakout Event	HCMR	9
D1.3	Six month management meeting report 2	GEOECOMAR	12
D1.11	Communication reports - 2nd update	GEOECOMAR	12
D4.2	Analysis of available sources of funds for DANUBIUS-RI and its sites	UEFISCDI	12
D5.4	Final Report on the role and operation of the Hub	INSB	12
D6.1	Report on current state of the art	USTIR	12
D7.1	Review and define types of non-digital data and the guidelines and methodologies for their collection and storage	CEH-NERC	12
D7.2	Types and formats of digital data supported by DANUBIUS-RI	INSB	12
D7.3	Metadata description and formalizing documentation procedures	INSB	12
D7.4	Draft of Review of processing, data tools, equipment needed and data standardization (INSB	12
D8.4	Study on the options for the link between data centre and the various parts of the distributed RI - draft	ROEDU	12
D8.6	Report describing the conditions to be met by the pan-European communication network - draft	ROEDU	12
D8.12	e-IRG interaction plan and report - draft	ROEDU	12
D9.3	DANUBIUS-RI strategy on Human Resources for Researchers - draft	UCC	12