



Work Programme 2025-2027

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## Preface

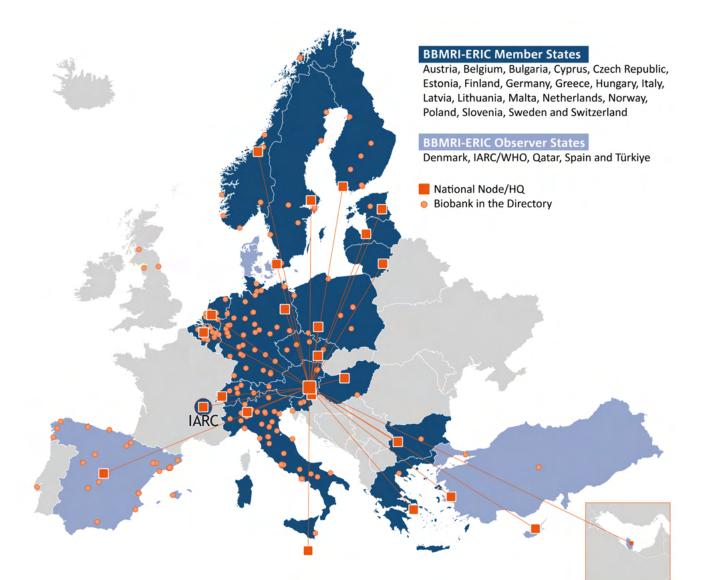
As BBMRI-ERIC enters its second decade of operations, we are excited to present our next Work Programme for 2025–2027. Building on the first three-year Work Programme that sees continuing development of BBMRI-ERIC's core and supporting services, the next three years incorporate the recently launched 10-Year Roadmap, with its vision towards **"Biobanking for a Healthier World"**.

This Work Programme represents the implementation of the first three years of our ambitious Roadmap, which emphasises a **"One Health"** approach that connects human, animal, and environmental health, addresses climate friendly operations and advances global perspectives.

It applies to all of BBMRI-ERIC, providing a framework of strategic objectives and operational goals for **biobanks**, **National Nodes**, and **Headquarters** and will guide our operations for the coming years.

This approach enables us to stringently leverage expertise and resources across the entire infrastructure while fostering synergies, cross-fertilisation and accelerated advancements **for all our stakeholders**.

While the **Work Programme 2025-2027** will continue to build on the achievements within our **Scientific Domains** (*Biobanking Development; Ethical, Legal and Societal Implications; Information Technology; Quality Management*) and **Central Services & Functions** (*Public Affairs; Finance & Project Management; Outreach, Education and Communications; Central Office*), the Roadmap's operational goals within the newly identified strategic objectives will be substantially co-led by BBMRI-ERIC's National Nodes.



## BBMRI-ERIC Members & Observers

#### About BBMRI-ERIC

BBMRI-ERIC is the European research infrastructure (RI) for biobanking and biomolecular resources, one of the largest RIs in the health and life sciences. Set up in 2013, its membership currently includes over **400 biobanks** and **24 National Nodes** from 24 Member countries plus the **global organisation IARC/WHO**.

A distributed research infrastructure, BBMRI-ERIC successfully develops multidisciplinary expertise and implements cutting edge services for the biobanking community that includes clinicians, researchers, biobankers, industry, patients and citizens.

The core services for, and provided by, the biobanking community are **IT infrastructure**, **biobanking development** support, **quality management** excellence and **ethical**, **legal and societal implications** expertise. These services facilitate access to high-quality samples, linked data and medical information through expertise in research, ethics, quality, datafication, imaging, AI and biobanking development. The aim is to achieve the core mission of facilitating access to samples, data, and biomolecular resources for public benefit. **BBMRI-ERIC's vision** is that "by unlocking the potential of biobanking and biomolecular resources, BBMRI-ERIC inspires the best research to benefit patients, the public and the planet." This is simplified as: **"Biobanking for a Healthier World"**.

BBMRI-ERIC currently takes a leading or key role in **EU Horizon projects** that cover genomics, AI, cancer, rare diseases, paediatrics, COVID-19 and other infectious diseases, federated platforms, personalised medicine, prevention, sensitive health data, European Health Data Space (EHDS), European Open Science Cloud (EOSC) and One Health.

#### **BBMRI-ERIC Members:**

Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Estonia, Finland, Germany, Greece, Hungary, Italy, Latvia, Lithuania, Malta, Netherlands, Norway, Poland, Slovenia, Sweden & Switzerland.

#### **BBMRI-ERIC Observers:**

Denmark, IARC/WHO, Qatar, Spain & Türkiye.

#### Governance

BBMRI-ERIC is governed by the **Assembly of Members** which comprises delegates from our Member States who take collective decisions on matters relating to BBMRI-ERIC. This is supported by the **Finance Committee**, made up of Member States, to provide fiscal oversight to BBMRI-ERIC's operations.

The Assembly also receives assistance from the **Steering Committee** who are responsible for guiding and monitoring the activities of BBMRI-ERIC between the sessions of the Assembly of Members. This committee, reporting to the Assembly of Members, oversees implementing their decisions, including the Roadmap, the Work Programme and the budget. The **Management Committee** comprises National Node (NN) directors and coordinators who support Work Programme and budget development and implementation. The **Stakeholder Forum**, with Pillars Patient and Citizens, Industry, and Scientific Societies, exists with the aim to build a sustainable, egalitarian relationship between the biobank community and its stakeholders.

Finally, the **Scientific and Ethical Advisory Board**, made up from distinguished scientists and experts, provides guidance to the Assembly of Members with regard to overall implementation and future developments of BBMRI-ERIC.

## **1. Executive Summary**

Welcome to the second three-year Work Programme that outlines our co-developed direction of travel for our research infrastructure. For the first time, we published a three-year plan for 2022-2024 which enabled us to forward plan and propose a stronger vision to support biobanking and biomolecular resources activity across Europe and beyond. This was a success and first, we share a flavour of those achievements.

## Achievements to build on

This work programme builds on the significant achievements we set out for 2022-2024. By department, the following provides a firm basis for 2025-2027 activities:

The **ELSI Services & Research** department continued to strengthen our scientific work. Its service portfolio, that includes the Knowledge Base and Helpdesk, provided state-of-the-art guidance and training rooted in research excellence. Recent research focused on ethical, social, and societal dimensions of artificial intelligence (AI) and datafication, along with expertise in GDPR and EHDS. Due to community demand, training and outreach was further intensified and directly supported community engagement goals.

**Quality Management Services & Research** expanded on their four pillar activities – Knowledge Hub, Training/Support, Auditing and Continuous Improvement. The BBMRI-ERIC Quality Label, which assesses the operation of biobanks according to European, international and community standards, has become a recognised certificate. QM activities also set the foundations for deepening data quality, enhancing the BBMRI.QM Training Curriculum which substantially contributed to intensified Community Engagement. Across the headquarters, quality management criteria streamlined and improved our expanding services.

*IT Services & Research* further developed in 2022-2024 with its discovery and access pipeline based on Directory and Negotiator. The digitisation and accessibility portfolio expanded through the launch of the Federated Search and Analysis Platform for sample-level and patient-/donor-level data, as well as data quality and certification tools.

Leadership in international interoperability continued in leading standardisation activities in ISO TC/276 Biotechnology, in curation and further development of MIABIS grassroot standards, and in development and operation of LifeScience Login, allowing interoperable identity and authorisation across the whole cluster of Life Science Research Infrastructures. Biomolecular resources service provision data was expanded in line with the development of Transnational and Virtual Access (TNA) within EU grants. These activities were supported by alignment between Common Service IT and the 2021 initiated Task Forces, and thus added to our overarching Community Engagement activities. BBMRI-ERIC data access mechanisms (Negotiator) and data integration activities (CRC-Cohort) served as guidance to design and implementation of European Health Data Spaces.

**Biobanking Development Services & Research** was specifically established to enhance the longterm sustainability of National Nodes and their biobanking networks. Its main goal is to ensure a continued return on investment for member countries that have invested significant resources in developing their National Nodes and associated networks. The department, in collaboration with the National Nodes, has undertaken important sustainability initiatives throughout the growth phase of the biobanking networks. This includes promoting faster exchange of samples and data, increased biobanks visibility to foster collaborations as well as launching a community-engagement training program. **Public Affairs** continued its leading role liaising with other Research Infrastructures, ERICs, EU institutions and international partners. We further positioned BBMRI-ERIC within broader EU science policy arena, grew BBMRI membership and developed a policy on associated and third countries. Through intensified activities in our Stakeholder Forum, we developed closer partnerships with our valued patient advocates and industry partners. We built closer alliances with our Member States and Observers at ministerial levels and discussed with them key strategic topics for BBMRI.

**Outreach, Education & Communications**, together with our BBMRI community and various stakeholders, increased the visibility of BBMRI's services and developments through intensified community engagement activities. Significantly, our community engaging congress and roadshow portfolio was relaunched. BBMRI's communications were streamlined and developed in partnership with National Nodes through the new Task Force Communication & Outreach. Within this forum, we developed strategies for common outreach activities towards our stakeholders on international and national levels. Success stories, a particular area of priority, have been crafted and highlighted using multimedia techniques whilst also redeveloping BBMRI's newsletter.

**Finances & Project Management**, an essential function for accounting, controlling and resource management, made significant strides forward in streamlining these processes. This has developed greater capacity for long-term planning of financial activities and resources which plays a key role in strategic decision-making. An increasing involvement in numerous EU grants meant project management functions were strengthened for continued sustainability in financial and human resources aspects.

BBMRI's **Central Office** increasingly supported the headquarters management structure and enabled us to provide the best possible internal and external services. Its efficient and transparent operations supported a growing community.

### 10-Year Roadmap (2025 to 2035)

Our ambition has since developed because underpinning this three-year Work Programme is our 10-Year Roadmap with its vision for a healthier world developed with the biobanking community, ministries, advisory boards, patients and partners.

It sets out our strategic approach to ensure that biobanking and biomolecular resources can continue to thrive in the context of Europe's longerterm political, societal, health and infrastructure related trends. Underpinning the Roadmap and its targeted objectives is the overarching imperative to take a "One Health" approach as we believe human, animal and environmental health are deeply interconnected.

The 10-Year Roadmap is intended as a framework to guide BBMRI-ERIC's evolution over the next decade through more aligned activities that will enable us to realise our potential for the benefit of patients, science and society. Through it, we want to empower National Nodes and biobanks to maximise their, and our, collective impact by increasing their level of engagement and leadership to leverage the full potential of biobanking.

We developed the Roadmap through an intensive and comprehensive process open to BBMRI-ERIC colleagues from the entire infrastructure. It was built by invaluable contributions made by colleagues from the National Nodes, Assembly of Members and Headquarters. The 10-Year Roadmap is underpinned by important guidance from our Stakeholder Forum Patients and Citizens' Pillar and our Scientific & Ethical Advisory Board.

Based on our core values of scientific excellence, equity, diversity, inclusion and fairness, the Roadmap is intended as a framework to support the greater strategic alignment of activities within the biobanking community in Europe. Implementation will, however, be delivered via distinct work programmes.

### The 2025-2027 Work Programme

This Work Programme distils the first three years of the Roadmap into a plan of action that has been developed closely with our National Nodes. The eight **Strategic Objectives & Operational Goals** which are relevant for the upcoming three-year period (section 2) are mirrored with the Roadmap but further detail is provided. In alignment with our Roadmap, we will emphasise a One Health approach also in this Work Programme, underscoring the critical interconnection of human, animal, and environmental health research. It is supported by our core activities (sections 3 and 4) within each department; a continuation of the 2022-2024 programme.

For the next three years, our focus will hence be on activities towards accelerating datafication and promoting green biobanking. To support this, we will take necessary steps to secure infrastructural scalability, sustainability and service excellence, while strengthening the National Node and biobank community within Member States. Together with specific tasks in education, training, and capacity building, we will emphasise stakeholder engagement and awareness.

Ultimately, BBMRI-ERIC will engage in a set of activities to **advance a global biobanking community** and play an impactful leadership role to strengthen the global biobanking community. Read on to see in more detail how we intend to realise the first three years of BBMRI's 10-Year Roadmap, starting in 2025.



Sincerely,

Prof. Jens K. Habermann M.D., Ph.D.

## **2.** Strategic Objectives & Operational Goals

In the first three years of the roadmap, the **BBMRI HQ**, **National Nodes**, **Biobanks and Member States** along with our various **Stakeholder Groups** will co-create towards the following Strategic Objectives (SO) and Operational Goals.

# **SO1:** Optimise the interconnection of human, animal, and environmental health research

**Milestone SO1:** Showcasing how BBMRI-ERIC has integrated One Health into different aspects of its infrastructure by a workshop with Member States and key stakeholders (Q4 2027).

BBMRI-ERIC will focus on optimising the interconnection of human, animal and environmental health research by exploring opportunities based on the One Health paradigm.

### **SO1** Operational Goals

#### **1.1 Engage with different Member State ministries**

Lead: PA. Contributors NN: MT, PL. Contributions HQ: BBD.

- Cooperation possibilities across ministries relevant to BBMRI's strategic outline and operation within Member States will be explored.
- We will liaise with key departments within the European Commission and advocate for a One Health approach in Framework Programme 10.

## **1.2** Scale up interactions and alliances with other research infrastructures and initiatives

**Co-leads**: CH, IT. **Contributors NN**: AT, BE, BG, CZ, ES, GR, IARC/WHO, LT, LV, NL, PL, SI. **Contributions HQ**: PA, BBD, ELSI, QM, HQ-IT.

- As a first activity of 1.2, we prepare for and map non-human biobanks/networks. This includes a gap analysis of potential transdisciplinary collaborations and active cooperation towards One Health.
- Based on the outcome of the mapping and gap analysis exercise, an inventory of existing non-human biobanks and relevant research networks will be created to identify areas where current research infrastructures lack collaboration or resources. The outcome is to identify potential partners in related fields to initiate transdisciplinary collaborations related to One Health.
- We will review the ELSI implications of One Health to identify new aspects and promote best practices in a complex biobanking community.
- Furthermore, we will organise informative exchanges with other research infrastructures or projects on the ESFRI roadmap to explore possible collaboration in the area of One Health.

## **1.3** Interconnect with viral, microbial, environmental, animal and/or plant collections

Co-leads: AT, NO. Contributors NN: BE, CH, ES, GR, IT, LV, NL, SI. Contributions HQ: QM, BBD, HQ-IT.

- We will conduct a comprehensive review of existing non-human databases and data sources.
- In this context, we will furthermore foster exchange with related infrastructures.

# **SO2:** Accelerate datafication to enable trustworthy, fit-for-purpose data for high-quality research

**Milestone SO2:** Support for non-human data available in the discovery and access pipeline (Q4 2026).

Accelerating datafication by applying FAIR-Health principles\* will enable reproducible advancements in science.

## **SO2** Operational Goals

#### 2.1 Datafication at source

Co-leads: IT, NO. Contributors NN: AT, BG, CZ, DE, GR, HU, LT, LV, PL. Contributions HQ: HQ-IT, QM, ELSI.

- Develop practical knowledge-base and training resources for interconnecting data from different sources at local level into common data warehouses and include quality-defined data from patient/public (e.g. from wearables and sensors) while considering ethical values, legal issues and societal implications.
- Also, we will promote data protection frameworks, as well as data governance guidelines and policies to ensure compliance with ethical and legal standards.

## **2.2** Enable reproducible research through good data traceability and quality management

Co-leads: CH, PL. Contributors NN: AT, DE, ES, GR, HU, IT, NL. Contributions HQ: HQ-IT, QM, BBD.

- Synergies between academia and industry will be explored.
- We will foster remote audits for pre-analytical phase i.e. quality of sample collections that appear as the Q-Label in Directory.

## **2.3** Ensure international interoperable connectivity with (local, national and international) medical data ecosystems

Co-leads: AT, NO. Contributors NN: CZ, DE, ES, GR, HU, IT, LV, MT, NL, PL, SI. Contributions HQ: HQ-IT, BBD.

- Cohorts and reference databases of common interest will be developed under BBMRI-ERIC (Links to SO4).
- The BBMRI's access pipeline will be expanded beyond human samples and data.
- Capacities to host obtained result data will be increased.
- Hereby we align and interconnect data-related services with other ESFRI research infrastructures and European data spaces.

#### 2.4 Expand the Federated Platform

Co-leads: CZ, SE. Contributors NN: AT, DE, ES, GR, IT, LT. Contributions HQ: HQ-IT, BBD.

- New data and analysis types will be added using data retrieval, extraction and curation processes in collaboration with industry to improve data readiness in biobanks and biomolecular resources. This task includes developing safe mechanisms for data quality assurance in federated data analysis environments (Links to SO4).
- The federated platform will be expanded to include a variety of data sources and data formats i.e. clinical and genomics, imaging data etc.
- The analysis module for multi-omics analysis and other types of analysis will be further developed based on the variety of existing data types and formats in collaboration with the participating National Nodes.

<sup>\*</sup>Findable, Accessible, Interoperable, Reusable, quality-defined, with incentives for data sharing and reuse, including ELSI aspects.

## **SO2** Operational Goals (continued)

#### 2.5 Enable on-demand easily accessible data generation to advance biobanking

#### Co-leads: LT, HQ-IT. Contributors NN: MT.

• Methods for synthesis and anonymisation of data for easier access will be developed. This includes developing AI/ML methods, tools for data synthesis and anonymisation and privacy risk assessment.

#### 2.6 Increase capacities to host result data (Links to SO4)

Co-leads: CZ, HQ-IT. Contributors NN: GR, LV. Contributions HQ: BBD.

- Existing capacities and available resources within the community will be assessed.
- Centralised storage capacities on all three federated levels will be developed.

# **SO3:** Foster green biobanking and Research Infrastructure operations

**Milestone SO3:** Guidelines towards green biobanking and Green Incentive published open access (Q4 2026).

By investigating and promoting the most sustainable and energy-efficient setup, BBMRI-ERIC will support a low carbon future for biobanks and research infrastructure operations (National Nodes and Headquarters).

## **SO3** Operational Goals

## **3.1** Foster Greening for biobanking operations through mapping the challenges (Links to SO4)

Co-leads: AT, NL. Contributors NN: BE, DE, ES, FI, IARC/WHO, IT, LT. Contributions HQ: BBD, OEC, ELSI.

- We will engage with National Nodes and their associated biobanks in a mapping exercise to identify gaps and challenges in implementing and maintaining environmentally friendly biobanking practices, in addition to highlight existing solutions.
- We will explore ELSI challenges for sustainable biobanking.
- Furthermore, it will be a key goal to team up with industrial partners to conceptualise/co-develop creative solutions to address environmental challenges and sustainability.
- The outcome of these activities will be used to prepare guidelines towards the implementation of Green Biobanking practices.

## **3.2** Achieve a Green biobanking approach, incl. Green Incentive and Green Label (Links to SO4)

Co-leads: BBD, IARC/WHO. Contributors NN: AT, CH, ES, NL. Contributions HQ: QM, ELSI.

- Criteria will be defined based on the Green Biobanking guidelines including environmental standards (ISO 14001 family) and regulations (Links to SO3.1).
- A Green Incentive process will be set up.

#### 3.3 Implement better waste management practices

Co-leads: BBD, GR. Contributors NN: AT, BE, DE, ES, IARC/WHO, LT, NL. Contributions HQ: OEC.

• We will develop recycling programmes and the reduction of single-use plastics will be aligned with the principles of a circular economy.

#### 3.4 Promote green computing (Links to SO2)

Lead: BBD. Contributors NN: AT, BE, DE, ES, FI, IARC/WHO, LT, MT, NL, SI. Contributions HQ: OEC, ELSI.

• To promote green computing, outreach materials to engage stakeholders on green computing will be developed. This draws on information generated by high power consumption data storage and analysis.

## **3.5** Develop an exchange platform for second use/exchange of technical equipment (Links to SO7)

Lead: BBD. Contributors NN: AT, BE, DE, ES, FI, IARC/WHO, LT, MT, NL. Contributions HQ: OEC.

• The circular economy will be promoted by identifying available equipment for second hand use.

# **SO4:** Secure infrastructural scalability, sustainability and service excellence

**Milestone SO4**: Legal framework concept involving biobanks, National Nodes and BBMRI HQ to foster scalability and sustainability (Q4 2025).

To further enhance the infrastructural scalability, sustainability and service excellence, we seek to engage with universities, industry and private foundations to explore collaboration models such as support for specific visionary projects, in-kind contribution, industry collaboration, public-private partnership as well as open innovation models. In parallel, the ambition is also to nurture close and high-value partnerships with associated and third countries.

### **SO4** Operational Goals

#### 4.1 Explore and develop new services models

Co-leads: FI, CH. Contributors NN: CZ, DE, ES, PL, SE. Contributions HQ: FPM, BBD, QM, ELSI, HQ-IT.

 The development of an access ecosystem enabling scientists to explore and access biological resources, essential data and comprehensive information will be scoped out. This ecosystem will also provide access to diverse scientific services across various life-science disciplines. The concept will significantly contribute to create a user-friendly universal platform.

#### 4.2 Build different partnership models

Co-leads: NO, BBD. Contributors NN: BE, BG, CZ, DE, FI, GR, HU, IT, LT, PL, QA, SE. Contributions HQ: PA, FPM, QM.

- Key stakeholders that align with our mission will be identified and partnership models that are aligned with the Statutes will be explored.
- Stand-by consortia for grant proposals will be built.

## **4.3** Develop new membership and partnership models beyond ERIC Statutes (Links to SO8)

Co-leads: IARC/WHO, PA. Contributors NN: GR, IT. Contributions HQ: FPM.

• Together with BBMRI governance bodies, partnership models and principles for international collaboration will be defined.

## **4.4** Develop and implement risk assessment tools, including risks related to privacy, consent, or possible discrimination

Lead: ELSI. Contributors NN: AT, GR, HU, IT, LT, NO. Contributions HQ: HQ-IT.

- We will systematically assess risks and develop risk assessment tools to improve the management of potential risks in biobanking such as economic, infrastructural, institutional, research community risks and participants' risks.
- Risk governance will be promoted as an integral part of good governance in biobanking to ensure responsible use of human biological samples and related data.
- A set of guidelines will be created that identify, assess and mitigate both individual and societal risks, as well as ensure that biobank scalability respects human rights, promotes equitable access to data and samples, non-discrimination, while maintaining compliance with local, national, European and international laws.

## **SO4** Operational Goals (continued)

#### 4.5 Define and build a back-up system

Co-leads: IARC/WHO, BBD. Contributors NN: DE, PL. Contributions HQ: PA, QM, ELSI.

- We will engage with our National Nodes to perform a risk assessment to identify and evaluate vulnerabilities.
- Standardised Disaster and Legacy plans will be developed, ensuring consistent communication and actions on a national level.
- Furthermore, these Disaster and Legacy plans will be continuously reviewed and updated to incorporate new risks and lessons learned.

#### 4.6 Leverage funding and subsidies to support biobanks (Links to SO3)

Co-leads: LT, BBD. Contributors NN: BE, CZ, DE, PL, SI. Contributions HQ: PA.

- Together with the National Nodes we will build strong partnerships with key stakeholders e.g. government agencies, universities, research institutes to enhance funding applications and increase visibility of the biobanks.
- We will furthermore work with policymakers to highlight the importance of biobanks in life sciences and health research.
- Sustainable practices will be incorporated in biobanking operations. This can appeal to environmentally focused funding sources and enhance the long-term viability of biobanks.



# **SO5:** Strengthen the National Node and biobank community within Member States

Milestone SO5: Call for community topic champions (Q2 2025).

The long-term sustainability of BBMRI-ERIC depends upon the expertise of the local and national community. Active engagement and shared responsibilities across the RI will strengthen collaboration with the network, including national policymakers, delegates, National Nodes, and biobanks.

## **SO5** Operational Goals

#### 5.1 Empower National Nodes and biobanks

Lead: BBD. Contributors NN: AT, BE, BG, CH, CZ, DE, EE, ES, FI, GR, HU, IT, LT, LV, MT, NL, PL, SE, SI. Contributions HQ: PA, OEC, QM.

- The framework and interplay between biobanks, National Nodes and Headquarters will be further evolved to stay scalable within a changing ecosystem.
- We will engage with National Nodes to identify experts in their community and establish level of engagement with national and international stakeholders (Links to SO4).
- National Nodes will be connected to patient organisations to foster closer collaboration.
- A toolkit of communication and outreach materials will be developed for consistent and strong engagement with stakeholders in partnership with Task Force Outreach & Communications and EvolveBBMRI partners for co-ownership (Links to SO6 and SO7).

## SO6: Educate, train & build capacity

Milestone SO6: Launch of upgraded BBMRI Academy as training portal (Q1 2026).

BBMRI-ERIC will shape education and capacity building by developing agile and future-oriented models for collaborative training and research for different target groups, such as researchers, data managers, project managers, or biobank technicians.

### **SO6** Operational Goals

#### 6.1 Evolve the BBMRI-ERIC Academy

Co-leads: DE, ES. Contributors NN: AT, GR, HU, IT, QA. Contributions HQ: QM, ALL.

- The framework of the Academy (ISO 21001:2018 (Educational Organisation)) will be evolved.
- The Academy training plan as well as the online learning environment will be updated.
- We will host a variety of community-driven live training courses and online learning modules. These cut across BBMRI-ERIC's core offer and will feature member only and public facing educational content to host CME, continuing professional development (CPD) and university linked curriculums.

#### 6.2 Build specific career development programmes for RI community

Co-leads: DE, IT. Contributors NN: CH, ES, GR, HU, LT, PL. Contributions HQ: QM, FPM, PA.

• We will build on the EvolveBBMRI career development outcomes, such as staff exchange and mobility and career pathways.

## **6.3** Ensure biobanking adapts to and leverages innovative technological developments (Links to SO4)

Co-leads: LT, SE. Contributors NN: CZ, ES, PL. Contributions HQ: BBD, QM.

- The current capabilities and needs within our community will be assessed.
- We will furthermore foster collaborations with technology providers.
- Biobanks will be supported in implementing quality and competence standards.

## **SO7:** Strengthen stakeholder engagement and awareness

Milestone SO7: Launch of BBMRI-ERIC's new website (Q4 2025).

Increasing multisectoral engagement with stakeholders — including Member States, National Nodes, patients and the public, policymakers, industry and academia — is crucial to further develop and strengthen BBMRI-ERIC to generate further socio-economic impact and awareness among wider communities.

### **SO7** Operational Goals

# **7.1** Strengthen communication, outreach, and demonstrate impact to key stakeholders, e.g. EU and national ministries, universities and hospitals, funders and foundations through existing and new digital channels

**Co-leads**: BE, DE. **Contributors NN**: AT, BG, CH, CZ, EE, ES, FI, GR, HU, IT, LT, LV, MT, NL, PL, SE, SI. **Contributions HQ**: OEC, ALL.

- A new set of communications materials aimed at scientists, industry, patients and the public etc. that simplify and explain the value of BBMRI, will be developed.
- Furthermore, we will develop a new BBMRI-ERIC website with an integrated community learning platform for the BBMRI Academy.
- Also, we will develop materials for and will coordinate an annual Biobank Day for key audiences.

## **7.2** Improve stakeholder engagement by continuing to strengthen the Stakeholder Forum Patients and Citizens' Pillar

Co-leads: DE, HU. Contributors NN: AT, BE, BG, CZ, ES, FI, GR, IT, LT, MT, PL, SE. Contributions HQ: PA, ALL.

• Linked to our wider work in EvolveBBMRI, we will develop a European web portal for patients and the public to develop and deepen understanding of biobanking, profile the relationship between research and clinical application and how to get involved.

## 7.3 Strengthen ability to illustrate the socio-economic value of biobanking – samples, data and biomolecular resources of BBMRI-ERIC and wider biobanking community (Links to SO4)

Co-leads: IARC/WHO, PA. Contributors: BE, CH, CZ, DE, GR, IT, LT, MT, QA. Contributions HQ: OEC, FPM, ELSI.

- Past and current activities will be mined for examples of qualitative and quantitative socio-economic KPIs that showcase the impact to the EC and Member States.
- In this context, we will also collaborate with researchers to showcase success and impact stories.
- Finally, a library of audio/visual content that demonstrates socio-economic impact to different audiences will be created.

## **SO8:** Advance a global biobanking community

Milestone SO8: Policy Paper on "advancing global biobanking community" published (Q2 2027).

BBMRI-ERIC has the potential to play an impactful leadership role to strengthen the global biobanking community and standards, as well as advance the biobanking field in Europe and beyond. This is important as global challenges need to be dealt with at global level.

### **SO8** Operational Goals

## **8.1** Identify and implement different "BBMRI-ERIC Global" formats (Links to SO4 and SO5)

Co-leads: QA, PA. Contributors NN: GR, IT. Contributions HQ: FPM.

- Levels of membership for non-European countries and different entities e.g., RIs, scientific organisations, will be explored.
- We will furthermore scale up cooperation with non-European countries and their relevant communities of interest and mutual benefit.

#### 8.2 Lead global standardisation initiatives (Links to SO1, SO2, SO4, SO6)

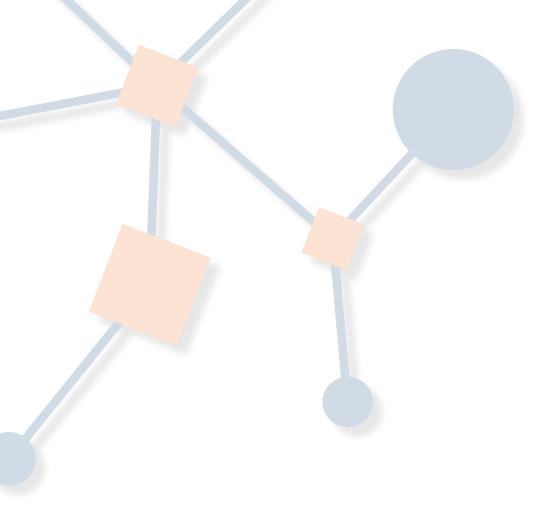
Co-leads: DE, PL. Contributors NN: AT, BE, CZ, ES, IARC/WHO, IT, NL. Contributions HQ: QM, ELSI, HQ-IT.

- Maintaining and expanding BBMRI-ERIC's leading position in ISO (ISO/TC 276, 212, 215 and CEN 140) by shaping and enhancing standard developments and revisions relevant for biobanking will be a key goal.
- We will promote the development of new community standards, with consideration of grassroots standards such as GA4GH, HL7 and OHDSI.
- BBMRI-ERIC's strong position to develop ethical guidelines on governance aspects (e.g. OECD and Council of Europe recommendations) will be expanded by fostering robust governance structures for biobank operations, promoting transparency in decision-making, ensuring equitable access to biobank resources, fostering ethical data sharing practices. This includes creating comprehensive guidelines on the use of different consent models in biobanking, aligned with international standard.

## **8.3** Consolidate BBMRI-ERIC's position as an opinion leader for health and life sciences RIs within the overall EU and global policy arena

**Co-leads**: GR, PA. **Contributors NN**: IARC/WHO, MT, PL. **Contributions HQ**: ALL.

• We will take up leadership of key policy European Research Infrastructure initiatives where possible and will explore broader policy engagement with OECD, G7 and UN initiatives.



## **3.** Scientific Services for Biobanking & Biomolecular Resources

We continue to strengthen our **core services** and build on them to align to the newly approved 10-Year Roadmap making special connections with specific strategic objectives where we go beyond what we are currently offering.

## 3.1. Biobanking Development

The main mission of Biobanking Development (BBD) is to effectively integrate newly established National Nodes and affiliated biobanking networks into the broader BBMRI community. This integration process is essential to ensure harmonisation with the rest of our community and thus requires intensified and expedited onboarding procedures across BBMRI's diverse service domains. These activities are pivotal not only for the emerging National Nodes but also for fostering collaboration within the evolving BBMRI community. Our core services also extend to foster sustainable growth and enhanced visibility of BBMRI's biobanks, as well as leverage technological developments and active community engagement. We work closely with Public Affairs to engage with different Member States to emphasise the benefit of joining BBMRI in terms of building a robust biobanking network and expertise required) which is a continued activity and links very strongly to the future roadmap of BBMRI-ERIC (*SO1 Optimise the interconnections of human, animal, and environmental health research*). BBD core services are listed below and will be the foundation for the upcoming work program 2025-2027 where it focuses on three main areas:

### National Node/Biobank Development

We will continue to maintain and expand our partnership with our National Nodes and their associated biobanks by continuously providing technical support through:

- Technical consultations to support them with developing their networks through sharing of best practices and providing guidance on establishing sustainable biobanking ecosystem;
- Engagement in working groups on topics of relevance to their growth and sustainability;
- Offering training in biobanking, either through member-specific workshops or via the BBMRI Academy on current relevant technologies in biobanking that are of benefit to the wider community (SO6 Educate, train & build capacity);
- Engaging with our community to identify expertise that enhances service provision and addresses core interests, preventing duplication of efforts. This involves collaborating with NNs to pinpoint experts and establish engagement levels with national and international stakeholders, ensuring biobanking adapts to and leverages innovative technological advancements (SO4 Secure infrastructural scalability, sustainability and service excellence; SO5 Strengthen the National Node and biobank community within Member States).

### National Node/Biobank Sustainability

When it comes to sustainability, we are continuing to collaborate with our community to develop sustainability models for National Nodes and biobanks, to aid in the transition towards financial and environmental sustainability. This activity is of vital importance to our community in supporting them to transition from project-funded phases to sustainable, independent operations. This can be achieved through the building of different partnership models by identifying key stakeholders such as universities, hospitals, industries etc., whose interests align closely with ours to benefit the wider community, as well as leveraging funding and subsidies to support biobanks (SO4 Secure infrastructural scalability, sustainability and service excellence).

In this work program, we are going further and focus on environmental sustainability to ensure biobanking practices are eco-friendly, reducing energy consumption and carbon footprints while optimising operations. We will create green biobanking guidelines and a Green Incentive, a concept to encourage biobanks to adopt sustainable practices by awarding them with a "green label" in our Directory, to showcase their compliance with the green biobanking criteria (SO3 Foster green biobanking and Research Infrastructure operations).

# Enhanced visibility & access to samples and data

We will continue to facilitate access to samples and data, negotiating with end users, and organising collaborative workshops with industrial partners. We will furthermore continue our collaborative work with the IT department to ensure international interoperability with local, national, and international medical data ecosystems (SO2 Accelerate datafication to enable trustworthy, fit-for-purpose data for high-quality research).

#### Table: Interdependencies between core and project tasks and budget

The following table provides an overview of how the funded projects are aligned with the overarching BBD tasks and as such are integrated in core service developments. More information on the distinct project goals is provided in the Appendix. Please note that of all BBD tasks, currently 16 % are covered by BBMRI-ERIC core budget while 84 % are based on grant funding.

		National Node & Biobank Operation Models	Visibility & Access to Samples/Data	Leverage novel technologies	Green Biobanking
<b>Core</b> 16 % (0,4 FTE)	Tasks	Ops*	Ops*/Dev*	Ops*/Dev*	Ops/Dev
	CY-Biobank	Dev	Ops	Ops/Dev	-
	ISIDORe	Dev	Ops	Ops/Dev	-
	canSERV	Dev	Ops	Ops/Dev	-
Projects 84 %	EvolveBBMRI	Dev	Ops	Dev/Ops	Dev/Ops
	Integrate-LMedC	Dev	Ops	-	-
	PRIM-TECH3R	-	Ops	Ops	-
	& others to come				

\* = National Nodes involvement; Ops = operations; Coor = coordination; Dev = development; FTE = Fulltime Employee

## 3.2. Ethical, Legal and Societal Implications

Since more than a decade, *Ethical, Legal and Societal Implications* (ELSI) provide dependable, practical, and sustainable services grounded in cutting-edge research to benefit the life sciences community. Our approach involves establishing standards, promoting best practices, and creating a sustainable platform for knowledge exchange, both internally and publicly. Our key focus areas include AI, the European Health Data Space (EHDS), datafication, ethics of AI as well as gender and diversity, all addressed by a team of interdisciplinary experts from fields such as law, philosophy, ethics, sociology, science- and technology studies, gender studies and political science. The transfer of ELSI knowledge is structured around three main pillars: **Research, Services, and Training**.

#### Research

We conduct research on ELSI in biobanking and life sciences, which is essential for keeping our services and training current and informed. This research allows us to contribute valuable insights and generate profound knowledge to our stateof-the-art expertise. Committed to *Responsible Research and Innovation* (RRI), our project participation focuses on aligning research practices with societal needs and ethical standards.

These initiatives often involve collaboration among stakeholders, including researchers, policymakers, and publics, to ensure that research is conducted transparently and inclusively. Key elements include: ethics and research integrity, public and stakeholder engagement, gender and diversity perspectives, ethics in emerging technologies such as data spaces and AI, open access and data sharing along accountably and trust-building measures as well as environmentally and socially sustainable research practices (SO1 Optimise the interconnection of human, animal, and environmental health research; SO2 Accelerate datafication to enable trustworthy, fit-for-purpose data for high-quality research).

These projects aim to create a framework for responsible research that benefits society and addresses emerging challenges in the life sciences and beyond effectively by design. This includes the ongoing *Code of Conduct for Health Research* initiative.

#### **Services**

We support the biobanking and life sciences research infrastructure (RI) communities by helping them comply with regulatory requirements and best practice standards. Over the years, we have developed several interconnected lines of expertise on ELSI relevant to the biobanking and life sciences community. To ensure we provide top-notch guidance on ELSI matters, we continue to employ a federated model, collaborating with a network of experts from academia and practice across our Headquarters, National Nodes, and project partners. Our focus areas are established in collaboration with European and international ELSI experts being informed by user needs identified in various projects and via helpdesk requests.

The BBMRI-ERIC ELSI Helpdesk is available to researchers and biobanks in both Member and Observer Countries of BBMRI-ERIC, as well as other RIs in the life sciences field. As a publicly funded research infrastructure, it is essential to share any knowledge created. Therefore, responses from the ELSI Helpdesk may be incorporated into the ELSI Knowledge Base, an open-access resource platform. In addition, the ELSI Helpdesk Network serves as a community for sharing best practices and facilitating knowledge transfer among ELSI experts from across BBMRI Member and Observer countries.

Ultimately, topical expert groups are formed to address specific topics, develop policies and recommendations or respond to public consultations from organisations such as the *World Health Organisation* (WHO) or *Council of Europe* (CoE) (SO2 Accelerate datafication to enable trustworthy, fit-for-purpose data for high-quality research; SO8 Advance a global biobanking community).

### Training

Building on the already established BBMRI.ELSI training programme, further training portfolios will be developed to cover research integrity, dual-use, ethics and legal aspects of AI, among other biobank-related topics. This continues to include the ELSI Webinars, Podcasts, Train-the-Trainer and tailored workshops, which will be integrated in the training portfolio. Collaborations with National Node ELSI workshops and conferences at universities and summer schools will continue and expand (SO6 Educate, train & build capacity).

### Strategic Integration of ELSI

We focus on ecological and good governance sustainability, research integrity, and ethical, legal, and societal implications (ELSI) to support the biobanking and life sciences community. By promoting responsible practices and fostering a culture of integrity, we ensure that our research contributes to sustainable solutions while addressing the complex ELSI issues that arise in these fields. Our interdisciplinary approach combines insights from various domains to create a robust framework for guiding researchers and institutions in navigating these challenges effectively.

#### Table: Interdependencies between core and project tasks and budget

The following table provides an overview of how the funded projects are aligned with the overarching ELSI tasks and as such are integrated in core service developments. More information on the distinct project goals is provided in the Appendix. Please note that of all ELSI tasks, currently 20 % are covered by BBMRI-ERIC core budget while 80 % are based on grant funding.

		Services				s, etc.)			
		R&D	Knowledge Base	Ethics Check	Ethics Advice	Helpdesk	Trainings (Workshops, Webinars, etc.)	GDPR Compliance	Code of Conduct
<b>Core</b> 20 % (1,4 FTE)	Tasks	Ops	Ops	Ops	-	Ops*	Ops*	Dev & Ops	Coor & drafting
	AHEAD	-	-	-		-	Ops	-	-
	canSERV	Dev*	Dev*	Ops	Ops*	Ops*	Dev	-	-
	CY-Biobank	Dev*	Dev	-	Dev*	-	Dev*	-	-
	DIAMONDS	Dev	Dev	-	Ops	-	Dev	Ops	-
	EUCAN-Image	Dev*	Dev*	Ops*	Ops	-	Dev	Ops*	-
	EPPERMED	-	Dev	-	Dev	-	Dev	-	-
Projects	EOSC4Future	-	Dev	Ops	-	-	-	-	-
80 %	EPND	Dev*	Dev	Ops	-	-	Dev	Ops	-
	EUCAIM	Dev*	-	-		-	-	Dev*	-
	IC2PerMed	-	Dev	-	Dev	-	Dev	-	-
	Integrate-LMedC	Dev	Dev	Ops	-	-	Dev	-	-
	Intervene	Dev	Dev	Ops	Ops	-	Dev	-	-
	ISIDORe	Dev		-	Ops	Ops*	Ops	-	-
	Prophet	Dev	Dev	-	Ops	-	-	-	-
	& others to come								

\* = National Nodes involvement; Ops = operations; Coor = coordination; Dev = development; FTE = Fulltime Employee

## 3.3 IT Services

### **Overview of Core IT Services**

BBMRI-ERIC's IT services form the foundation of its discovery and access platform, enabling streamlined access to biobank resources across Europe. The BBMRI-ERIC Directory acts as a central catalogue for metadata describing biobanks, biomolecular resources, collections of data and samples, and additional services. This Directory simplifies the discovery process, allowing users to easily identify relevant resources. Complementing this, the BBMRI-ERIC Federated Platform integrates both the Locator and Finder services, enabling in-depth, privacy-preserving querying of data at the source. This approach allows users to build virtual cohorts tailored to their research needs. For controlled data access, the BBMRI-ERIC Negotiator streamlines the process, acting as an intermediary to facilitate communication and secure access between users and data custodians. The LifeScience Login (LifeScience AAI) further strengthens this infrastructure by providing unified user identity management, facilitating collaboration not only across BBMRI services but also with other research infrastructures (RIs), enhancing the efficiency and security of collaborative efforts in life sciences.

These IT services are supported by extensive interoperability activities, ensuring seamless integration and consistent data handling across platforms. MIABIS (*Minimum Information About Biobank Data Sharing*) and its various components contribute to harmonising metadata standards, while the development of international standards like Common Provenance Model in ISO 23494 Series on distributed provenance ensures traceability of samples, data, and computational workflows throughout their entire lifecycle.

## Service maintenance & operations

BBMRI-ERIC's IT operations use a dual approach: the *Common Service IT* (CS IT) manages core services like the Directory, Negotiator, and LifeScience Login, while Task Forces develop additional tools through in-kind contributions from the National Nodes and their affiliated communities.

CS IT ensures stable infrastructure, and Task Forces enable innovation by tapping into the expertise of individual Nodes. Maintenance and conservative development of core services are handled by CS IT, incorporating user feedback and technological updates. A security penetration test will add further infrastructure hardening alongside routine security fixes, ensuring continued robustness and security.

#### **Innovation priorities**

1) Expansion beyond human biobanking focused on retrospective data to fulfill the mission of BBMRI-ERIC to support services in One Health. BBMRI-ERIC will expand its focus beyond human biobanking centred on retrospective data to embrace its mission of supporting services within the broader One Health framework. This expansion involves developing interoperable metadata and data models to describe e.g., animal, microbiome, and environmental data resources. Based on these interoperability models, we aim to increase the range of data types supported and practically available by both the Directory and Federated Platform, accommodating both human and non-human biobanking and biomolecular resources. Furthermore, BBMRI-ERIC plans to extend its service portfolio by offering on-demand, quality-assured services provided by biobanks and biomolecular resources, while also supporting the development of new business models (SO1 Optimise the interconnection of human, animal, and environmental health research; SO2 Accelerate datafication to enable trustworthy, fit-for-purpose data for high-quality research; SO4 Secure infrastructural scalability, sustainability and service excellence).

2) Acceleration of datafication and FAIR and FAIR-Health compliance of data at source to remove the main roadblock of medical research needing high-quality data available at scale. To achieve this, BBMRI-ERIC will further develop a vendor-neutral Federated Platform, enabling both public and private investments in datafication to be leveraged under fair terms. Ensuring the trustworthiness and traceability of data will be achieved through the use of complete provenance chains, spanning from biological material to data, analysis, and AI model training, based on the Common Provenance Model (ISO 23494 series), which will be applied at prioritised BBMRI data sources. The organisation also aims to support biobanks and biomolecular resources in becoming central data hubs, interconnecting various data sources from medical and research institutions (SO2 Accelerate datafication to enable trustworthy, fit-for-purpose data for high-quality research).

BBMRI-ERIC will simplify and speed up data access by developing data anonymisation techniques and conditioned data synthesis using AI and traditional methods. The geographic expansion of the Federated Platform will ensure comprehensive coverage across all BBMRI National Nodes. In addition, BBMRI will design training curricula combining AI and non-AI tools, which will be integrated into the BBMRI Academy.

Finally, BBMRI-ERIC will align datafication efforts with the European Health Data Space (EHDS), the Global Data Infrastructure (GDI), and the European Cancer Imaging Initiative (EUCAIM) (SO2 Accelerate datafication to enable trustworthy, fitfor-purpose data for high-quality research; SO6 Educate, train & build capacity).

**3)** BBMRI-ERIC will focus on the development of three core pillars within its data infrastructure to enhance access to both retrospective and on-demand data. These pillars include federated retrospective data, federated services for on-demand data generation, and centralised retrospective data resources. By establishing these pillars, BBMRI-ERIC aims to ensure that researchers have efficient access to fit-for-purpose data, while also facilitating mechanisms for the return and reuse of existing data.

BBMRI-ERIC plans to expand its capacities for data return and deposition and collaborate with e-infrastructures through initiatives like RI-SCALE to boost data processing capabilities. In addition, we will strive to adopt green computing practices wherever feasible. Ensuring compatibility with Secure Processing Environments (SPEs) of the European Health Data Space (EHDS) and meeting the requirements of other data spaces, such as the Global Data Infrastructure (GDI) and the European Cancer Imaging Initiative (EUCAIM), are also priorities.

Furthermore, BBMRI-ERIC will engage with national communities to actively participate in TEHDAS2 and Code of Practice groups, contributing to the development of EHDS2, which will be essential for efficient data discovery, access, and processing in the coming decade (SO2 Accelerate datafication to enable trustworthy, fit-for-purpose data for high-quality research; SO3 Strategic Objective: Foster green biobanking and Research Infrastructure operations; SO4 Secure infrastructural scalability, sustainability and service excellence).

### Table: Interdependencies between core and project tasks and budget

The following table provides an overview of how the funded projects are aligned with the overarching IT tasks and as such are integrated in core service developments. More information on the distinct project goals is provided in the Appendix. Please note that of all IT tasks, currently 17 % are covered by BBMRI-ERIC core budget while 83 % are based on grant funding.

		Findability	Accessibility	Interoperability	Reproducibility & Reusability	Infrastructure	Accessibility & Infrastructure	Reference tools for biobanks	Findability
		Direc- tory	Negoti- ator	MIABIS	Prove- nance	Help- desk	ΑΑΙ	BIBBOX	Locator
<b>CS IT</b> 17 % (1,68 FTE + CS IT)	Tasks	Ops*	Ops	Ops*	-	Ops	Ops*	-	-
CS 17 (1,68 FTE	10315	Dev*	Dev*	Dev*	-	Dev	Dev*	-	-
	EOSC4Cancer	Dev*	-	-	-	-	Ops*	-	-
	ERDERA	(Dev)/ Use*	(Dev)/ Use	Dev	-	-	-	-	Dev/ Ops*
	canSERV	Dev	Dev/ Use	-	-	Dev/ Ops	-	-	-
S	CY-Biobank	-	-	Use*	Use*	-	-	Dev*/ Ops	Ops*
Projects 83 %	CETOCOEN II	-	-	Dev	Use	-	-	Dev/ Ops	Ops
<u>.</u>	Evolve BBMRI	Dev*	-	Dev*	Dev*	-	-	-	Dev*
	Integrate- LMedC	-	_	-	Dev	-	-	_	-
	EHDS2Pilot	Dev*	Dev*	Dev*	-	-	-	-	-
_	& others to com	e							

\* = National Nodes involvement; Ops = operations; Coor = coordination; Dev = development; FTE = Fulltime Employee

## 3.4 Quality Management

Quality Management (QM) has developed a sophisticated and adaptable QM Service and training programme. This programme is tailored for biobanks focusing on essential cornerstones designed to elevate the performance, capacity, and operational excellence of biobanks by integrating a comprehensive quality management system that spans the entire biomedical research lifecycle. The focus is on the core activities of biobanks such as the collection of samples and data. It will be complemented by the specific requirements for data quality and the handling of artificial intelligence solutions in the healthcare sector and their impact on biobank operations. The BBMRI QM service is built upon four pillars: **Knowledge, Training, Auditing and Continuous Improvements**. While BBMRI biobanks have adopted this holistic approach enthusiastically, leveraging the commitment of these biobanks to maximise benefits for all stakeholders remains critical.

BBMRI's vision for the coming period emphasises positioning biobanks as reliable partners in scientific and technological development, hence aiming to open new collaboration for the interconnection of human, animal and environmental health research in the interface of biobanking (S01 Optimise the interconnection of human, animal, and environmental health research; S06 Educate, train & build capacity; S08 Advance a global biobanking community). To achieve this goal, biobanks are encouraged to adopt and comply with international and European biobanking standards, in particular ISO standard 20387, which defines the "General requirements for biobanking". BBMRI's QM Services provide full support for biobanks to achieve these standards.

For the purpose of Quality Control (QC) measures, biobanks can apply for the BBMRI-ERIC Quality Label by undergoing a rigorous audit process. This audit is based on the audit program developed by BBMRI, which aims to assess the biobank against criteria of international standards relevant to biobanks. In this context, the biobank standard ISO 20387, among others, is the leading international standard (S02 Accelerate datafication to enable trustworthy, fit-for-purpose data for high-quality research; S03 Foster green biobanking and Research Infrastructure operations). The demonstration of advanced capabilities is a step-by-step approach for biobanks to third-party verification, which can be carried out by national accreditation bodies. The BBMRI audit program is available as a preparatory tool in this context.

BBMRI.QM continues to host established Working Groups on Biobank Quality and Data Quality Systems (QMS), consisting of biobank representatives, QM and data managers from all member and observer countries. Continuous improvement, identified as a key priority, is essential for the sustainable development of biobanks and is actively promoted through these Working Groups. The groups remain open to new biobankers and researchers to enable broader knowledge sharing and community engagement (S01 Optimise the interconnection of human, animal, and environmental health research; S04 Secure infrastructural scalability, sustainability and service excellence; S06 Educate, train & build capacity).

Building on the already established BBMRI.QM training concept, further training portfolios will be developed to cover all basis and emerging biobank-related topics (S06 Educate, train & build capacity). This will include new focus areas such as data quality, AI in biobanking as well as green biobanking, environmental health and sustainability in line with the strategic objectives of BBMRI (S01 Optimise the interconnection of human, animal, and environmental health research; S02 Accelerate datafication to enable trustworthy, fit-for-purpose data for high-quality research; SO4 Secure infrastructural scalability, sustainability and service excellence; S05 Strengthen the National Node and biobank community within Member States; S08 Advance a global biobanking community).

### Strategic Integration of Quality Services

BBMRI-ERIC's quality services will continue to support biobankers and researchers through four pillars: Knowledge Hub, Training and Support, Auditing and Continuous Improvement. These pillars support BBMRI's efforts to integrate biobanks into a broader scientific network that encompasses human, animal, microbial and environmental health research in line with the One Health approach (S01 Optimise the interconnection of human, animal, and environmental health research; S04 Secure infrastructural scalability, sustainability and service excellence; S06 Educate, train & build capacity; S08 Advance a global biobanking community). BBMRI-ERIC will be the benchmark for high quality in biomedical research.

### **Knowledge Hub**

BBMRI will deepen and broaden its collaboration with the International and European Standardisation organisation, ISO Technical Committees (ISO/ TC 276, 212, 215) and CEN/TC 140, to ensure biobanks and researchers are informed about the latest developments in biobanking standards. Developments in data quality and artificial intelligence will be included in the QM portfolio for the benefit of the biobanking community (S08 Advance a global biobanking community). Active participation in the revision of ISO 20387:2018 will ensure the biobank community's interests are represented. All QM expertise, drawn from and applied in various EU and scientific projects, will continue to be shared through the Knowledge Hub. The BBMRI.QM Newsroom will serve as a platform for biobanks to highlight their achievements, enhancing their visibility within the international community.

### **Training & Support**

BBMRI will further expand its training offerings to support the growing needs of biobanks and biomedical research. Modular training programs covering advanced topics like molecular diagnostics, data quality management, and green biobanking will be integrated into the BBMRI-ERIC Academy (S06 Educate, train & build capacity). Training programs will offer *Continuing Medical Education*  (CME) and *Continuing Professional Development* (CPD) credits, contributing to professional growth within the biobank community.

### Auditing

BBMRI has successfully implemented an audit programme that enables biobanks to assess their internal quality management systems according to ISO 20387 and technical standards for various biological materials. The audit programme allows biobanks to conduct self-assessments using BBMRI-ERIC's *Self-Assessment Surveys* (SAS), which can be submitted for formal auditing. On-site and remote audits will be conducted by BBMRI-ERIC Headquarters and/or designated national auditors and experts, reinforcing the integration between National Nodes and Headquarters activities. This audit programme will incorporate emerging aspects of data quality and data provenance.

Additionally, the introduction of a "Green Label" will recognise biobanks adhering to defined criteria based on the Green Biobanking guidelines aiming to further advancing BBMRI's commitment to green biobanking (S02 Accelerate datafication to enable trustworthy, fit-for-purpose data for high-quality research; S03 Foster green biobanking and Research Infrastructure operations). Biobanks that pass the audit will receive a Quality-Label in the BBMRI Directory, elevating their credibility as trusted partners in scientific research. The official conferment of a BBMRI Quality Award for an ISO 20387 Quality Label acquired by BBMRI-ERIC audited biobanks takes place during Europe Biobank Week.

#### **Continuous Improvement**

Continuous improvement is central to the operation of the biobanks within BBMRI and will be supported by enhanced *Quality Assurance* (QA) and *Quality Control* (QC) measures, which are essential to maintain the quality and integrity of biological materials. The introduction of proficiency testing services will complement the existing quality management systems. These services, currently focused on sample collection and processing of tissue histology, as well as liquid biopsies such as serum, plasma and urine, nucleic acid purification, single cell isolation, will be strategically expanded to cover new research fields and emerging technologies. Standardised technologies for proficiency testing, particularly in the pre-analytical phase, will be further developed to ensure consistency and reliability. A specialised group of experts will lead these QA/QC initiatives within BBMRI.QM and ensure that biobanks remain at the forefront of providing high-quality samples for critical research across Europe. This group will work with academic and industrial partners to publish position papers, secure external funding and, where necessary, initiate the development of new European and international standards.

### BBMRI-ERIC Central Quality Management Service

The BBMRI.QM Team plays a pivotal role in the continuous improvement of BBMRI Headquarters' management operations. These efforts follow the principles of ISO 9001 and ISO 21001, 'Management Systems for Educational Organizations' for the BBMRI Academy (S06 Educate, train & build capacity), ensuring ongoing alignment with international standards while promoting effective and lean office operations. This will be accomplished in close cooperation with the Central Office and the entire BBMRI Headquarters team.

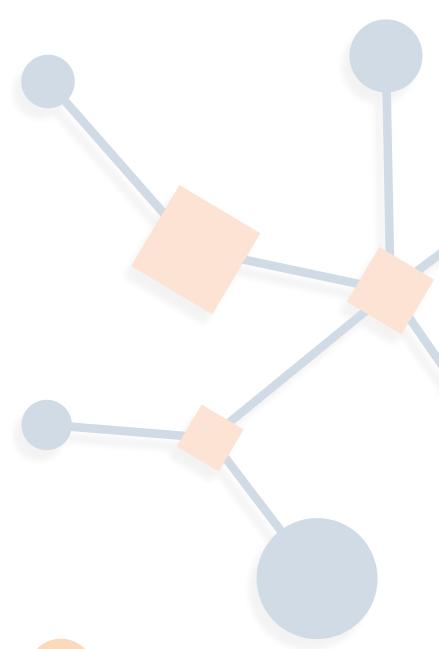
#### Table: Interdependencies between core and project tasks and budget

The following table provides an overview of how the funded projects are aligned with the overarching QM tasks and as such are integrated in core service developments. More information on the distinct project goals is provided in the Appendix. Please note that of all QM tasks, currently 52 % are covered by BBMRI-ERIC core budget while 48 % are based on grant funding.

		Liaison to ISO & CEN	Knowledge Hub	Training & Education	Audit	Continuous Improvement
<b>Core</b> 52 % (2,19 FTE)	Tasks	Dev/Ops	Ops/Dev	Dev*/Ops*	Dev*/ Ops*	Dev*
	EPND	-	Dev	-	Ops	-
	ISIDORe	-	Dev*	-	Dev*	-
	CY-Biobank	-	Dev	-	Dev	-
ts	canSERV	-	Dev*	Dev*	-	-
Projects 48 %	QUANTUM	-	Dev	Dev*	-	-
4	PRIM-TECH3R	-	Dev	-	Dev	-
	INTEGRATE-LMedC	-	Dev	-	Dev*	-
	EvolveBBMRI	-	Dev*	Dev*	-	-
	& others to come					

\* = National Nodes involvement; Ops = operations; Coor = coordination; Dev = development; FTE = Fulltime Employee





## 4.1 Public Affairs

In 2013, more than a decade ago, BBMRI-ERIC was granted European legal status as an ERIC and started operations. Since then, it has established and implemented a stable governance model that enables efficient decision-making and strategic planning. Supported by the Steering Committee, decisions regarding BBMRI-ERIC's future direction are made by the Assembly of Members. The biobanking community is involved through their National Nodes, whose coordinators participate in the Management Committee and advise the Director General. Additionally, BBMRI-ERIC has in place the Stakeholder Forum and the *Scientific and external Ethical Advisory Board* (SEAB). Also in the coming years, Public Affairs will play a vital role in supporting the effective governance of BBMRI-ERIC bodies.

Public Affairs' primary mission remains to support the current Member States, in particular relations with the ministries and other funding bodies as well as interactions within the national communities, the latter together with the Biobanking Development department. This will require continuous exchange and visits to the countries whenever needed; priority will be given to those countries where the visit of the current DG has not yet taken place. In this respect, an important focus of the upcoming relations will be the One Health perspective in individual member and observer countries (SO1 Optimise the interconnections of human, animal, and environmental health research; SO5 Strengthen the National Node and biobank community in the Member States).

In the 2025-2027 period it is expected that BBMRI-ERIC will grow moderately in its membership. The focus of enlargement activities will be primarily on EU countries which are not yet BBMRI-ERIC members or observers and Horizon Europe Associated countries. Potential candidates will be guided during the application process. Collaboration with third countries and potential observer or membership will be pursued in line with the upcoming recommendations of the Working Group International Cooperation and the EvolveBBMRI project, as well as the AoM Working Group on Strategic Partnership, where new models for engagement and integration into the infrastructure will be explored (SO4 Secure infrastructural scalability, sustainability and service excellence; SO8 Advance the Global Biobanking Community).

Further aligned with the above listed Strategic Objectives, for BBMRI-ERIC relations with the EU bodies, in particular the European Commission are of key importance, as the Framework Programme has served and will continue to serve as a crucial co-funder of BBMRI-ERIC services and developments and has helped to integrate the biobanking community. It will therefore also remain BBMRI-ERIC's priority to engage with EU bodies, as well as other pan-European organisations in health and life sciences, and in the field of One Health in particular. This also contains continuous engagement with key stakeholders in the European Research Area, such as ESFRI, EOSC Association, ERIC Forum, the LS-RI Strategy Board, and other partners and Research Infrastructures. The need to continue supporting excellence in research and infrastructure in Central and Eastern Europe (CEE) will be conveyed on EU level.

Last but not least, relations with the European Patient Organisations and Citizens will be furthered (SO7 Strengthen Stakeholder Engagement and Awareness). This will on the one hand be addressed with bringing patient organisations from remaining Member States into the Stakeholder Forum Patients and Citizens' Pillar and connecting them closer with the National Nodes, as well as putting in place tools that foster easier engagement of patients in the European policy arena. Links to societies and industry, here in cooperation with other departments, will be stepped up within the Stakeholder Forum. In view of furthering the recognition and leadership of BBMRI-ERIC beyond the European policy arena, engagement with global actors, such as OECD, UN and G7 will be looked into.

### Table: Interdependencies between core and project tasks and budget

The following table provides an overview of how the funded projects are aligned with the overarching PA tasks and as such are integrated in core service developments. More information on the distinct project goals is provided in the Appendix. Please note that of all PA tasks, currently 29 % are covered by BBMRI-ERIC core budget while 71 % are based on grant funding.

		HQ internal infrastructure	Governing Bodies	Member States & prospect Members	Stakeholder Forum	Sustainability	Relations with EU, EOSC, RIs & international Organisations
<b>Core</b> 29 % (1,15 FTE)	Tasks	Ops/ Coor/Dev	Ops/ Coor/ Dev*	Dev/Coor*	Ops/ Coor*	Dev/ Coor	Ops/Coor/Dev
	ERIC Forum 2	-	-	-	-	-	Coor
	EvolveBBMRI	Coor	Coor*	Coor*	Coor	Coor*	Coor
	BIG PICTURE	-	-	-	Dev	-	Dev
	PROPHET	-	-	-	Dev	-	Dev
Projects	INTEGRATE-LMedC	-	-	-	-	-	Dev
71 %	EPND	-	-	-	-	-	Dev
	ERDERA	-	-	-	-	-	Dev
	PRIM-TECH3R	-	-	-	-	-	Dev
	RI-SCALE	-	-	-	-	-	Dev
	& others to come						

\* = National Nodes involvement; Ops = operations; Coor = coordination; Dev = development; FTE = Fulltime Employee



## 4.2 Outreach, Education and Communications

Outreach, Education and Communications (OEC) exists to increase visibility of BBMRI-ERIC's services and developments with a focus on samples, data and biomolecular resources within the community. This is achieved in close collaboration with all HQ departments, National Nodes, biobanks and the broader stakeholder community. The 2025-2027 Work Programme builds on the significant reshaping of OEC to maximise community engagement at every level. There are **four key areas of focus** for the next three years:

### **Community engaging education**

2022-2024 lay the foundations for the BBMRI Academy with a regular roster of Quality Management, Biobanking Development and ELSI Dialogues. This Work Programme steps up development of our core offer to the biobank community whilst also targeting related disciplines in biomedical research, universities, hospitals and laboratories via the dedicated BBMRI Academy learning platform. This widely promoted online asset will encompass the broad range of the Academy's education offer that includes:

- ELSI Dialogues including One Health sub-topics
- Quality Management Newsrooms, ISO training and EACCME<sup>®</sup> accredited courses
- IT modules and workshops
- Biobanking Development workshops and modules
- Research Infrastructure career CPD courses
- In-house hosted modules for external partnerships e.g. universities

The Academy is also a face-to-face proposition and encompasses annual events such as:

- Europe Biobank Week Congress
- The Europe Biobank Week Roadshow

## Community strengthening outreach

The next three years will see a continuing growth of public, community and key stakeholder facing outreach work that includes calendar events and wider presence that embeds BBMRI-ERICs value proposition. A Biobank Day is a new concept to educate, engage and empower patients and potential participants to the benefits of biobanking **(SO7 Strengthen stakeholder engagement and awareness)**. An annual designated day will provide a key outreach opportunity that will enable strategic biobanks in member states to open their doors to the public. By bringing scientists and researchers into the biobanks to discuss achievements and impact won from access to samples and data, the value of donating samples becomes as vital a gesture as giving blood.

*Europe Biobank Week* Congress (EBW), run in partnership with ESBB, was reestablished in 2024 as the biobanking and biomolecular congress of the year. 2025-2027 sees the Congress maintain a now regular May slot in Member States. As BBMRI's 10-Year Roadmap embeds to deepen the applications of One Health, the Congress is a key opportunity to unite communities from across the human, environmental and animal biobanking disciplines. In the same vein, the Europe Biobank Week Roadshow will continue to address specific topics of interest and timely relevance to the community. It is an inspiring in-between outreach mechanism that shines a spotlight on specific community expertise in Member States.

The establishment of a European web portal for sample donors and the general public will be delivered. Working with BBMRI's Patient Forum, an existing bbmri.de portal will be adapted for this purpose and translated into the most widely spoken languages in Europe. All National Nodes and biobanks will be able to link to this portal. After all, well-informed participants who consent to the use of their samples in research are a prerequisite for biobanking and for research with biospecimens and associated data.

### **Core communications**

A now firmly re-established corporate identity will continue to be developed over the next three years. Core to this is the redevelopment of the BBMRI-ERIC website to provide clear information and engagement pathways for our community and stakeholders. This will be informed by usability mapping and testing. Underlying the website will be the Academy platform (SO6 Educate, train & build capacity; SO7 Strengthen stakeholder engagement and awareness) and the equipment exchange platform (SO3 Foster green biobanking and Research Infrastructure operations).

A highly expert OEC team will build on quality communications and branding materials to provide a consistent and meaningful presentation of the research infrastructure and community's achievements. This includes the in-house production of brand materials, reports, magazines, news stories, press releases, policy papers, newsletters and a comprehensive set of social media platforms that responds to a changing digital environment. These are services the team also provides to several EU projects.

The continuing Task Force Communications and Outreach, established during the last Work Programme, is the main forum for knowledge sharing and media/communications skills development. This National Node community centred approach will also steer co-development communications and outreach toolkit for consistent and strong engagement with stakeholders e.g. individuals (e.g., patient advocates, scientists, clinicians) or institutions (universities, university hospitals, scientific societies, companies).

## Powerful biobanking and biomolecular stories

OEC's particular specialism is creating simple, engaging, multimedia content to illustrate the value and impact of BBMRI-ERIC. This will be achieved through existing audio and video channels. In line with Oxford Reuters research on content consumption, OEC will prioritise short and long form video on basic biobanking 101 explainers alongside advanced content aimed at key stakeholders already identified in our contact mapping.

This extends to the impact storytelling that draws on all the aspects of what BBMR-ERIC offers. To capture the socio-economic value of the research infrastructure, we will collaborate with researchers to showcase success and impact stories. This storytelling content includes contributions to EU projects and how they strengthen BBMRI-ERIC core services (SO7 Strengthen stakeholder engagement and awareness).

#### Table: Interdependencies between core and project tasks and budget

The following table provides an overview of how the funded projects are aligned with the overarching OEC tasks and as such are integrated in core service developments. More information on the distinct project goals is provided in the Appendix. Please note that of all OEC tasks, currently 59 % are covered by BBMRI-ERIC core budget while 41 % are based on grant funding.

		Manage website, social media & newsletter	Outreach activities	Coordinate & sup- port education offer (incl. webinars and events e.g. EBW)	Impact storytelling	Produce PR content
<b>Core</b> 59 % (2,09 FTE)	Tasks	Dev	Dev	Coor/Dev	Dev	Dev
	ERIC Forum 2	-	Dev	Dev	Dev	Dev
	INTEGRATE-LMedC	Dev*	Dev*	Dev	Dev	Dev*
	CY-Biobank	-	Dev	Dev	Dev	-
	canSERV	-	Dev	Coor	Dev	Dev
Projects	EvolveBBMRI	Dev	Dev*	Dev*	Dev*	Dev
(41 %)	ECPerMed	-	Dev	-	-	-
	euCanImage	-	Dev	-	Dev	-
	Big Picture	-	Dev	-	Dev	-
	PROPHET	-	Dev	-	Dev	Dev
	& others to come					

\* = National Nodes involvement; Ops = operations; Coor = coordination; Dev = development;

FTE = Fulltime Employee

#### 4.3 Finance and Project Management

A main pillar of Finance and Project Management is providing all the necessary data, information and support to effectively and efficiently run the core as well as the project activities within BBMRI. This includes preparing the annual budget in line with the Work Programme, ensuring that forecasted expenses are balanced with anticipated income from membership fees, project overheads, and other revenue sources. Regular monitoring of the financial plan, including cost analysis and cash flow management, leads to the creation of detailed financial reports. Additionally, the preparation of year-end closings and support for external financial audits are key tasks. Strong communication with project partners and stakeholders is crucial, alongside the management of financial statements for EU projects (CFS).

Key for a lean organisational setup to handle the increasingly complex tasks of budgeting, resource planning and reporting is to push towards digitalisation and automation of financial and administrative processes. This relates equally to core activities as well as to project administration and reporting requirements. A central responsibility involving all the departments and employees is an important success factor to assure streamlined and well accepted processes throughout the entire organisation.

It is also essential to continuously evaluate and develop new funding streams, including both public and private sources. There is particularly strong interest of the industry (pharma and biotech) to cooperate with BBMRI, being a one-stop-shop for the industry towards the biobanking network and generating added value for all parties involved. This also requires a revision and a new structuring of the legal framework within the BBRMI network (SO4 Secure infrastructural scalability, sustainability and service excellence).

In terms of Project Management, the role requires the timely and accurate provision of financial reports for externally funded grants, and internal reports and forecasts for all EU projects. This involves careful monitoring of budget spending and improving project management capabilities. Regular performance controls are implemented to ensure project milestones are met within planned budgets and deadlines. Effective internal communication is maintained across interdisciplinary teams, and continuous support is provided for project owners handling research projects and proposals. Monthly progress and performance monitoring of all projects is a critical component of this role.

On the Human Resources (HR) side, resource planning and monitoring are essential to balance the staffing needs for core and project activities. Accurate and timely information must be provided to payroll service providers both within and outside Austria to ensure a smooth payroll process. The management of time-tracking systems, in accordance with Austrian labour law and project requirements, is also a priority. Additionally, support for general HR activities such as onboarding, drafting employment contracts, and maintaining personnel reports is necessary.

Liaising with financial and legal authorities, including tax offices and social insurance, is also an integral part of HR operations. There is a strong emphasis on expanding the knowledge base within the organisation in finance, project management, and HR **(SO4 Secure infrastructural scalability, sustainability and service excellence)**. This knowledge is integrated into the BBMRI Academy to ensure continuous learning and development.

#### Table: Interdependencies between core and project tasks and budget

The following table provides an overview of how the funded projects are aligned with the overarching FPM tasks and as such are integrated in core service developments. More information on the distinct project goals is provided in the Appendix. Please note that of all FPM tasks, currently 59 % are covered by BBMRI-ERIC core budget while 41 % are based on grant funding.

		Digitalisation of admin & financial processes	Cost & cash flow management	Explore & develop new service models	Build different partnership models	Advanced HR management
<b>Core</b> 59 % (2,73 FTE)	Tasks	х	х	х	Х	х
	canSERV	х	х	-	-	-
	INTEGRATE-LMedC	х	х	-	-	-
Projects 41 %	EvolveBBMRI	х	х	х	х	-
	Eric Forum 2	х	Х	-	-	-
	& others to come					

\* = National Nodes involvement; Ops = operations; Coor = coordination; Dev = development; FTE = Fulltime Employee

### 4.4 Central Office

The Central Office (CO) of BBMRI-ERIC is the backbone to an efficient organisational structure in administrative tasks as well as in the support of the scientific departments. It serves as a contact point among employees and all other stakeholders of BBMRI. Its tasks are diverse and include administrative, organisational and strategic areas. Here are the most important tasks in detail.

The Central Office is responsible for coordinating BBMRI-ERIC's Headquarters operation and the various projects carried out within it. It ensures that collaborations with various stakeholder groups including partner institutions run smoothly. The CO also prepares regular reports, analysis and presentations for funding organisations, supervisory bodies and management. It supports in building administrative relationships with universities and hospitals and takes a lead in fundraising via foundations (SO4 Secure infrastructural scalability, sustainability and service excellence). In this context, the CO furthermore supports organising conferences, workshops and congresses, thus further strengthening event management skills and capacities.

Moreover, the CO is responsible for managing the administrative implementation of the BBMRI Academy and will remain the responsible unit for travel management. This includes travel bookings, control of incoming invoices, credit card statements, and preparation of travel expense claims, which are core administrative activities to efficiently guide the infrastructure towards a lean organisation. In the upcoming three years, the Central Office will continue playing a key role in the continuous improvement of the BBMRI Headquarters Quality Management System in accordance with ISO 9001, with guidance from the Central Quality Management team. It will collect KPIs on BBMRI's service and research activities, prepare according reports and support on capturing BBMRI's overall socio-economic impact.

Last but not least, the crucial activities of the Data Protection Officer as well as the Gender and Diversity Expert and Systems Administrator are formally covered by this department, being currently supported by experts from the ELSI and IT team.

# **5.** Milestones

#### Milestones 2025

- Q2 2025 // SO5 Call for community topic champions.
- Q4 2025 // SO4 Legal framework concept involving biobanks, National Nodes and BBMRI HQ to foster scalability and sustainability.
   Q4 2025 // SO7 Launch of BBMRI-ERIC's new website.

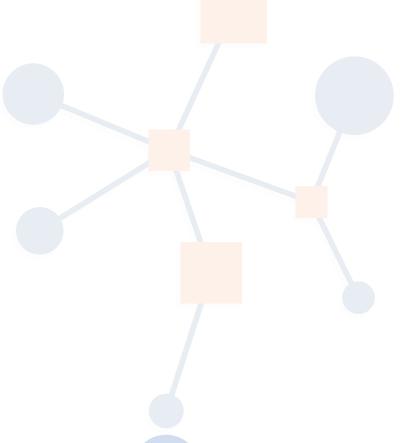
#### Milestones 2026

• Q1 2026 // SO6 Launch of upgraded BBMRI Academy as training pc	rtal.
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Q4 2026 // SO2 Support for non-human data available in the discovery and access pipeline (Q4 2026).
 Q4 2026 // SO3 Guidelines towards green biobanking and Green Incentive published open access.

#### Milestones 2027

• Q2 2027 // SO8	Policy Paper on "advancing global biobanking community" published.
• Q4 2027 // SO1	Showcasing how BBMRI-ERIC has integrated One Health
	into different aspects of its infrastructure by a workshop with
	Member States and key stakeholders.



## 6. Key Performance Indicators\* (KPIs)

- **#01:** Users of **BBMRI Directory**
- **#02:** Active Users of the **BBMRI Negotiator**
- **#03:** Requests filed into the **BBMRI Negotiator**
- **#04:** Requests successfully handled via BBMRI Negotiator
- **#05:** Requests successfully handled outside of the BBMRI Negotiator
- **#06:** Hours of BBMRI ELSI Services provided
- **#07:** Number of **Attendees** in **BBMRI ELSI Dialogues**
- **#08:** Number of **BBMRI Quality (Q)-Labels** on BBMRI Biobank, Laboratory/Institute or Expert Centre level in BBMRI Directory
- **#09:** Number of **BBMRI Quality (Q)-Labels** on Collection level in BBMRI Directory
- **#10:** Number of Certified/Accredited BBMRI Biobanks, Laboratories/ Institutes & Expert Centres
- **#11:** Number of **publications** involving BBMRI-ERIC
- **#12:** Number of **participants** reached by **BBMRI Outreach Events**
- **#13:** Number of **participants** in **BBMRI Stakeholder Forum**
- **#14:** Number of successful grants involving BBMRI

<sup>\*</sup>All listed KPIs will be represented as total numbers/year.

# 7. Funding

To fulfil its commitments and deliver all the activities as described in this Work Programme, BBMRI-ERIC relies on the annual contributions of its Members and Observers. In addition, BBMRI-ERIC generates income from the annual Europe Biobank Week congress as well as small amounts of income generated from the delivery of services, subletting office space and receiving the

host country contribution of Austria. BBMRI-ERIC also reinvests the indirect costs received from external grants to ensure the continuous development of its activities. The 2025 core budget was created with the sole purpose of ensuring the successful implementation of this Work Programme. The expenses and income forecast for the years to come are shown below.

Operational costs	Budget 2025	Outlook 2026	Outlook 2027
rent, maintenance, equipment, consumables	-265.500	-273.465	-281.669
consulting, subcontracting, legal advice	-61.700	-63.551	-65.458
annual conference (EBW)	-520.000	-520.000	-520.000
community meetings, business trips	-106.500	-109.695	-112.986
Federated search IT software licence	-	-	-
EOSC Association membership	-10.000	-10.000	-10.000
AoM/MC/HQ retreat	-15.000	-15.000	-15.000
proposal writing	-70.000	-70.000	-70.000
Total	-1.048.700	-1.061.711	-1.075.112
Staff costs true costs of employment			
central office/finance/HR/DG/ IT			
Organizational development & strategic activities *)	-446.606	-461.504	-476.849
Services (incl. Personnel and development costs)			
QM	-244.557	-275.819	-284.094
ELSI	-205.452	-220.196	-226.802
CS IT & IT infrastructure *)	-605.175	-623.330	-642.030
Public Affairs	-190.481	-199.940	-205.939
Biobanking Development	-80.086	-83.040	-85.531
Outreach, Education & Communication	-196.758	-232.034	-238.095
Finance, Proj. Mgmt, HR *)	-181.191	-186.627	-192.226
Central office *)	-181.660	-190.497	-196.212
Total	-1.885.360	-2.011.484	-2.070.929
Total expenses:	-3.380.666	-3.534.699	-3.622.890

The staff costs for organisational development and strategic activities reflect the efforts to evolve BBMRI-ERIC regarding its operational performance and manage the federated efforts to support the strategic objectives and foster the implementation process for the operational goals.

<sup>\*)</sup> For transparancy reasons, the "Staff costs" were partiall allocated to services and certain costs allocated to "Organizational development & strategic activities" (see sheet: "Staff cost - reconciliation" and pdf "Guidance on budget 2025")

Membership contributions	Budget 2025	Outlook 2026	Outlook 2027
Austria	80.676	83.903	87.259
Belgium	93.911	97.667	101.574
Bulgaria	35.494	36.914	38.390
Cyprus	23.452	24.390	25.366
Czech Republic	59.330	61.703	64.171
Denmark 30% of GDP	21.274	22.125	23.010
Estonia	24.388	25.363	26.378
Finland	58.304	60.637	63.062
Germany	511.044	531.486	552.745
Greece	50.457	52.475	54.574
Hungary	46.712	48.581	50.524
Italy	270.613	281.437	292.695
Latvia	24.690	25.677	26.704
Lithuania	28.197	29.325	30.498
Malta	22.184	23.071	23.994
Netherlands	144.800	150.592	156.616
Norway	85.217	88.626	92.171
Poland	107.985	112.304	116.796
Qatar 30 % of GDP	16.385	17.041	17.722
Slovenia	27.214	28.302	29.434
Spain 30 % of GDP	58.093	60.416	62.833
Sweden	93.244	96.974	100.853
Switzerland	120.546	125.368	130.383
Turkey 30 % of GDP	39.792	41.384	43.039
IARC	6.000	6.000	6.000
Total membership fees:	2.050.000	2.131.760	2.216.790

Other income	Budget 2025	Outlook 2026	Outlook 2027
Host country contribution:	100.000	100.000	100.000
Other earnings (including EBW)	590.000	610.000	610.000
AWS investment premium	3.231		
EU projects overheads	637.436	692.939	696.100
Total other income:	1.330.666	1.402.939	1.406.100
Transfer from financial reserves	Budget 2025	Outlook 2026	Outlook 2027
Total income:	3.380.666	3.534.699	3.622.890

# 8. Appendices

- 8.1 Task forces
- **8.2 Expert groups and working groups**
- **8.3 BBMRI-ERIC's European projects involvement**
- 8.4 National Node Directors
- 8.5 Headquarters team overview

#### 8.1 Task forces

Task Forces (TFs) are temporary groups of volunteer colleagues who come together to work on a specific topic until the objectives of that TF are met. These groups rely on in-kind contributions from staff at BBMRI-ERIC National Nodes, affiliated biobanks, partners, and BBMRI-ERIC Expert Centres, drawing on the broader BBMRI community. Once a TF is established, its goals and milestones will be clearly defined in alignment with BBMRI-ERIC's Management Committee. Each TF will have two elected co-chairs, with coordination support available from BBMRI-ERIC Headquarters. Participation in TFs is open to the wider BBMRI community.

#### 8.2 Expert groups & working groups

Continuing in 2025-2027, Expert Groups and Working Groups will serve as platforms for the exchange of ideas, addressing key topics outlined in the Work Programme. These groups are coordinated by the BBMRI-ERIC Headquarters and rely on in-kind contributions from experts at National Nodes and/or project partners. Expert Groups bring together specialists from various fields and are formed or dissolved based on the community's evolving needs, making them more agile than the Task Forces. Their work provides practical, reliable insights, fostering shared expertise across the community. This ultimately leads to the development of recommendations, guidance, best practices, and training materials.

#### 8.3 BBMRI-ERIC's European projects involvement

BBMRI-ERIC is involved in many EU Horizon-funded projects and takes a leading role in four — canSERV, ERIC Forum 2, EvolveBBMRI and INTEGRATE-LMedC. During the 2025-2027 period, it is foreseen that additional project grants will be achieved with the benefit of extending BBMRI-ERIC's value to the wider community whilst providing a mechanism to develop vital research infrastructure hosted services.

Nr.	Project name	BBMRI-ERIC budget (€)	Start date	Description
1	AHEAD	9,200.00	01.01.2025	Creation of a transdisciplinary, diverse and global community dedicated to the ongoing effort of tackling challenges and setting important stan- dards
2	BigPicture	209,000.00	01.02.2021	Central repository of digital pathology slides to support the development of artificial intelligence tools
3	<b>BIOINDUSTRY 4.0</b>	148,468.75	01.01.2023	R&D for the next generation of scientific instru- mentation, tools and methods
4	canSERV (coordinated by BBMRI-ERIC)	3,507,489.06	01.09.2022	European wide research infrastructures, oncology experts, and patient associations team up to battle cancer by providing transnational access to cutting-edge transnational research services
5	CETOCOEN Excellence II	600,000.00	01.01.2020	To create the European Centre of Excellence in Environmental Health Sciences
6	CY-BIOBANK	1,285,815.00	01.10.2019	Towards the Establishment of a Research and In- novation Center of Excellence for Biobanking and Biomedical Research at the University of Cyprus

#### Table: BBMRI-ERIC's European projects involvement

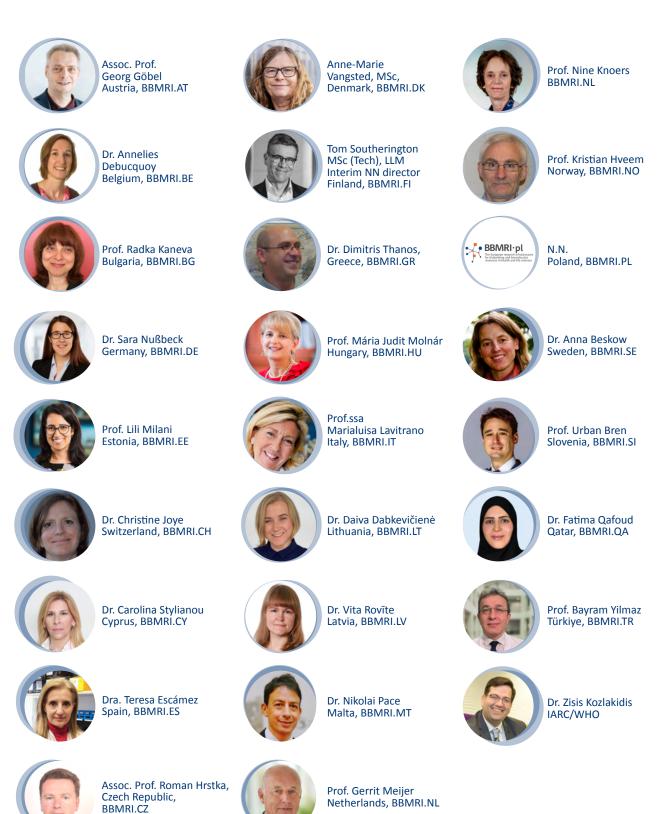
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#### Table: BBMRI-ERIC's European projects involvement (continued)

Nr.	Project name	BBMRI-ERIC budget (€)	Start date	Description
7	DIAMONDS	130,000.00	01.01.2020	To bring personalised medicine into routine use in EU healthcare systems for diagnosis and treat- ment of common infectious and inflammatory diseases
8	EuCanImage	173,425.00	01.10.2020	Building a secure and federated imaging plat- form for next-generation artificial intelligence in oncology
9	EOSC4CANCER	580,500.00	01.02.2022	FAIR and open data sharing in support of cancer research
10	EPND	313,875.00	01.11.2021	A platform for accelerating biomarker discovery and validation to support therapeutics develop- ment for neurodegenerative diseases
11	EPPerMed	399,500.00	01.11.2023	European partnership for personalised medicine
12	ERDERA	111,878.00	01.09.2024	The European Rare Diseases Research Alliance (ERDERA) aims to improve the health and well-being of the 30 million people living with a rare disease in Europe
13	ERIC Forum 2 (coordinated by BBMRI-ERIC)	736,837.50	01.09.2023	Coordination and Monitoring of the European Research Infrastructure Consortia (ERICs)
14	EvolveBBMRI (coordinated by BBMRI-ERIC)	2,683,178.75	01.01.2024	Accelerating datafication for support of EU health priorities, greening of biobanks and integrated approach to "One Health"
15	EUCAIM	505,361.00	01.01.2023	Federated European infrastructure for cancer images data
16	EUCANImage	173,425.00	01.01.2020	A European Cancer Image Platform Linked to Biological and Health Data for Next-Generation Artificial Intelligence and Precision Medicine in Oncology
17	GDI	205,440.00	01.11.2022	Federated European infrastructure for genomics data
18	INTEGRATE- LMedC (coordinated by BBMRI.no)	862,286.25	01.01.2024	Concept development for a research infrastruc- ture to manage, integrate and sustain large medical cohort studies
19	INTERVENE	349,975.00	01.01.2021	Al for Genomics and Personalised Medicine
20	ISIDORe	665,357.50	01.02.2022	Research infrastructure services for rapid research responses to COVID-19 and other infectious disease epidemics
21	PRIM-TECH3R	578,125.00	01.01.2025	PRIM-TECH3R leverages advanced technologies to reduce and refine the use of animal models through standardised protocols and robust vali- dation procedures
22	PROPHET	84,812.50	01.09.2022	PeRsOnalized Prevention roadmap for the future HEalThcare
23	QUANTUM	170,700.00	01.01.2024	Creation of a common label system for Europe that guarantees the quality and utility of datasets for scientific and health innovation purposes
24	<b>RI-SCALE</b>	354,250.00	01.09.2024	Create preconfigured AI frameworks and models on powerful compute resources and unlock full data and AI potential for scientific users, RI oper- ators and industry

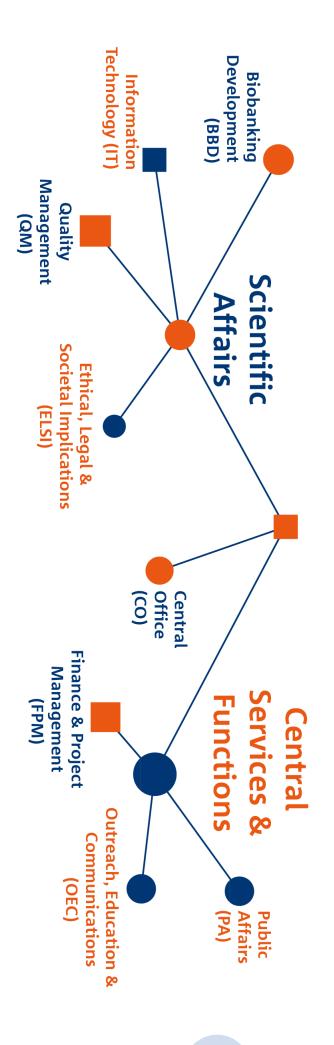
## **8.4 National Node Directors**

BBMRI-ERIC is a distributed research infrastructure with 25 National Nodes – 20 Member and 4 Observer countries plus IARC/WHO. Our current National Node Directors are:



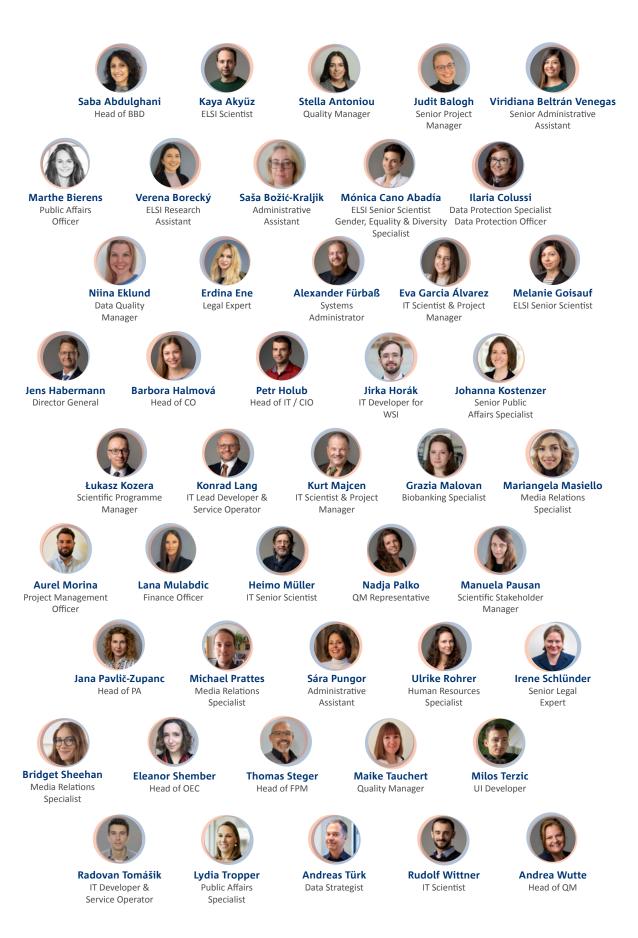
# 8.5 Headquarters team overview

core services departments: The BBMRI-ERIC headquarters, based in Graz, Austria, comprises the following scientific affairs and



#### Meet the BBMRI-ERIC team

The headquarters team is based across Europe. When dealing with us, you may meet:



# Acknowledgements

The BBMRI-ERIC **Work Programme 2025-2027** distils the first three years of the 10-Year Roadmap into a plan of action that has been developed closely with our **HQ team** and **National Nodes**. We would like to express our sincere gratitude to all BBMRI-ERIC Member States and their delegates, who have enabled this process.

The underlying Roadmap has been developed as part of an intensive community engagement and consultation process with our **Member States**, **National Nodes and Biobanks**, **Stakeholder Forum Patients and Citizens' Pillar**, **our Scientific and Ethical Advisory Board** and other key stakeholders.

BBMRI-ERIC Member States Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Estonia, Finland, Germany, Greece, Hungary, Italy, Latvia, Lithuania, Malta, Netherlands, Norway, Poland, Slovenia, Sweden and Switzerland

BBMRI-ERIC Observer States Denmark, IARC/WHO, Qatar, Spain and Türkiye

National Node/HQ Biobank in the Directory BBMRI-ERIC Neue Stiftingtalstrasse 2/B/6 8010 Graz, Austria



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