SEEIIST
Steering Committee meeting

- Thessaloniki meeting
  - Excellent organization by our Greek hosts
  - Interesting visits program
  - Including some historical places
- Special thanks to organizers!!!
- Very special to Yiota Foka!
- Several important topics
  - Memorandum of Collaboration
  - General Work plan
  - Contribution of the member states
  - Work group on funding

Agenda – open session

Chair Prof. Leandar Litov

Participants SEEIIST Steering Committee members, representatives of collaborating organizations and observers

9:30 - 10:15	Opening Welcome by Greek Authorities & Organizers
10:15 – 10:35	SEEIIST Current Status and Plans – Leandar Litov (SU)
10:35 – 10:55	HITRIplus Overview and Opportunities – Sandro Rossi (CNAO)
10:55 – 11:15	Treatment Accelerator Design Studies – Maurizio Vretenar (CERN)
11:15 -- 11:40	*Coffee Break*
11:40 – 12:00	IAEA role for capacity building - Sotirios Charisopoulos (IAEA)
12:00 – 12:20	Experts support for capacity building - Yannis Papaphilippou (CERN)
12:20 – 12:40	Ongoing activities supporting capacity building - Yiota Foka (GSI)
12:40 - 13:00	Report from SEEIIST Association – A. Beganovic, P. Gruebling

Lunch – 13:00-14:00

Agenda Close session

14:00 – 18.00 SC Close session – Chair L. Litov

- Verification of the quorum
- Approval of the minutes of the XIIIth meeting of the SC
- Approval of the agenda
- Report from WGLF - S. Estermann
- The WGLF mandate and terms of reference L. Litov (for approval)
- Report from WGSS – S. Estermann
- Memorandum of Understanding between SC and the SEEIIST – L. Litov (for approval)
- SEEIIST General work plan – L. Litov (for approval)
- SEEIIST project implementation control – L. Litov (for approval)
- Member states contribution to the project – L. Litov (for approval)
- Creation of WG on funding – L. Litov (for approval)
- AOB

16:00-16:30 Coffee break

SEEIIST current status and plans

SEEIIST

- Proposed by Herwig Shopper – former director general of CERN
- Objectives of the project
  - ✓ to promote collaboration between science, technology and industry
  - ✓ to provide platforms for the development of the education
  - ✓ technology transfer from European laboratories like CERN and others
  - ✓ mitigate tensions between countries in the region
  - ✓ to form a research nucleus in the region of South-East Europe
- The goals can only be achieved with one major new Institute based on the latest technologies to enable ‘first class research’

SEEIIST

- Participants
- Albania,
- Bosnia and Herzegovina,
- Bulgaria,
- Greece,
- Montenegro,
- Republic of Croatia,
- Republic of Kosovo,
- Republic of Nord Macedonia,
- Republic of Slovenia,
- Republic of Serbia

Political steps

Declaration of Intent signed at CERN on October 25, 2017

Signature of Declaration of Intent by SEE Ministers of Science/corresponding Ministers or their representatives at CERN

DoI – signed by 8 countries
Croatia – ad referendum
Greece – Observer, signed 2021

Political steps

Memorandum of Cooperation signed by six Prime Ministers of the SEE Region

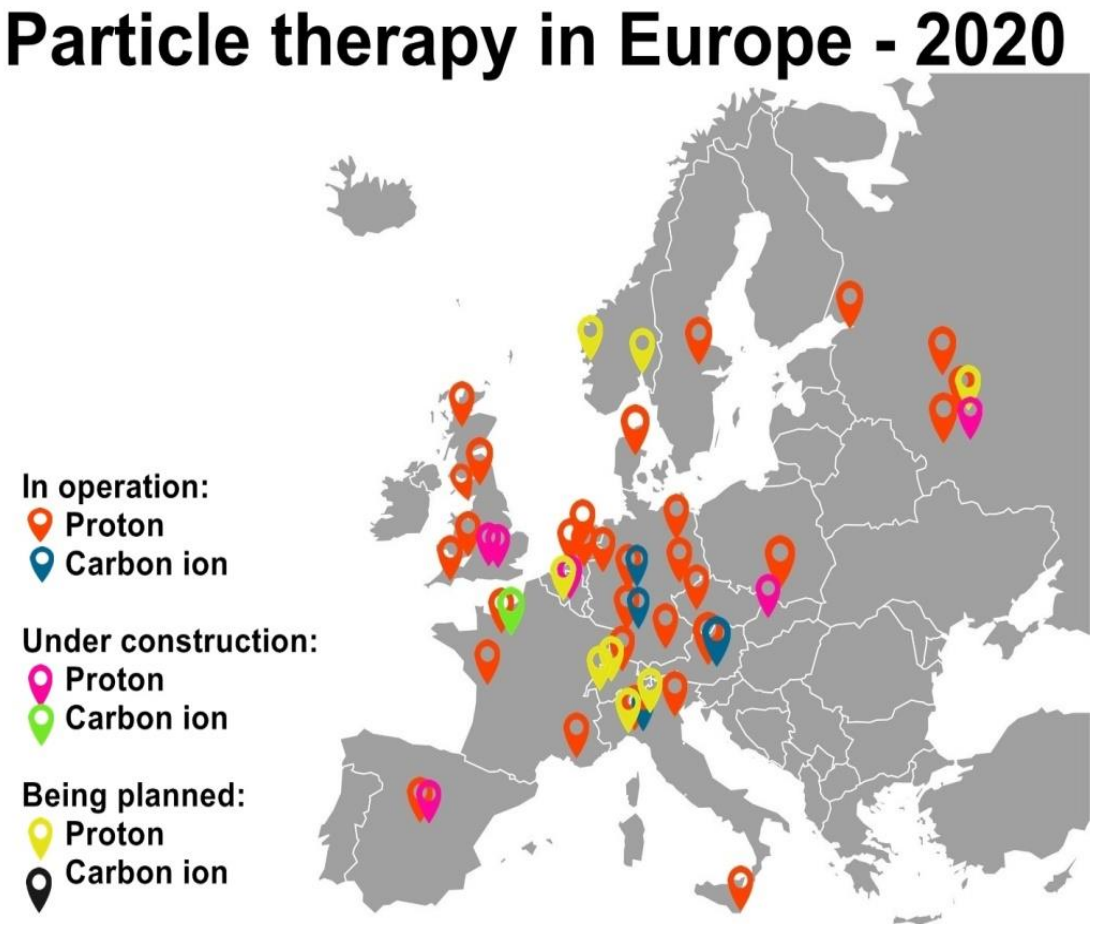
the 6th Summit of the Berlin Process

Hadron therapy

- Two options were under consideration – both based on accelerators
  - ✓ Synchrotron Light Source with a new technique which is used for the first time in Lund, Sweden
  - ✓ Hadron therapy center with proton and ion beams
    - Medical, Biomedical and some Technical Community of South-East Europe will be unified.
    - About 1000 researchers, including a major number from outside SEE.
    - 400 patients per year to be treated

Some additional arguments for HT

Practically unavailable for the citizens of the region

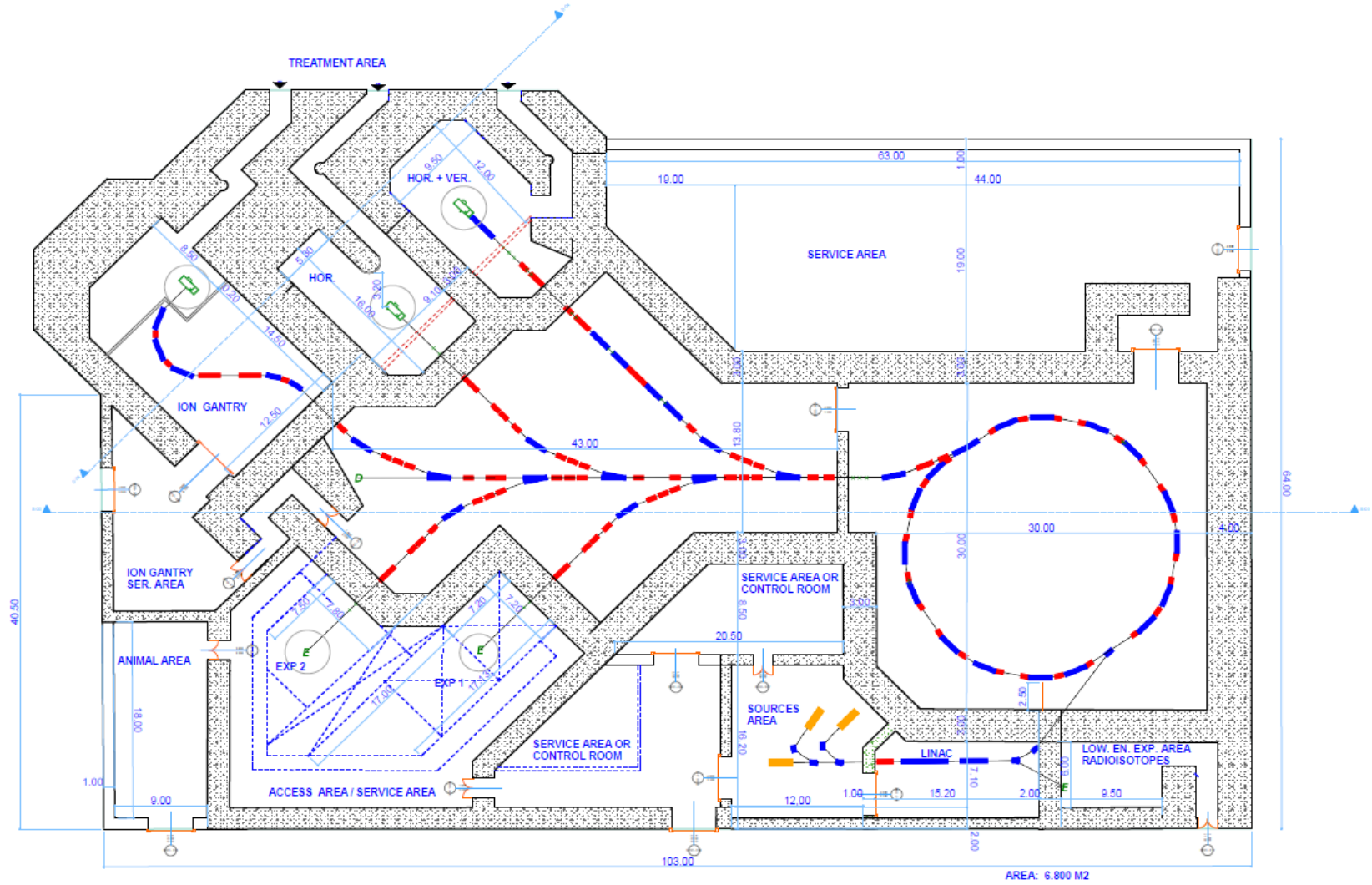


Very expensive – 50 000 Euro at HIT

Expected number of patients

- The population of the 10 countries in the project – 43 million
- Population of Balkan peninsula (including European part of Turkey) – 75 millions
- Estimated number of expected patients
  - ✓ SEEIIST member states > 1400
  - ✓ Balkans > 2450
- Numbers strongly depend from the national protocols for cancer treatment and can vary significantly
  - ✓ The above numbers should be considered as a lower limit
- The SEEIIST HT center will not cover the needs of the region

SEEIIST accelerator complex



SEEIIST accelerator

Injection/Acceleration	Unit					
Particle after stripping		p	$^{4}He^{2+}$	$^{12}C^{6+}$	$^{16}O^{8+}$	$^{36}Ar^{16+}$ (*)
Energy	MeV/u	7				
Magnetic rigidity at injection	Tm	0.38	0.76	0.76	0.76	0.86
Extraction energy range (**)	MeV/u	60 – 250 (1000)	60 – 250 (430)	100 - 430	100 - 430	200 – 350
Slow extraction spill duration with multi-energy operation	s	0.1 – 60				
Fast extraction	s	< 0.3 10^{-6}				

- Warm magnets with improved design
- Fast and slow beam extraction
- Possibility for Flash therapy
- First ion accelerator in the world

SEEIIST


SEE IIST
South East European
International Institute
for Sustainable Technologies

SEEIIST

Center for ion therapy and biomedical research

- Sustainable running of the centre
  - ✓ First requirement is to prove that the centre will run and be used in the most efficient way
- In case we build HT centre with three treatment rooms
  - ✓ 50% acc. time – patients treatment
  - ✓ 50% – research program

Nominal treatment capacity of the Centre		Exploitation level till break-even point	
Number of rooms	3		
Days of operation/year	250		
Treatment hours/day (7 – 14)	5		
Time for fraction	30 min	Capacity reached	70%
Room utilization	95 %	Average number of fractions/patient	18
Room availability	95 %	Number of patients/year	260
Maximal number of fractions/year	6670	**Number of patients/year**	**375**

SEEIIST cost

	kEUR
General expenses during construction and commissioning (5.5 years)	16 850
1. Accelerator system	99 600
2. Instrumentation for research	5 150
3. Systems to treat patients with horizontal/vertical beams	27 900
4. Total for carbon-ion gantry	23 500
5. Total for high-tech components	156 150
6. W/C needed during the exploitation phase	4 094
6. Building	45 000
7. Imaging centre	8 000
8. Contingency	22 500
TOTAL	**252 594**

Running cost full operation

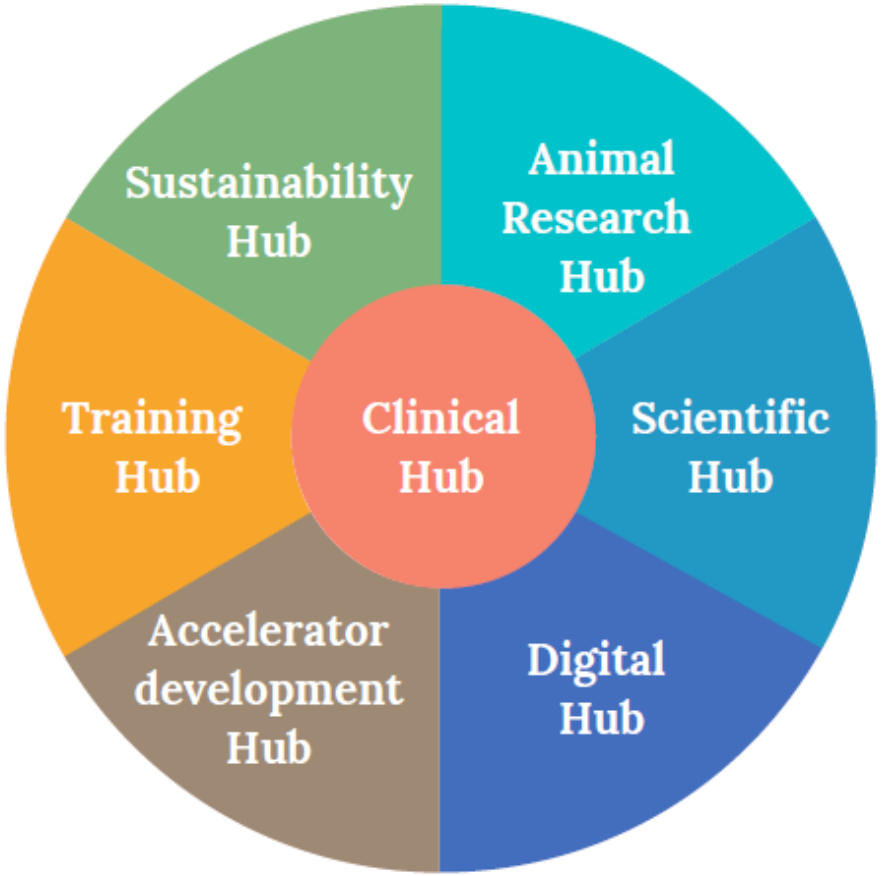
Scenario 3: Loan to equity 0%/100%	
Running costs full operation (Milion Euro)	
Investment in research programmes	1,60
Cosumables for treating patients	0,50
Maintenance and upgrade	4,80
Power and utilities	2,00
Personnel	7,70
General expenses	1,50
Expenses on imaging activity	0,22
Total	**18,32**
Investment costs per year (for 30 years)	**0,00**
Income due to the treatment of 375 patients at unit fee of 25.000	-9,38
Income from imaging activity	-0,70
Net Sum of Membership fee	**8,25**

Stages of the project

- Stages of the project
- Preparatory phase
  - First stage
    - preparation of Conceptual Design (CDR)
  - Second stage –
    - detailed technical design of the infrastructure (TDR)
    - Legal framework and establishment of the Institute
    - Business plan
- Construction phase – 5-6 years
- Detailed work plan with corresponding time scale was developed

Hubs and Networks

- Distributed infrastructure
  - Digital Hub
  - Accelerator development Hub
  - Scientific Hub (Radiobiology)
  - Sustainability Hub (Sun Power)
  - Training Hub
  - Animal Research Hub
  - Imaging Hub
- WG – Hubs and Networks
- Hubs can be established earlier than central infrastructure



SEEIIST Collaborations

- CERN
  - Framework Collaboration agreement KN 4962
  - Development of next generation ion therapy accelerators and associated systems

- HITRI+ - Heavy Ion Therapy Research Integration plus
  - HORIZON 2020
  - Coordinated by CNAO
  - 18 participating organizations
  - Project in its first year
  - Conceptual design of the accelerator

SEEIIST activities

- Ministry of Science of Montenegro - Agreement for Cooperation on establishment of the SEEIIST
  - Further development of the SEEIIST project
  - Applications for funds from EC (H 2020, HORIZON Europe etc.)
  - Participation in the activities in the field of Science diplomacy
  - Building human capacity for the future Institute
  - Organization of the work of the SEEIIST bodies
- DLR - EC
  - Service contract - Advancing the Design of the SEEIIST
  - Initially three subcontractors – CERN, GSI, SEA
  - Amendment 2 – SEEIIST Association
  - Amendment 3 - SEEIIST Association

SC activities

- WG on some critical tasks
- Swiss FDFA agreed to coordinate the work of WGLF and WGSS
- WG Legal Framework
  - To propose the legal framework for the Institute
  - To propose its Constitution
  - Combination of ERIC and CERN convention
- WG Site Selection
  - To define the technical, economic, financial requirements
  - To propose the site selection procedure
  - Input from expert External Site Selection Committee
- WG Hubs and Networks
  - To develop a model for the establishment of the Institute as a distributed infrastructure
  - To define the Hubs and Networks
  - To organize the work on their establishment

Current work&plans

- General work plan developed – to be approved today
- Based on it – yearly plan
- The WGLF, WGSS, WG Hubs formed and functioning
- The funding is not structured yet
- Establishment of Work group on Financial Sustainability (WGFS)
- Negotiation with EC are ongoing
- Very important – formation of local community to work on the project
- Strong support of the member states needed
  - Organization of the local community
  - Financial support for the Association

Meetings with EC

- Meetings with SC
  - Organized by the Swiss FDFA
- Anna Panagopoulou – Director ERA & Innovations
- Corinna Amting REA.C4 Research Executive Agency
  - Responsible for the realization of the projects
- Adrien Kiraly – DG NEAR
  - Responsible for the West Balkans Investment plan
  - The member states should activate their national delegations to the EC
- Peter Koren INTRA.F5
- Strong support from EC

Particle therapy in Europe

- INSPIRE: Proton Therapy across European regions, technological advances and the emerging field of heavy ions therapy
- Welcome - Signe Ratso, Deputy Director-General, DG R&I, European Commission
- Proton Therapy: past, present and future Prof Tony Lomax - Chief Medical Scientist, Paul Scherrer Institute
- The model-based approach: a cost-effective evidence-based method to select patients for proton therapy Prof Johannes Langendijk - Radiation-oncologist, University Medical Centre Groningen
- Clinical Trials in Proton Therapy Prof Cai Grau - Professor of Radiation Oncology, Aarhus University
- Proton Therapy: its role in the multidisciplinary cure of cancer Prof Neil Burnet - Professor of Academic Proton Clinical Oncology,

Particle therapy in Europe

- Modern Radiobiology in Particle Therapy Prof Marco Durante - Director of Biophysics Department, GSI
- The SEEIIST Project Prof Leandar Litov - Professor in Nuclear and Particle Physics, Sofia University, SEEIIST
- The INSPIRE Project Prof Karen Kirkby - Professor of Proton Therapy Physics, The University of Manchester
- The HITRIplus Project Sandro Rossi - Director General, CNAO Foundation, HITRIplus
- KIU Hadron Therapy Centre Dr Alexander Tevzadze - Rector of Kutaisi International University
- Discussion Summary and close

Thank you for your attention!

WGLF Mandate & ToR

The Steering Committee (“SC”) of the South East European International Institute for Sustainable Technologies (“SEEIIST”) establishes, for a period of one year, a Working Group on the Legal Framework (WGLF).

Mandate

- The Working Group shall:
  - Collect and assess any relevant information concerning international scientific cooperation organization;
  - Study the existing legal framework for such organizations, be it on the international level as well as on the national level;
  - Identify the characteristics of a project such as SEEIIST, in particular with regard to the clinical side of it. Specifically, the WGLF shall take into account the implication of treating patients originating from several countries and the social security issues it could raise;

WGLF Mandate & ToR

- Recommend a legal model that meets the distinct requirements of SEEIIST and addresses the need for an efficient governance of the organization;
- Where appropriate, support the recommendation with a draft of an appropriate legal framework.

Terms of reference

- The WGLF reports to the SC;
- The WGLF interacts with other *ad hoc* groups which are relevant to the legal framework, such as the Committee for the Site Selection;
- The decisions of the WGLF are made by consensus whenever it is possible;
- The WGLF shall be led by a Chair and shall be supported by a Secretariat provided by the SEEIIST association. The Chair shall facilitate the decision but shall not have a voice in it;

WGLF Mandate & ToR

- The Working Group shall be open to all participant States of SEEIIST, including observers. The latter have an advisory voice;
- The Chair of the SC shall be invited to the WGLF meetings, with an advisory voice;
- The WGLF may take into consideration submissions on the issue of the legal framework and the governance of a scientific and medical organization such as SEEIIST. For this purpose, it may invite any relevant stakeholder, including from academia, civil society, technical experts, institutional and private actors to share their views.
- « Association pour le soutien de l'Institut International de l'Europe du Sud-est pour les Technologies Durables (SEEIIST) ».

WGLF Mandate & ToR

Methods of Work

- The WGLF shall convene no more than once a month but at least every two months;
- The meetings are held in a virtual, in-person or hybrid format;
- The communications shall be made by electronic means;
- The Secretariat shall draft the Minutes of the WGLF meetings. The Chair shall prepare the Agenda for each meeting;
- Minutes and Agenda of the meetings shall be circulated to the delegates to the WGLF and copied to the SC members.

MoU between SC and the SEEIIST

- Association for support of SEEIIST
  - A temporary solution for legal entity
  - Established on 8 August 2019 under Swiss low
  - Seat is located in Geneva, Switzerland
  - Purpose
    - In the public interest, to promote, encourage and support the interests of the South East European International Institute for Sustainable Technologies (SEEIIST)
- WG Relation with the Association
  - To propose mechanism for synchronization of the actions and their control
- Decision – to prepare a Memorandum of Understanding
  - Legally non binding document
  - Regulates the relations and responsibilities of SC and the Association
  - Main goal – to synchronize the work of SC and Association

MoU between SC and the SEEIIST

- Preamble
- Section 1 Purpose of the Memorandum
- Section 2 Clarification of Roles and tasks of the Parties
  - Role and tasks of the SC
  - Role and tasks of the SEEIIST Association
- Section 3 Mode and Activities of Cooperation
  - General
  - Plan of work and budget
  - Working Plan
  - Annual Budget plan
  - Communication and Reporting
  - Public Relations
  - Code of Conduct

MoU between SC and the SEEIIST

- Section 4 Financial Support
- Section 5 Settlements and Disputes
- Section 6 Final Provisions
- Attachments

MoU between SC and the SEEIIST

- The SEEIIST Association has been established as an implementing entity. Its role is to be the legal and operative arm of the SEEIIST initiative
- In particular, the tasks of the Association are:
  - to prepare the materials for decisions to be taken by the SEEIIST SC, when requested
  - Definition and implementation of all relevant design and operational concepts for SEEIIST main infrastructure and hubs
  - Project management and execution with a project team, incl. preparatory phase
  - contract management (partners, hubs, employees)
  - Application for funds
  - Finance management
  - Human resources development
  - Development and management of the organizational structure suitable to the different project phases

MoU between SC and the SEEIIST

- Plan of work and budget
  - The Parties agree to develop a joint general plan of work and budget outlining the main phases of the establishment of SEEIIST
  - Based on the joint general working plan an annual working plan, indicating also the working plan for the next year, shall be agreed latest in October of the previous year.
  - The SEEIIST Association submits the draft of the annual working plan of the Association for comments to the representatives of the SEEIIST SC before approval by the SEEIIST Association Bodies
- Annual Budget plan
  - The SEEIIST Association submits the draft of the annual budget plan for confirmation to the SEEIIST SC before approval by the SEEIIST Association Bodies.

MoU between SC and the SEEIIST

- Communication and Reporting
  - to have regular meetings of the management of both Parties for information and alignment,
  - to invite two appointed representatives of the respective other party to the meetings of the SEEIIST SC and the meeting of the SEEIIST Association board as observers,
  - that the representatives of the SEEIIST Association in the SEEIIST SC meetings report on the Association activities to the SC, and
  - to exchange the meeting minutes of the above mentioned meeting mutually.

MoU between SC and the SEEIIST

- Financial support
  - The SEEIIST SC agrees to be responsible to take care, that the SEEIIST SC member countries contribute to the financing of the SEEIIST
  - The financial contribution of the SEEIIST SC member countries shall be based on bilateral contracts between the SEEIIST Association and the contributing member state.
- Settlements and Disputes
  - Any dispute that may arise concerning the interpretation and implementation of this Memorandum will be resolved through negations of the Parties

MoU between SC and the SEEIIST

- Decision
  - The SEEIIST SC agrees to sign Memorandum of Understanding with the Association for the support of the SEEIIST. The SC authorizes the Chair of SC to sign it on behalf of the SC.

General Working plan

- General work plan
  - Common plan of the SC and the Association
  - First draft for discussion
- Purpose
  - to define a general working plan for SEEIIST SC and SEEIIST Association as base for definition of the joined annual working plan and for the coordination of their activities derived from these working plans.
- Scope
  - The document shall cover the necessary steps, tasks and the respective main timelines to establish the SEEIIST, the research infrastructure and related Hubs, including the design and construction phase of the SEEIIST facility.

General Work plan

- Main directions
- Management of the project
- Establishment of the Institute
  - Legal setup
  - Site selection
  - Governance and organizational structures
  - Human resources
  - Financing
- Hubs Concept
- Operational Concepts and User Requirements
  - Clinical concept
  - Research concept
  - Facility Operations Concept

General Working plan

- SEEIIST Infrastructure Realisation
  - SEEIIST Main Facility Realisation
    - ✓ Building and Infrastructure
    - ✓ Treatment Accelerator
    - ✓ Isotope production
    - ✓ Auxiliary Equipment
    - ✓ IT/IT Infrastructure
  - Hubs infrastructure realization
- Quality Management and Regulatory Affairs
- Development of User Community
- Public relation and SEEIIST promotion
- Collaborations
- Master Schedule

General Working plan

- For every Work Package are defined
  - Scope
  - Status
    - ✓ Existing materials (DLR deliverables, ESFRI application, HITRI+, ongoing activities)
  - Main milestones
    - ✓ Reflected in the Master Schedule
    - ✓ Interconnections are taken into account
  - Responsibilities
- In all packages a close collaboration with Association is envisaged
- The main ideology is – the realization of the project is a common effort of the SC, the Association and the member states
- The next phases of the project can be realized only with significant contribution of the participating parties

Project management

- Setup the management of the project
  - Definition of the relevant project phases (e.g. preparatory phase, design and development phase, construction phase, installation and commissioning phase): end of Q2/2022
  - Definition of the project management structure for each phase:
    First Phase: end of Q3/2022
    further phases: tbd
  - Establishment of a project management handbook: end of Q4/2022

- Proposal
  - Start with formation of Management Board
  - Members
    - Chair and Co-chair of the SC
    - Chair of the Association Board
    - CEO of the Association

Establishment of the Institute

- Legal Framework and registration of the Institute
  - Define the legal framework
  - Constitution
- Site selection
  - Technical requirements
  - Economic
  - Financial requirements
  - Legal requirements
  - Procedure for site selection
  - Input from ESSC
  - Site selection – before the end of 2022
- Working groups already formed
- Coordinated by the Swiss FDFA

Establishment of the Institute

- Governance and organizational structures
  - Define the governance structure for all phases of the project
- Milestones
  - First proposal for governance and organisational structure of the SEEIIST institute by the WGLF: end 2022
  - Institute to be established: 12/2023
  - Governance and organisational structure of the SEEIIST institute implemented: 06/2024
  - Definition and implementation of Advisory Committees for the Preparatory phase:
    see sections “Operational Concepts” and “Treatment Accelerator”

Establishment of the Institute

- Human resources
  - staffing plan for the project phases and the operational phase
  - recruitment and employment policies
  - remuneration policy
  - training and education plan
  - social insurances concept
  - definition and implementation of corresponding procedures
- Milestones
  - First proposal for governance and organisational structure of the SEEIIST institute by the WGLF: end 2022
  - Institute to be established: 12/2023
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  - Definition and implementation of Advisory Committees for the Preparatory phase:
    see sections “Operational Concepts” and “Treatment Accelerator”

Work Plan Funding

- Structure project funding
  - EC – direct and trough national programs supported by the EC
  - Contribution of the participants
    - ✓ Construction phase
    - ✓ Running cost – yearly contribution
  - Agreement with the National health insurance agencies
  - Donors
- Business plan
  - Business plan exists
  - Update according of the funding structure
  - Negotiations with banks
  - Sustainability of the project

Work Plan - Hubs

- Hubs & Networks
  - Define Hubs
  - Define Networks
  - Organization of teams to work on Hubs and Networks
  - Connection and Synchronization with the Central infrastructure
  - Plan the budget for Hubs and Networks
- Wide range of hubs may be considered
  - technology development and providing hubs
  - clinical hubs
  - research hubs
  - service providing hubs

Operational concepts & user requirements

- Clinical concept
- Research concept
- Facility operation concept

- Extremely important for the design, construction, sustainability of the project
- Interconnected with the other WP – significant input for some of them

SEEIIST Infrastructure realization

- Building and infrastructure
  - Start design work for final design and construction: beginning Q4/2023
  - Cost Estimation for building and infrastructure: Q3/2023
  - Start Tendering for Construction: Beginning Q2/2024
  - Start of the Construction: Beginning Q1/2025
  - Installation of the building infrastructure: beginning Q4/2025
  - Building ready for installation of accelerator components: beginning Q2/2026
  - completion of building: Q2/2027
- Accelerator
  - setting up WG to define the treatment accelerator project: Q2/2022
  - project plan for the treatment accelerator project: Q4/2022
  - definition of the project structure and team: Q4/2022
  - Start of staffing the project team (employees): Q1/2023
  - User requirement specification done: end of Q4/2022

SEEIIST Infrastructure realization

- Accelerator
  - Requirements for Shielding available: Q3/2023
  - Cost Estimation for the Treatment Accelerator: Q3/2023
  - start of tendering (long term items): end Q4/2024
  - start of installation (injector): beginning of Q2/2026
  - start of technical commissioning: beginning of Q2/2027
  - Treatment accelerator ready for research use (1. beam line): end of Q1/2029
  - Treatment accelerator ready for medical commissioning (1. beam line): end of Q1/2029

SEEIIST Infrastructure realization

- Isotope production
  - Establishment of a WG for the definition of the Isotope Facility Program at SEEIIST: Q3/2022
  - project plan: Q4/2022
  - User Requirements on Treatment Accelerator: Q4/2022
  - Requirements on Building and Infrastructure: Q3/2023
  - Cost Estimation: Q3/2023
  - Start Installation of the Equipment: beginning Q3/2026
  - Start Commissioning: beginning Q2/2027
  - Start Isotope Production: beginning Q3/2028

SEEIIST Infrastructure realization

- Auxiliary equipment
  - Medical Equipment (including imaging modalities)
  - Experimental Equipment
  - Workshops and workshop equipment required for operation and development
  - Laboratories and laboratory equipment
- Milestones
  - Requirements with impact on Building and infrastructure: Q3/2023
  - Cost Estimation: Q3/2023
  - Tendering plan for Equipment: Q1/2028
  - Research Equipment, Workshops, Labs
  - Tendering plan facility operations equipment: Q1/2026
- Hubs infrastructure

Quality management & regulatory affairs

- Quality management & regulatory affairs
  - Permit for Facility Construction
  - Permit for Commissioning, Technical and Research Operation
  - Permit for Isotope Production
  - CE for the Treatment Accelerator medical device
  - Permit for Clinical Operation

Development of user community

- Create a local community
  - Local community does not exist
  - Medical, research, technical
  - Should exists in every participant
  - The main steering power of the project
  - Build connection between the local communities
  - Common research projects
  - Integration of the local community with the European one
- Training program
  - Training in accelerator physics and technologies
  - Training in the field of radiotherapy
  - Training in the field of biomedical research
  - Common doctoral programs with leading centers

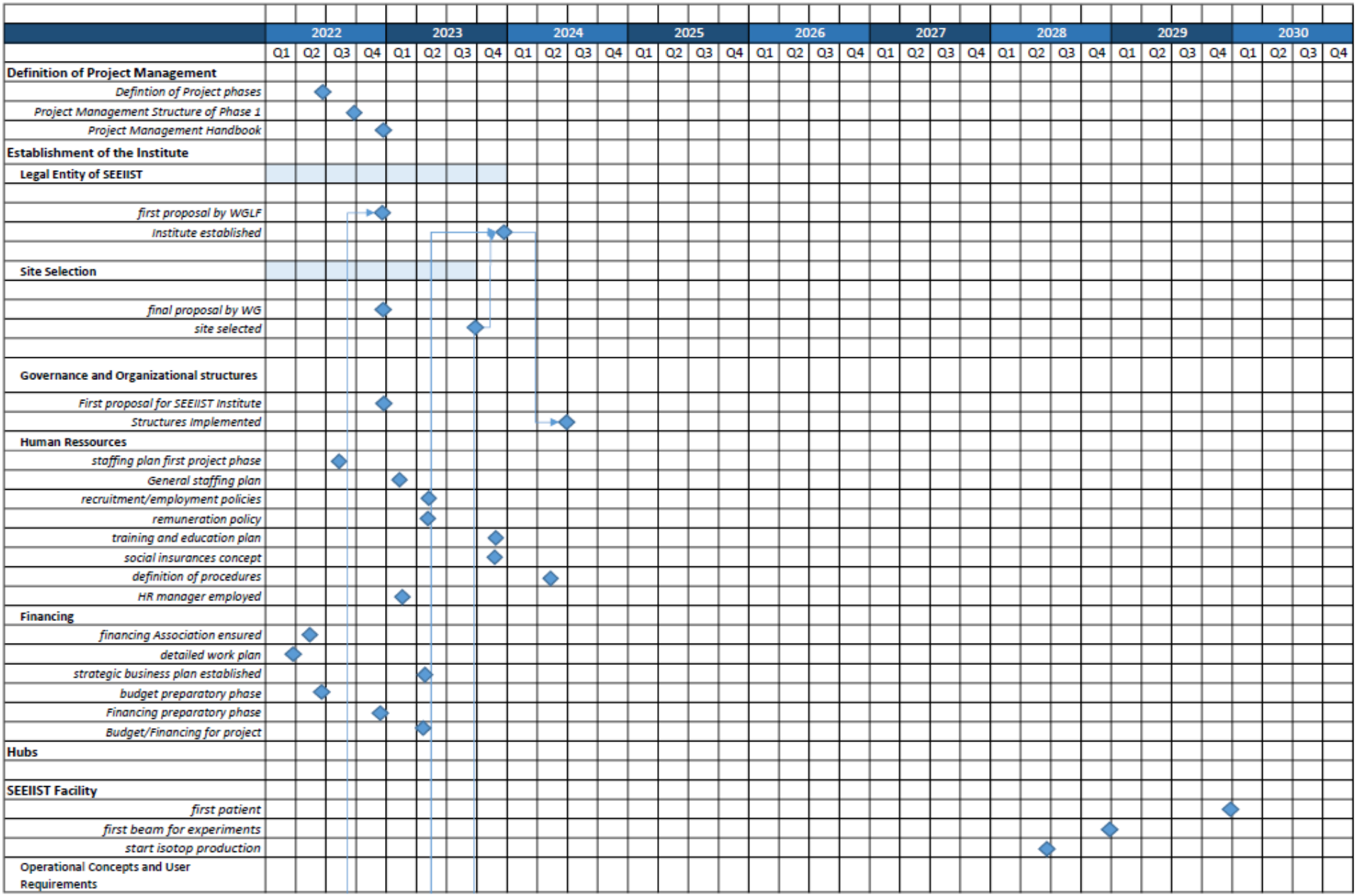
User Community

- Involvement of the local industry
  - During preparatory phase
  - During construction phase
  - During running phase
  - Transfer of technologies

- Public Relations and SEEIIST promotion
  - PR Plan for 2022: 2/2022
  - SEEIIST meets Industry: Q2/2022
  - Strategic PR Plan: Q3:2022

Collaborations

- Collaborations
  - Improve connections with the local governments
  - Improve connections with EC
  - Build and improve connections with international organizations
  - Scientific (CERN, GSI-FAIR, ICTP, EMBL, EMBO etc.)
  - Political (IAEA, UNESCO, CEI etc.)
  - Cooperation agreements with leading centers in Europe (CNAO, HIT, MedAustron, PSI etc.)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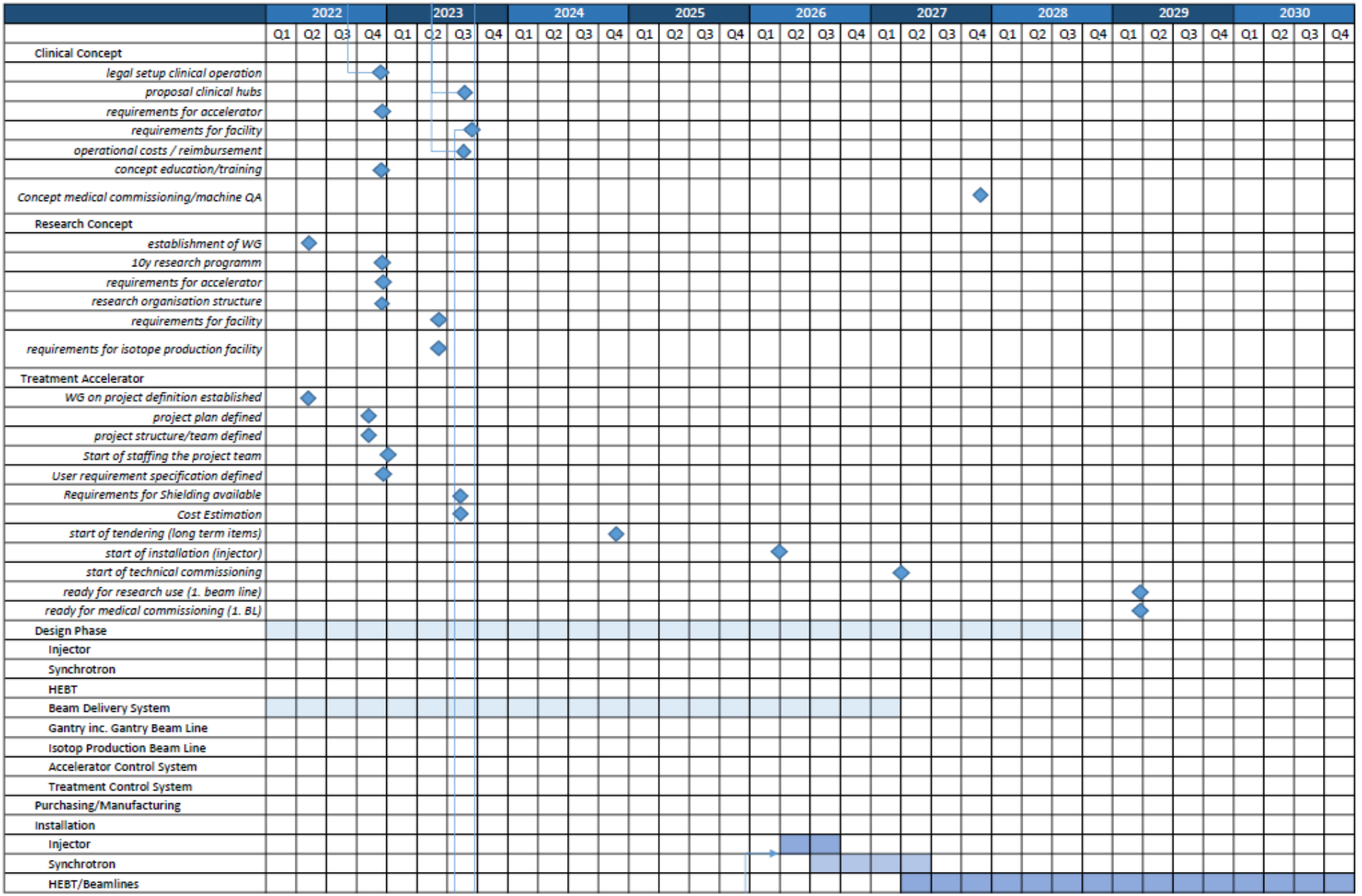
Definition of Project Management
Defintion of Project phases
Project Management Structure of Phase 1
Project Management Handbook
Establishment of the Institute
Legal Entity of SEEIIST
first proposal by WGLF
Institute established
Site Selection
final proposal by WG
site selected
Governance and Organizational structures
First proposal for SEEIIST Institute
Structures implemented
Human Ressources
staffing plan first project phase
General staffing plan
recruitment/employment policies
remuneration policy
training and education plan
social insurances concept
definition of procedures
HR manager employed
Financing
financing Association ensured
detailed work plan
strategic business plan established
budget preparatory phase
Financing preparatory phase
Budget/Financing for project
Hubs
SEEIIST Facility
first patient
first beam for experiments
start isotop production
Operational Concepts and User Requirements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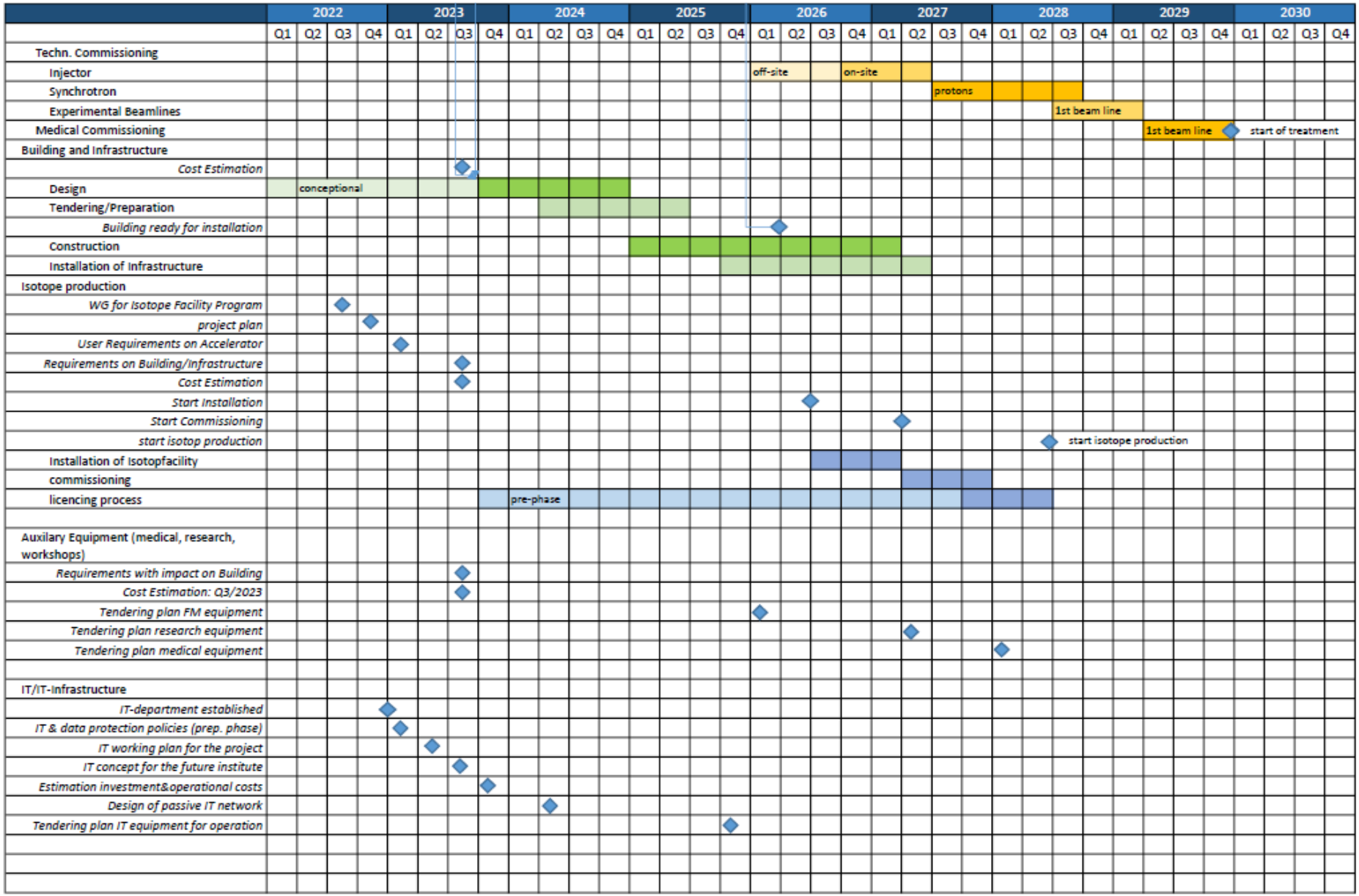
Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4
Clinical Concept
legal setup clinical operation
proposal clinical hubs
requirements for accelerator
requirements for facility
operational costs / reimbursement
concept education/training
Concept medical commissioning/machine QA
Research Concept
establishment of WG
10y research programm
requirements for accelerator
research organisation structure
requirements for facility
requirements for isotope production facility
Treatment Accelerator
WG on project definition established
project plan defined
project structure/team defined
Start of staffing the project team
User requirement specification defined
Requirements for Shielding available
Cost Estimation
start of tendering (long term items)
start of installation (injector)
start of technical commissioning
ready for research use (1. beam line)
ready for medical commissioning (1. BL)
Design Phase
Injector
Synchrotron
HEBT
Beam Delivery System
Gantry inc. Gantry Beam Line
Isotop Production Beam Line
Accelerator Control System
Treatment Control System
Purchasing/Manufacturing
Installation
Injector
Synchrotron
HEBT/Beamlines


2022
2023
2024
2025
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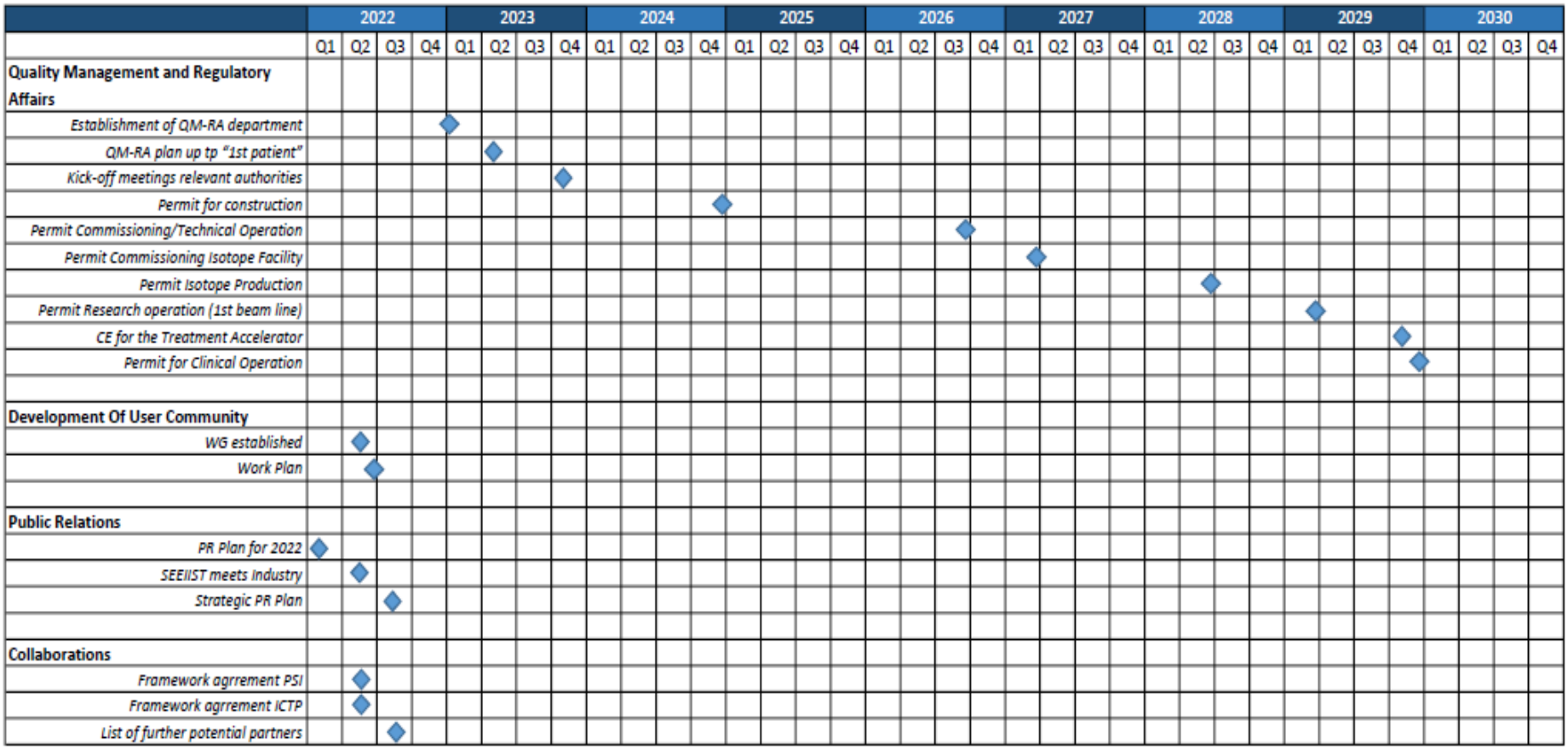
2029
2030
Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4
Techn. Commissioning
Injector
off-site
on-site
Synchrotron
protons
Experimental Beamlines
1st beam line
Medical Commissioning
1st beam line
start of treatment
Building and Infrastructure
Cost Estimation
Design
conceptional
Tendering/Preparation
Building ready for installation
Construction
Installation of Infrastructure
Isotope production
WG for Isotope Facility Program
project plan
User Requirements on Accelerator
Requirements on Building/Infrastructure
Cost Estimation
Start Installation
Start Commissioning
start isotop production
start isotope production
Installation of Isotopfacility
commissioning
licencing process
pre-phase
Auxilary Equipment (medical, research, workshops)
Requirements with impact on Building
Cost Estimation: Q3/2023
Tendering plan FM equipment
Tendering plan research equipment
Tendering plan medical equipment
IT/IT-Infrastructure
IT-department established
IT & data protection policies (prep. phase)
IT working plan for the project
IT concept for the future institute
Estimation investment&operational costs
Design of passive IT network
Tendering plan IT equipment for operation

Master Schedule



Work plan

- Decision
- The SC approves the General work plan for implementation
- The SC together with the Association (when relevant) opens calls for members of the working groups
- The SC together with the Association (when relevant) opens call for nominations of members of the Advisory Boards

Majority of WG members should come from the region!!!

Project implementation control

- The purpose of this document is to describe the methods to be applied to control the implementation of the SEEIIST project.
-
- The document shall cover the necessary steps and tasks to establish the SEEIIST Institute, the research infrastructure, including the design and construction phase of the SEEIIST facility.
- The control of the definition and implementation of SEEIIST related Hubs is not in the scope of this document. However, a similar or identical approach should be considered.

Project implementation control

Table of Content

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2 Scope
3 Document Properties
4 Terms
5 Control Measures
5.1 General
5.2 Finance Controlling
5.2.1 Funding Controlling
5.2.2 Budget Controlling
5.3 Controlling of legal Setup of the Institute
5.4 Controlling of the Project Implementation and Execution
5.4.1 Site Selection
5.4.2 Project Implementation and Execution
5.5 Other Aspects
6 References

Member states contribution

- Contribution of the member states to the project
- Political signal for the EC
- Important for the normal functioning of the Association (to cover organizational work
- Proposed contribution ~ 20 000 euro
- To ensure control how the funding is spent
- Agreement between the Association and the corresponding ministry from the member state
- Draft of standard agreement is distributed among SC members.

- Decision: The SC kindly asks the member states to sign agreement with the Association and to support its work and the realization of the project

Project implementation control

Decision

To approve for implementation the proposed measures for control of the project realization as it is envisaged in the document “SEEIIST project implementation control”

WG on Financial Sustainability

- We need to develop and implement a financial strategy for realization of the project
- The main contribution is expected from the EC
- Development of comprehensive and sustainable financial concept is of critical importance
- Proposal to establish Working Group on Financial Sustainability WGFS

Mandate

- development of a comprehensive and sustainable financing concept for the project preparation and project implementation in accordance to the SEEIIST General Working Plan
- development of a comprehensive and sustainable financing concept for at least the first 5 years of operation of the SEEIIST research infrastructure

WG on Financial Sustainability

- development of a comprehensive and sustainable financing concept for at least the first 5 years of operation of the SEEIIST research infrastructure
- coordinating the implementation of the financing concept with the SEEIIST SC member countries supported by the SEEIIST SC and the SEEIIST Association until the SEEIIST is established and operational
- update and further development of the SEEIIST business plan

Terms of Reference

- be led by a Chair
- define its methods of work
- establish a detailed working plan in accordance to the general working plan and a budget proposal for its work
- execute the actions defined in the scope
- be responsible for the tasks defined in the General Working Plan in the area of financing

WG on Financial Sustainability

- approach the relevant national authorities and institutions of the SEEIIST SC member countries on behalf of the SEEIIST SC for action related to the scope of the WGFS
- approach the relevant bodies and representatives of the EC on behalf of the SEEIIST SC for action related to the scope of the WGFS
- coordinate its activities with the SEEIIST SC, the SEEIIST Association and other relevant working groups and committees established by the SEEIIST SC and the SEEIIST Association
- report regularly to SEEIIST SC, in particular in the SC meetings
- prepare the assessment at the defined review milestones

- The Chair of the WGFS is to be appointed by the SEEIIST SC.
- The decisions of the WGFS are made by consensus whenever it is possible.
- The decisions on the recommendations by the WGFS are taken by the SC.

WG on Financial Sustainability

- The members of the WGFS shall have expertise in national and European financing tools. Connections to the relevant national and European institutions is very welcome. The members shall managerial experiences related to scope of the WGFS.

- The SEEIIST SC member countries and observers are asked for nomination of members for the WGSC. The SEEIIST Association appoints max. 2 experts to the WGFS.

- Deadline for nominations is 30.04.2022.

Thank you for the attention