M-ERA.NET Call 2026

Guide for Proposers

Version 1.0

4 March 2026

This document was developed following the M-ERA.NET policy for joint programming and includes the objectives, topics and procedures for the Call 2026.

The definition of call topics was elaborated by the M-ERA.NET consortium in close cooperation with the Research and Technological Development (RTD) community, including relevant stakeholders.

A systematic approach was deployed introducing a panel of selected experts (”Strategic Experts Group”) to assist the consortium with external expertise.

Contents

Abbreviations:

AI – Artificial Intelligence
CRM - Critical Raw Materials
ERA – European Research Area
HEU – Horizon Europe
LCA - Life Cycle Assessment
PIC – Participant Identification Code
RTD - Research and Technological Development
RRI - Responsible Research and Innovation
SDGs - Sustainable Development Goals
SMEs - Small and Medium Enterprises
SSbD - Safe and sustainable by design
TEA - Techno-Economic Analysis
TRL - Technology Readiness Level

1. Objectives and thematic priorities of Call 2026

1.1 M-ERA.NET mission

M-ERA.NET is a strong network of public funding organisations supporting and increasing the coordination and convergence of national and regional funding programmes related to advanced materials, with the aim of contributing to the objectives of the European Green Deal. Technological innovation is the driving force behind M-ERA.NET's contribution to achieve the environmental and growth objectives necessary for the green transition, supporting the circular economy and the Sustainable Development Goals (SDGs) set in the 2030 Agenda for Sustainable Development by the general assembly of the United Nations.

M-ERA.NET aims to strengthen the European Research Area (ERA) in the field of advanced materials. With annual joint calls M-ERA.NET funds ground-breaking research, facilitates knowledge exchange, promotes sustainable solutions in the field of materials science, and fosters transnational collaboration among researchers, academia, industry and other stakeholders. In addition, efforts are directed towards consolidating strategic programming, reducing fragmentation of funding, engaging in international cooperation and facilitating the exploitation of knowledge along the entire innovation chain.

M-ERA.NET plays a pivotal role in aligning national and regional priorities with industry needs, European policy priorities and global challenges. The initiative emphasises a holistic approach to product development, addressing challenges at the design, materials and manufacturing levels. This includes improving durability, reducing energy and material consumption, substituting hazardous materials and developing products that are lighter, easier to maintain, repair, upgrade, remanufacture or recycle. The programme also welcomes strategies and materials development aimed at mitigating health risks and reducing plastic waste. Furthermore, M-ERA.NET promotes digitalisation and materials modelling to tailor material properties, optimise production processes, and establish uniform data structures for seamless collaboration. Addressing climate challenges, the initiative supports research on efficient energy harvesting, storage devices, and high-performance, environmentally friendly batteries. Overall, M-ERA.NET catalyses progress in materials research, driving advancements in functional materials, composites, surfaces, coatings and interfaces to shape sustainability and competitiveness in key industrial sectors.

1.2 Horizontal objectives

Horizontal aspects must be integrated into the project's concept, expected outcomes, and delivery strategy. Their implementation should be evidenced through concrete measures, clearly assigned responsibilities, and verifiable deliverables.
The horizontal objectives for the Call 2026 are:

Supporting the European Green Deal by increasing attention to clean energy technologies and future batteries:
M-ERA.NET aims to strengthen the contribution of materials RTD for clean energy-related applications, energy harvesting, energy storage (battery technologies), electrolysers and fuel cells. M-ERA.NET will support the transition towards a circular economy by addressing aspects like eco-design, design for recycling, durability of products and process efficiency through reduced energy and materials consumption, resulting e.g. in light-weight products.

Supporting the achievement of the United Nations' SDGs:
M-ERA.NET will contribute to a wider public debate on the impact of materials research and its potential to achieve the SDGs. In particular, M-ERA.NET will support SDG 6 ("Clean water and sanitation") through the development of materials and processes for water treatment, SDG 7 ("Affordable and clean energy") through fostering research on sustainable energy storage technology, SDG 9 ("Industrial innovation and infrastructure") by upgrading the technological capabilities of industrial sectors and SDG 12 ("Ensure sustainable consumption and production patterns") through an environmentally sound management of natural resources and reduced waste generation.

Creating socio-ecological benefits in the context of Responsible Research and Innovation (RRI):
M-ERA.NET joint calls will address EU areas of socio-ecological relevance, illustrating the leveraging effects materials research and innovation have on areas that reflect meaningful societal needs. M-ERA.NET will develop responsible research and innovation processes to systematically address socio-ecological, ethical and political dimensions of material research, development and use. Please refer to the topic descriptions and the M-ERA.NET RRI guidelines

Supporting the innovation chain, strengthening interdisciplinarity and widening:
Making the best use of the interdisciplinary network, M-ERA.NET joint calls will facilitate the generation of knowledge along the innovation chain, from excellent science and research to innovative industrial applications. M-ERA.NET as a platform uses an integrative approach across disciplines and across application fields, making the initiative an attractive and efficient tool for transnational joint projects that were unlikely to be realised before. Measures to ensure gender balance in the project consortia should also be considered.

Digitalisation and data management

M-ERA.NET aims to integrate digital technologies and data management frameworks to accelerate technological transfer to the market. Inclusion of digital tools and data spaces from design to validation are encouraged. An open operability and data sharing secure approach will encourage international cooperation in the field. In line with the principle “as open as possible, as close as necessary” it will ensure the provision of FAIR (Findable, Accessible, Interoperable and Reusable) results and supporting the need for uniform data structures, uniform data processing (exchange, evaluation, further processing) and uniform concepts for handling materials data in the so-called digital workflows across all borders. Special attention will be given to ethical considerations, security measures, and fostering inclusivity to ensure responsible and impactful digital transformation

1.3 Thematic priorities

The following six topics are defined for the Call 2026:

1. **Materials for energy storage and distribution systems**
2. **Materials for energy conversion**
3. **Innovative surfaces, coatings and interfaces**
4. **Innovative functional materials with defined architectures**
5. **Materials addressing environmental challenges**
6. **Next generation materials for electronics**

1.3.1 Topic 1: Materials for energy storage and distribution systems

Technical Content and Scope

The scope covers innovative materials, devices and systems that store and distribute any kind of energy (electrical, chemical, mechanical, thermal energy, among others). It encompasses materials for stationary energy storage systems, as well as materials that enable the safe and efficient transport of energy carriers.
This topic addresses the development of advanced materials for energy storage and distribution prioritizing sustainability, durability, reduced degradation phenomena, manufacturability, easy disassembly, recyclability and reduced reliance on critical raw materials. Such advancements should enhance the resilience, safety and circularity of Europe's low-carbon energy systems.

Additional aspects considered are: Life Cycle Assessment (LCA), Techno-Economic Analysis (TEA), digital supported methodologies (e.g. Artificial Intelligence (AI), multiscale modelling, machine learning (ML), etc.) needed for accelerated materials design, discovery and optimisation for energy applications. These methodologies, together with experimental high throughput screening of materials, are expected to save time and cost versus traditional trial and error approaches.

Objectives

The objective of this topic is to develop innovative materials to enable new and cleaner energy storage and distribution. The proposals shall address at least one of the following items:

- Materials for safe and sustainable by design (SSbD) energy storage and energy distribution.
- Materials for short, medium and long duration thermal energy storage.
- Materials for medium, and long duration energy storage.
- Novel materials-based concepts for energy carriers storage and distribution (e.g. . H_2, NH_3, heat, power transmission, etc.).
- Novel material-based concepts for hybrid energy storage connecting different technologies
- Improved active materials and electrolytes for high capacity and long cycling batteries and also beyond Li-ion batteries (e.g., metal-sulfur, metal-air and post Li-ion), as well as for Vanadium-free redox-flow batteries for stationary applications.
- Usage of recycled or secondary materials in functional layers of storage and distribution systems, with evaluation of performance, sustainability and manufacturability.
- Development of surface engineering and protection strategies and research in corrosion mechanisms in materials exposed to corrosive atmospheres, including the

development of novel testing methods and identification of degradation pathways applied to energy storage and distribution systems.
- Development of risk-based analysis for material selection, durability, low degradation in energy storage and energy carrier transport systems.

Cross-cutting aspects

Inclusion of one or more of the following cross-cutting aspects would be considered a strength:

- Development of additive manufacturing (AM) strategies for advanced energy storage and distribution systems that enable the production of tailored architectures with improved performance and reduced waste.
- Multiscale and data-driven modelling including AI and ML tools to develop and optimise materials for energy storage and distribution.
- Substitution of Critical Raw Materials (CRM) and/or hazardous materials in new energy storage and distribution systems, products or processes.
- Materials processing with high sustainability and lower costs, to improve energy optimization through flexible design for repurposing and recycling.

These aspects could be further enhanced by fostering collaboration between academia, civil society, industry, and other relevant stakeholders, thereby strengthening the whole innovation chain.

Expected impact

Proposals should address how they will contribute to the expected impact of the topic, addressing at least one of the following aspects:

- The proposed research should lead to energy storage and distribution systems with higher efficiency, improved overall performance and lower cost.
- In the field of energy storage, progress is expected through increases in, among others and not limited to, energy and power density, safety, cyclability, volumetric and gravimetric energy density, capacity and stability.
- For distribution systems, the proposed research should foster advanced systems that enable efficient, flexible, and resilient management of energy flows across multiple sources and/or storage units.
- Improvement of sustainability and reduced carbon footprint in particular considering energy consumption in the overall proposed processes.
- Improved openness and interconnectivity within the community; by providing open access to accrued raw data and metadata, allowing for comparisons between project results, cooperation between related research groups and possibly contribution to standardization efforts.
- Improvement of reusability and interoperability in developed software.

The proposal impacts should be substantiated with key performance indicators. All proposals should clearly state the Technology Readiness Level (TRL) at the project start and at the project end. The proposals should include a plan for the transition to higher TRLs at a later stage (i.e. beyond the project end date). Establishing an industrial and societal advisory board or the participation of one or more companies in the project consortium is encouraged.

Sustainability and RRI requirements

M-ERA.NET requires that all proposers explain how their projects demonstrate a commitment to RRI by investigating and addressing the environmental, social, ethical, political, or cultural dimensions of the proposed research.

In line with the M-ERA.NET RRI annex, proposals should consider the following points:

- Resources: the use of resources overall, the environmental properties of the materials, the use of critical raw materials, energy, water, etc.
- Green-production-processes: use of environmentally friendly solvents, avoiding hazardous elements, substances of concern, minimizing energy and water consumption during production and preserving worker's health.
- Use phase: the sustainability of the conditions under which the material can be used (continuous energy use, releases to the environment, life span, etc.).
- End of life: the entry of the material into the circular economy, including re-use, remanufacturing or recycling considerations.
- Involvement of relevant societal stakeholders as appropriate.

Proposals should describe potential trade-offs between sustainability burdens and benefits, and include an activity where relevant aspects are further investigated, potentially with corresponding impacts on the design of the material(s).

Target groups

This topic is targeted at all groups in the innovation chain: disruptive, applied research, industrial research and development. In proposals targeting TRL 4 and higher, industrial partners and at least one project partner specialised on customer or end-user demands should be involved in the project consortium. Collaboration between research entities and industrial partners is encouraged also at lower TRLs.

Keywords

Projects submitted to this topic should choose at least **3** keywords from the following list:

Aqueous batteries; Artificial intelligence for materials discovery; Battery materials; bio-based materials; Ceramic heat storage; CRM reduction / replacement / substitution;

Electrochemical energy storage; Energy distribution; Energy efficiency; Energy storage;; Energy carriers distribution; Energy carriers storage; Hybrid energy storage, Long duration energy storage; Materials safety; Membranes Next-generation batteries; Phase change materials; Post lithium ion batteries; Recycled Materials; Redox-flow batteries; Second-life materials; Solid sorbent; Supercapacitors, Superconductors, Thermal storage; Thermochemical materials.

General keywords (KWs) (such as Additive manufacturing / 3D printing; Durability; Nanomaterials; Recyclability…) and Additional KWs (free text) can also be chosen in the submission platform. The ensemble of the keywords should allow for an overview of the scope of the project (consider describing different aspects of the project such as: main scientific area / domain, system / property / material of interest, applications / objectives and pertinent procedures / techniques).

Indicative TRL range: 2-6

1.3.2 Topic 2: Materials for energy conversion

Technical Content and Scope

This topic supports the development and deployment of advanced materials and processes that accelerate the energy transition across generation, conversion and mobility. Projects should bring together materials discovery (including *in silico* and high-throughput screening), novel active components for electrolyzers, fuel cells and photovoltaics, and disruptive concepts for energy harvesting (photoelectrochemical, thermoelectric, triboelectric, piezoelectric, etc). Emphasis is placed on substituting critical and hazardous raw materials, designing lightweight solutions for clean mobility, and creating scalable, low-impact routes for sustainable e-fuels. Circularity is embedded via measurable strategies for disassembly, recovery and second-life use, ensuring that technological advances translate into demonstrable environmental and socio-economic benefits.

Objectives

The proposals should address at least one of the following objectives:

- Development of materials for electrolyzers and fuel cells.
- Optimization of active materials for photovoltaics.
- Investigation of new material concepts for efficient energy harvesting, including wind energy, hydroelectric energy, ocean energy, thermoelectric, triboelectric, piezoelectric, chemical, photothermal, photoelectrochemical, thermionic, bioenergy, or other technologies.
- Application of innovative materials and processes for sustainable e-fuels production (e.g. ammonia, biodiesel, sustainable aviation fuels (SAF)…).
- Development of lightweight materials for clean mobility.

Cross-cutting aspects

Inclusion of one or more of the following cross-cutting aspects would be considered a strength:

- *In situ* and/or *in operando* experimental data mining.
- Implementation of *in silico* and/or high-throughput screening approaches for new energy conversion materials. The development of these tools, that include Machine Learning (ML) approaches, will be positively considered if properly integrated within the project.
- Reduction and replacement of Critical Raw Materials (CRM) and/or hazardous materials with alternative new materials in energy related products or processes

- Improving the circularity of energy conversion materials and processes (*e.g.* dissembling, recovery, second-life, sustainable-by-design…) by using measurable approaches.
- Proposals are sought that deliver demonstrable added value to the field of materials standardisation; substantiated by clear, measurable impacts and documented engagement with pertinent standardisation bodies.
- Development of additive manufacturing (AM) strategies for advanced energy conversion that enable improved performance and reduced waste.

Project implementation could be further enhanced by fostering collaboration between academia, society, industry, and relevant stakeholders to strengthen the whole innovation chain.

Expected impact

Proposals should address how they will contribute to the expected impact of the topic, addressing at least two of the following aspects:

- Improvement of energy conversion devices in terms of overall performance and longer lifetime.
- Reduction of transport emissions via the development of e-fuels and/or lightweight materials through the integration into vehicles (increasing power-to-weight ratio).
- Progressive substitution of CRMs and toxic components with abundant, safer alternatives that lowers the supply-chain risk across designing, manufacturing and end-of-life.

All proposals should clearly state the TRL at the project start and at the project end (see 1.5.). The proposals should include a plan for the transition to higher TRLs at a later stage (i.e. beyond the project end date). Establishing an industrial and societal advisory board or the participation of one or more companies in the project consortium is encouraged. In proposals targeting TRL 4 or above, industrial partners and at least one project partner specialised on customer or end-user demands should be involved in the project consortium.

Sustainability and RRI requirements

M-ERA.NET requires that all proposers explain how their projects demonstrate a commitment to RRI by investigating and addressing the environmental, social, ethical, political, or cultural dimensions of the proposed research:

In line with the M-ERA.NET RRI annex, proposals should consider the following points:

- Resources: the use of resources overall, the environmental properties of the materials, the use of critical raw materials, energy, water, etc.

- Green-production-processes: use of environmentally friendly solvents, avoiding hazardous elements, substances of concern, minimizing energy and water consumption during production and preserving worker's health
- Use phase: the sustainability of the conditions under which the material can be used (continuous energy use, releases to the environment, life span, etc.)
- End of life: the entry of the material into the circular economy, including re-use, remanufacturing or recycling considerations. Describe any potential trade-offs between sustainability burdens and benefits.
- Involvement of relevant societal stakeholders as appropriate. Describe any potential trade-offs between sustainability burdens and benefits.

Proposals should describe potential trade-offs between sustainability burdens and benefits, and include an activity where relevant aspects are further investigated, potentially with corresponding impacts on the design of the material(s).

Target groups

This topic is targeted at all groups in the innovation chain: disruptive, applied research, industrial research and development. In proposals targeting TRL 4 and higher, industrial partners and at least one project partner specialised on customer or end-user demands should be involved in the project consortium Collaboration between research entities and industrial partners is encouraged at lower TRLs.

Keywords

Projects submitted to this Topic should choose at least **3** keywords from the following list:

Circularity of materials and devices; Clean mobility; CRM substitution; Devices stability; Electrolysers; Energy efficiency; E-fuels; Fuel cells; Hydroelectric energy; Lightweight materials; Life Cycle Assessment (LCA); Modelling / Simulations; Ocean energy; Photovoltaics; Piezoelectric materials; Power to X; Thermoelectric; Triboelectric (X-electric); Wind energy.

General keywords (KWs) (such as Additive manufacturing / 3D printing; Durability; Nanomaterials; Recyclability…) and Additional KWs (free text) can also be chosen in the submission platform. The ensemble of the keywords should allow for an overview of the scope of the project (consider describing different aspects of the project such as: main scientific area / domain, system / property / material of interest, applications / objectives and pertinent procedures / techniques).

Indicative TRL range: 2-5

1.3.3 Topic 3: Innovative surfaces, coatings and interfaces

Technical Content and Scope

Surface and coating technologies are key enablers for new solutions across numerous industrial sectors worldwide. This call will stimulate application-driven development of innovative surfaces, thin films, coatings, interfaces, and related process technologies. The scope covers a broad spectrum of industry needs and applications, in various fields (e.g. health, transport, construction, packaging, energy, electronics, etc.).

Projects that increase the synergy between industry and academia are encouraged. Potential topics include, but are not limited to: stimuli-responsive and adaptive coatings, catalytic properties, adhesive properties, optical, electrical and magnetic surface properties, surfaces with antimicrobial properties, biocompatibility, anti-icing, anti-slip, anti-wear, changing stress distribution, anticorrosion, self-healing properties, thermal barrier and high-temperature coatings applications, tribological coatings and/or surface modification for energy saving and/or noise mitigation and barrier coatings.

The proposals should consider the energy efficient development, processing or production aspects including modelling and circular economy. Safe and sustainable processing, use of materials in an environmentally friendly manner with special attention to critical raw materials (CRM) and recyclability should be considered.

Objectives

The proposals should address at least one of the following items:

- Development and optimization of advanced surfaces technologies and multifunctional coatings, including thin films, interfaces and/or interphases.
- Development of surface texturing to achieve targeted performance
- Development of surface modification and recovery by additive manufacturing
- Development of new or improved processing technologies considering circular economy (repair, reuse, recycle) and energy efficiency to enable deposition of new coatings and/or surface modification
- Development of thin films and coatings for sensing applications, including biosensing
- Engineered functional interfaces between artificial and biological systems.
- Surfaces based on engineered living materials

Cross-cutting aspects

Inclusion of one or more of the following cross-cutting aspects would be considered a strength:

- Considering aspects such as mechanistic understanding and experimental verification of the novel properties of the developed material or device. Where relevant, including prototyping, up-scaling, and manufacturing, with validation and demonstration in a relevant operational environment with a view to end-user applications
- Addressing complementary characterisation techniques (including New Approach Methods (NAMs)) and/or, where relevant, modelling techniques, AI and Machine Learning (ML).
- Development of in-lab protocols to replicate the failure mechanism of the surface/coating interface in order to predict and improve lifetime and formulate future standards.
- Addressing the impact of how coatings and/or thin films on the recyclability of the core material
- Ensuring relevance for different links in the value chain by stating clear concepts for application(s) in targeted industrial sector(s).
- Including (in accordance with the project's scope and ambition) lifecycle, environmental, economic, and/or social assessments to address sustainability

Expected impact

Proposals should address how they will contribute to the expected impact of the topic, addressing at least two of the following aspects:

- Innovative energy-efficient process technologies for interface optimisation, coating development and application, as well as surface modification
- Availability of high-end components, products with tailored properties or functionalities by innovative surfaces, coatings and interfaces. All addressed technologies and/or products should ensure having a minimal negative impact on health and safety
- Achieving a positive ecological outcome and improved energy performance by developing processes, coating materials, and thin film technologies following a circular economy and CRM strategies in accordance with SDG 7 (affordable and clean energy)
- Innovative products or technologies with tailored properties or functionalities enabled by innovative surfaces, coatings and interfaces, that generate positive societal impacts, on e.g. safety, economic, competitiveness employment, quality of life, and avoid the release of hazardous substances
- The possibility to develop innovative characterization protocols as guidelines for future standards

The proposal impact should be substantiated with key performance indicators. All proposals should address environmental aspects, including reuse, remanufacturing or recycling considerations, and broader social or ethical impacts, when relevant. All proposals should clearly state the TRL at the project start and at the project end. The proposals should include a plan for the transition to higher TRLs at a later stage (i.e. after the project end date). Establishing an industrial and societal advisory board or the participation of one or more companies in the project consortium is encouraged.

Sustainability and RRI requirements

M-ERA.NET requires that all proposers explain how their projects demonstrate a commitment to RRI by investigating and addressing the environmental, social, ethical, political, or cultural dimensions of the proposed research.

In line with the M-ERA.NET RRI annex, proposals should consider the following points:

- Resources: the use of resources should be considered at design phase, to minimize or substitute the use of harmful materials for the health and environment, or the use of critical raw materials.
- Green-production-processes: use of environmentally friendly solvents, avoiding hazardous elements, substances of concern, minimizing energy and water consumption during production and preserving worker's health.
- Use phase: the reduction of energy consumed or wear during use phase, the sustainability of the conditions under which the material can be used (avoiding wear and releases to the environment, increasing life span, etc.)
- End-of-life: the entry of the material into the circular economy, including repairing, reuse, remanufacturing or recycling considerations.
- Involvement of relevant societal stakeholders as appropriate.

Proposals should describe potential trade-offs between sustainability burdens and benefits, and include an activity where relevant aspects are further investigated, potentially with corresponding impacts on the design of the material(s).

Target groups

This topic is targeted at all groups in the innovation chain: basic research, applied research, industrial research, as well as at the end-user industry. The topic is particularly suitable for the establishment of a strong collaboration between research entities and industry, including Small and Medium Enterprises (SMEs). . Interdisciplinary/transdisciplinary projects along the value chain are encouraged and should enable a broader cross-sectorial use. In proposals targeting TRL 4 and higher, industrial partners and at least one project partner specialised on customer or end-user demands should be involved in the project consortium.

Collaboration between research entities and industrial partners is encouraged also at lower TRLs.

Keywords

Projects submitted to this Topic should choose at least **2** keywords from the following list:

Adaptive coatings; Adhesive properties; Advanced coatings; Anticorrosion; Anti-icing; Antimicrobial surfaces; Anti-slippery; Anti-wear; Barrier coating; Bio-based or Bioinspired coatings; Biocompatibility; Bio-interfaces; Biomimetic surfaces; Catalytic properties; Energy saving; Functionalisation; High temperature coating applications; Innovative surfaces; Interfaces; Interphases; Modelling / simulations; Multifunctional coatings; Nano-engineered coatings; Noise mitigation; Optical, Electrical and magnetic surface properties; Residual stresses; Self-healing properties; Sensing surfaces; Smart coatings; Structured surfaces; Surface characterisation techniques; Surface modification by Additive Manufacturing; Surface technologies; Textured surfaces; Thermal barrier; Thin films; Tribological coatings; Tribology; Upscaling of surface treatments;.

General keywords (KWs) (such as Additive manufacturing / 3D printing; Durability; Nanomaterials; Recyclability…) and Additional KWs (free text) can also be chosen in the submission platform. The ensemble of the keywords should allow for an overview of the scope of the project (consider describing different aspects of the project such as: main scientific area / domain, system / property / material of interest, applications / objectives and pertinent procedures / techniques).

Indicative TRL range: 2 – 7

1.3.4 Topic 4: Innovative functional materials with defined architectures

Technical Content and Scope

The scope of topic 4 encompasses the development of materials and material systems possessing defined architectures (in terms of scale, complexity, hierarchy, arrangement, hybrid or (nano)composite structures, etc.), which confer specific characteristics (mechanical, physical, thermal, chemical, electromagnetic, optical, biological, etc.) leading to desired functionalities.

Examples of functionalities include (but are not limited to) conductivity, transport characteristics, reactivity, adaptability, bio-integration, enhanced structural performance, stimuli-responsive behaviour, etc. Projects may address the design, synthesis, processing (including additive manufacturing) and integration of these materials into functional components. Smart systems with sensing, actuation, adaptive or self-healing capabilities, materials for extreme environments, and novel lightweight solutions are within the scope.

Notwithstanding the above, proposals primarily targeting clean mobility or focused on application areas covered in other topics must be submitted to those topics. Proposals should also consider the transversal aspects listed below.

Objectives

The overall objective of this topic is to develop innovative materials with structural, optical, magnetic, electrical or thermal responses for functions across sensing, health, and/or structural applications (e.g. self-healing materials, low dimensional materials enabling novel functions, bio-based materials, catalyst materials, photonics materials). Some specific examples include:

- Design of metamaterials, heterostructures, hierarchical structures or topologies with unconventional responses.
- Development of smart materials (textiles, composites, packaging materials, etc.) that include sensing, detection, self-monitoring, adaptation or actuation functions.
- Development of biocompatible, antimicrobial or bioactive materials / materials architectures for healthcare or agricultural applications.
- Design of materials for smart, energy efficient, and / or sustainable buildings and construction (thermal insulation, thermal management, alternative materials, etc.).
- Design of materials for efficient separation, liquid / gas purification and storage.
- Development of advanced composites, lightweight and hybrid materials with enhanced strength- or stiffness-to-weight ratios and / or functionalities.
- Enhanced durability of materials under harsh or extreme conditions (impact, combustion, high temperatures, pressures, radiation, aggressive media, etc.).

Cross-cutting aspects

Inclusion of one or more of the following cross-cutting aspects would be considered a strength:

- New strategies to replace toxic or critical raw materials (CRM)
- Application of green, safe and sustainable fabrication techniques
- Improved end-of-life strategies: separation, repairability, disassembly and recyclability
- Development of scalable processing routes to ensure cost-effective manufacturability and application-specific integration
- Development of additive manufacturing (AM) strategies to produce tailored architectures with improved performance and reduced waste
- Use of computational modelling / simulation, artificial intelligence (AI), machine learning (ML), or advanced data management tools to accelerate materials design, behaviour prediction, characterization, development, manufacturing or system optimisation

Expected impact

Proposals should address how they will contribute to the expected impact of the topic, addressing at least two of the following aspects:

- Support European industry through technological developments addressing unmet needs.
- Enhance competitiveness by improving performance, reducing costs, optimising production processes, or supporting sustainability and circular economy.
- Strengthen European research efforts and workforce training focused on functional materials that address new societal and industrial challenges.
- Improve citizens' well-being by providing sustainable functional materials enabling more powerful technological solutions.

The proposal impacts should be substantiated with key performance indicators. All proposals should clearly state the TRL at the project start and at the project end. The proposals based on original and innovative approaches may start with TRL 1. The proposals should include a plan for the transition to higher TRLs at a later stage (i.e., beyond the project end date). Those projects could include an LCA elaborated in collaboration with the industrial partners.

Sustainability and RRI requirements

M-ERA.NET requires that all proposers explain how their projects demonstrate a commitment to RRI by investigating and addressing the environmental, social, ethical, political, or cultural dimensions of the proposed research.

In line with the M-ERA.NET RRI annex, proposals should consider the following points:

- Resources: use of resources overall, the environmental properties of the materials, the use of critical raw materials, energy, water, etc.
- Green-production-processes: use of environmentally friendly solvents, avoiding hazardous elements, substances of concern, minimizing energy and water consumption during production and preserving worker's health
- Use phase: sustainability of the conditions under which the material can be used (releases to the environment, life span, etc.).
- End-of-life: entry of the material into the circular economy, including re-use, re-manufacturing or recycling considerations.
- Involvement of relevant societal stakeholders as appropriate

Proposals should describe potential trade-offs between sustainability burdens and benefits, and include an activity where relevant aspects are further investigated, potentially with corresponding impacts on the design of the material(s).

Target groups

This topic is targeted at all groups: disruptive research, applied research, industrial research and development. In proposals targeting TRL 4 and higher, industrial partners and at least one project partner specialised on customer or end-user demands should be involved in the project consortium. Collaboration between research entities and industrial partners is encouraged at lower TRLs.

Keywords

Projects submitted to this topic should choose at least **3** keywords from the following list:

2D materials; Acoustic properties; Additive manufacturing; Bio-based materials; Biocompatible; Biological applications; Bio-mimetic; Carbon fibres; Casting; Catalysis; Ceramic matrix composite; Concrete; Controlled release; Construction / building materials; Covalent adaptable network; Degradability; Eco-design; Elastomer; Electrical properties; Electro- / photochromic materials; Energy-efficient processes; Fibre; Filler; Fire safety; Geopolymer; Healthcare; Heterostructures; Innovative alloys; Joining; Laser processing; Low-dimensional materials; Magnetic properties; Mechanical properties; Membranes; Metal matrix composite; Metal-organic frameworks; Metamaterials; Modelling / simulations; Nanomaterials; Natural materials; Networks / gels; Optical properties; Photonic properties;

Piezo- materials; Plasma processing; Plasmonics; Polymer matrix composite; Polymers; Porous materials; Printing; Processing technologies; Quantum materials; Recyclability; Safe and Sustainable by Design (SSbD); Self-healing; Sensing; Solvent-free processing; Thermal properties; Thermoplastic; Thermoset; Topological structures; Triboelectric; Tribological properties; Upcycling; Weight reduction / lightweighting.

General keywords (KWs) (such as Additive manufacturing / 3D printing; Durability; Nanomaterials; Recyclability…) and Additional KWs (free text) can also be chosen in the submission platform. The ensemble of the keywords should allow for an overview of the scope of the project (consider describing different aspects of the project such as: main scientific area / domain, system / property / material of interest, applications / objectives and pertinent procedures / techniques).

Indicative TRL range: 1-5

1.3.5 Topic 5: Materials addressing environmental challenges

Technical Content and Scope

The topic will support the transition towards a circular economy by addressing design, synthesis, shaping, production, use and recovery of advanced materials covering: SSbD materials; biodegradable and bio-based materials; substitution or reduction of hazardous substances, fossil-based and/or critical materials; sensing and removal of hazardous substances; materials recycling.

The reduction of resources consumption and waste generation and improved materials recyclability, in accordance with a sustainable development, is becoming a necessity related to decarbonization, circular economy and environmental protection.

Objectives

Proposals should develop and/or integrate new materials, advanced processing routes and digital technologies, all along the value chain, to enable more efficient and safer approaches tackling environmental challenges. These innovations should target sustainable solutions in environmental applications, addressing at least one of the following areas:

- SSbD, also including:
  - product and material life extension (self-healing; reparability, etc.)
  - resource optimization (materials; water; energy, etc.)
  - waste reduction and/or valorisation
  - life cycle perspective
  - prediction assessment (failure, risk reduction, etc.)
- Biodegradable, bio-based materials including:
  - biodegradable polymers, fibers, composites, etc.
  - new (bio)chemical processes that reduce sources of (nano/micro)plastic (e.g. for packaging, in agriculture, etc.)
- Substitution or reduction of hazardous substances, fossil-based and/or critical materials, e.g. alternative to per- and polyfluoroalkyl substances (PFAS)
- Advanced materials for sensing and removal of hazardous substances from air, water or soil
- Clean and efficient materials recycling
  - designed for easy dismantling and sorting
  - clean recovery and recycling technologies (reduce hazardous side-streams from recycling, e.g. use of alternative solvents)
  - use of European secondary materials sources to reduce the dependency on imported materials and to limit supply risks (recycled materials with processing compatibility with first use materials, etc.)

Cross-cutting aspects

Inclusion of one or more of the following cross-cutting aspects would be considered a strength:

- Additive manufacturing for sustainable production and resource efficiency
- Methodologies supported by digitalization (e.g. computational modelling, artificial intelligence, machine learning, etc.)
- Strengthening the whole innovation chain covering materials processing, application, and recycling. Such integration could be further enhanced by fostering collaboration between academia and industry, and by a consortium covering the whole circular value chain and life-cycle.
- Assessment of the project´s economical, environmental, societal and safety impacts.

Expected impact

Proposals should address how they will contribute to the expected impact of the topic, addressing at least two of the following aspects:

- Increased material circularity.
- Sustainable and cost-efficient production methods (synthesis, processing, recycling) for high quality materials and components.
- Less pollution of water / air / soil.
- Contribution to zero-waste objectives by reducing waste generation and improving its valorisation.
- Increased substitution of fossil-based materials (e.g. with bio-based materials), of CRM and of materials with hazardous components.

The aim is to increase the European competitiveness by offering sustainable, safe, energy efficient and low carbon materials production and recycling technologies that enable the creation of new business opportunities and models for the EU industry.

The proposal impacts should be substantiated with key performance indicators. All proposals should clearly state the TRL at the project start and at the project end. The proposals should include a plan for the transition to higher TRLs at a later stage (i.e., beyond the project end date). Establishing an industrial and societal advisory board or the participation of one or more companies in the project consortium is encouraged, as well as considering the inclusion of a societal stakeholder.

Sustainability and RRI requirements

M-ERA.NET requires that all proposers explain how their projects demonstrate a commitment to RRI by investigating and addressing the environmental, social, ethical, political, or cultural dimensions of the proposed research:

In line with the M-ERA.NET RRI annex, proposals should consider the following points:

- Resources: the use of resources overall, the environmental properties of the materials, the use of critical raw materials, energy, water, etc.
- Green-production-processes: use of environmentally friendly solvents, avoiding hazardous elements, substances of concern, minimizing energy and water consumption during production and preserving worker's health
- Use phase: the sustainability of the conditions under which the material can be used (continuous energy use, releases to the environment, life span, etc.).
- End of life: the entry of the material into the circular economy, including, repairing, re-use (second life), re-manufacturing or recycling considerations.
- Inclusion of relevant societal stakeholders as appropriate.

Proposals should describe potential trade-offs between sustainability burdens and benefits, and include an activity where relevant aspects are further investigated, potentially with corresponding impacts on the design of the material(s).

Target groups

This topic is targeted at all groups in the innovation chain: disruptive, applied research, industrial research and development. In proposals targeting TRL 4 and higher, industrial partners and at least one project partner specialised on customer or end-user demands should be involved in the project consortium. Collaboration between research entities and industrial partners is encouraged also at lower TRLs.

Keywords

Projects submitted to this Topic should choose at least **2** keywords from the following list:

Air treatment; Bio-based materials; Biodegradation; Circularity; CRM substitution; Degradable materials; Emerging pollutants; Hazard materials substitution; Life Cycle Assessment (LCA); Material life extension; Material recyclability; Product life extension; Safe and Sustainable by Design (SSbD); Soil treatment; Sustainable processing; Waste recycling; Waste reduction; Wastewater treatment; Water conditioning.

General keywords (KWs) (such as Additive manufacturing / 3D printing; Durability; Nanomaterials; Recyclability…) and Additional KWs (free text) can also be chosen in the submission platform. The ensemble of the keywords should allow for an overview of the scope of the project (consider describing different aspects of the project such as: main scientific area / domain, system / property / material of interest, applications / objectives and pertinent procedures / techniques).

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General keywords (KWs) (such as Additive manufacturing / 3D printing; Durability; Nanomaterials; Recyclability…) and Additional KWs (free text) can also be chosen in the submission platform. The ensemble of the keywords should allow for an overview of the scope of the project (consider describing different aspects of the project such as: main scientific area / domain, system / property / material of interest, applications / objectives and pertinent procedures / techniques).

Indicative TRL range: 2-6

1.3.6 Topic 6: Next Generation Materials for Electronics

Technical Content and Scope

Disruptive evolution of electronics always came together with the development and integration of advanced materials, illustrating the transformative potential of materials in our daily life. The European Union is aware of the need of creating a diverse and dynamic microelectronics ecosystem and, at the same time, is concerned about the sustainability challenges related to deploying electronics applications like high-rate tele-/data-communications (5G, 6G connectivity), Internet of Things (IoT), Industry 4.0, AI or Advanced Computing, that will require a huge production of electronic components, absorb an increasing amount of energy, and rely on imported critical raw materials. This challenge also opens a window of opportunity to research and design the next generation of materials for sustainable electronics, delivering improved performance and energy efficiency. At the same time, these materials and processing routes can reduce electronic waste and enhance the recyclability of the electronic components, moving towards greener production processes. This aligns with the Green Deal that seeks to accelerate technological progress by reducing the carbon footprint and promoting a circular economy.

The topic supports proposals on materials research and its application, with special focus on specific properties for electronics, including sensors and SSbD materials modelling.

Objectives

Proposals should address at least one of the following items:

- Materials complementary to silicon electronics (low-dimensional materials, 2D materials, hybrid heterostructures, topological materials, etc.)
- Materials for sensors and sensor arrays, and their actuators, transducers, processors
- Materials for thermal management in electronics
- Wearable, flexible, stretchable, organic and/or conformable materials for responsible electronics
- Implantable, ingestible and bioresorbable materials for sensing.
- Materials for ultralow-power memories and electronics
- Materials for high-power electronics (GaN, GaxOy, SiC, C, etc.)
- Materials for More-than-Moore electronics (spintronics, orbitronics, valleytronics, etc.)
- Materials for optoelectronics, photonics and integrated photonics (for tele/data-com, quantum communications, sensing, etc.)
- Substitution of hazardous or critical raw materials, reduced carbon footprint and green electronics

Cross-cutting aspects

Inclusion of one or more of the following cross-cutting aspects would be considered a strength:

- High throughput manufacturing approaches for electronic components (printing technologies, additive manufacturing techniques, laser-induced processes, etc.).
- The consideration of SSbD materials.
- Where relevant, the integration of computational modelling, artificial intelligence (AI), machine learning (ML), and advanced data management tools to accelerate materials design, modelling, characterization, development and system optimisation.

Expected impact

Proposals shall address how they will contribute to the expected impact of the topic, addressing at least two of the following aspects:

- New electronic materials enabling sustainable economic growth and technological sovereignty.
- Development of new technologies for electronics to solve societal challenges and improve quality of life in a wide range of applications (e.g., human-machine interface, health management, environment monitoring, precision agriculture, energy and mobility, tele-/dat-communications, etc.).
- Reduction of the carbon footprint and critical raw material content of the materials used in the developed technologies.

The proposal impacts should be substantiated with key performance indicators. All proposals should clearly state the TRL at the project start and at the project end. The proposals based on original and innovative approaches may start with TRL 1. The proposals should include a plan for the transition to higher TRLs at a later stage (i.e., beyond the project end date). Establishing an industrial and societal stakeholder advisory board or the participation of one or more companies in the project consortium is encouraged.

RRI requirements

M-ERA.NET requires that all proposers explain how their projects demonstrate a commitment to RRI by investigating and addressing the environmental, social, ethical, political, or cultural dimensions of the proposed research:

In line with the M-ERA.NET RRI annex, proposals should consider the following points:

- Sustainability aspects along materials, processing, and products covering the environmental, economic and social dimension.
- Resources: the use of resources overall, the environmental properties of the materials, the use of critical raw materials, energy, water, etc.

- Green-production-processes: use of environmentally friendly solvents, avoiding hazardous elements, substances of concern, minimizing energy and water consumption during production and preserving worker's health
- Use phase: the sustainability of the conditions under which the material can be used (continuous energy use, releases to the environment, life span, etc.).
- (When relevant) end of life: the entry of the material into the circular economy, including re-use, re-manufacturing or recycling considerations.
- Inclusion of relevant societal stakeholders as appropriate.
- Potential trade-offs between sustainability burdens and benefits.

Proposals should describe potential trade-offs between sustainability burdens and benefits, and include an activity where relevant aspects are further investigated, potentially with corresponding impacts on the design of the material(s).

Target groups

This topic is targeted at academic research groups, SMEs, or large enterprises. In proposals targeting TRL 4 and higher, industrial partners and at least one project partner specialised on customer or end-user demands should be involved in the project consortium. Collaboration between research entities and industrial partners is encouraged also at lower TRLs.

Keywords

Projects submitted to this Topic should choose at least **2** keywords from the following list:

5G/6G connectivity, Bioelectronics; Flexible electronics; Integration; High-power-control electronics; Memories; Neuromorphic electronics; Organic electronics; Optoelectronics; Packaging and housing; Photonics; Printed electronics; Sensors; Spintronics; Sustainable processing; Thermal management; Ultralow-power electronics

General keywords (KWs) (such as Additive manufacturing / 3D printing; Durability; Nanomaterials; Recyclability…) and Additional KWs (free text) can also be chosen in the submission platform. The ensemble of the keywords should allow for an overview of the scope of the project (consider describing different aspects of the project such as main scientific area / domain, system / property / material of interest, applications / objectives and pertinent procedures / techniques).

Indicative TRL range: 1-4

1.4 Technology Readiness Level

All proposals should clearly state and motivate the Technology Readiness Level (TRL) of the project at its beginning, and the target TRL at the end of the project. In order to increase the potential for new business opportunities and commercial exploitation of results:

• Proposals aiming at a final TRL below 4 should include a plan for the transition to higher TRL's at a later stage (i.e. beyond the project end date) and demonstrate industrial involvement. This can be realised by establishing an industrial or end-user advisory board (or alternatively by the participation of one or more companies in the project consortium when feasible).

• For proposals aiming at a final TRL 4 or above, industrial partners should be involved in the project consortium.

Where the topic description refers to the concept of **"Technology Readiness Level"** (TRL), the following definition in accordance with Horizon Europe applies:

TRL 1 – basic principles observed

TRL 2 – technology concept formulated

TRL 3 – experimental proof of concept

TRL 4 – technology validated in laboratory

TRL 5 – technology validated in relevant environment (industrially relevant environment in the case of key enabling technologies)

TRL 6 – technology demonstrated in relevant environment (industrially relevant environment in the case of key enabling technologies)

TRL 7 – system prototype demonstration in operational environment

TRL 8 – system complete and qualified

TRL 9 – actual system proven in operational environment (competitive manufacturing in the case of key enabling technologies; or in space)

Project proposals should clearly indicate the TRL position at the beginning of the project and after the project is finished and consider to the indicative TRL range indicated in each topic as summarised in the figure 1 below.

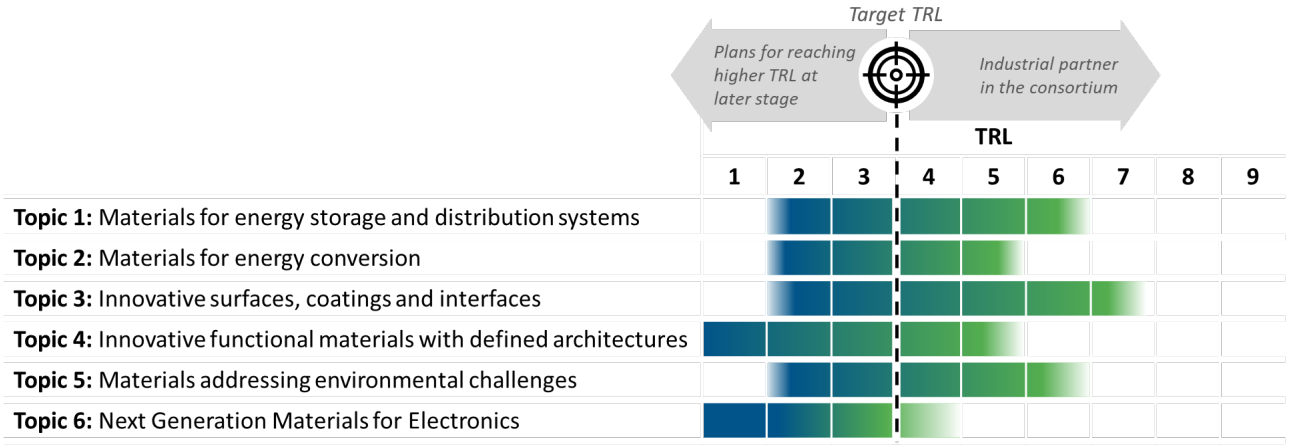


Fig. 1: indicative TRL rage in each topic

2. Call design 2026

M-ERA.NET will implement the Call 2026 as non co-funded call. The call design 2026 builds on previous M-ERA.NET Calls 2021-2025. The call design 2026 comprises of the call schedule, corresponding call documents and call procedures.

2.1 Structure and schedule of the Call 2026

Call Structure

The objective of the M-ERA.NET Call 2026 is to enable transnational R&D projects between partners receiving funding from national/regional programmes.

Fig. 2 shows the schematic workflow of the Call 2026. Benefits are combined in one approach: On the one hand the regional/national funding organisations apply their own well-established funding rules and procedures known to their applicants, and on the other hand M-ERA.NET provides transnational coordination expertise:

- The call is organised as a **2-step application** (Pre- and Full-Proposal). The eligibility of applicants applying for funding will be checked by national/regional funding organisations according to the rules defined by their respective funding programmes in both steps. In addition, M-ERA.NET will check if the transnational requirements of Call 2026 are fulfilled.
- The centralised evaluation of Pre-Proposals and Full-Proposals will be carried out by independent international evaluators resulting in a ranking list for each stage.
- In **stage 1** the M-ERA.NET call consortium will agree on a list of Pre-Proposals invited to submit a Full-Proposal. The decision is based on the ranking list of evaluated Pre-Proposals and available national/regional budgets.
- In **stage 2** the M-ERA.NET call consortium will agree on a joint selection list based on the ranking list of evaluated Full-Proposals and available national/regional budgets.
- The final funding decisions will be made by the national/regional funding organisations.

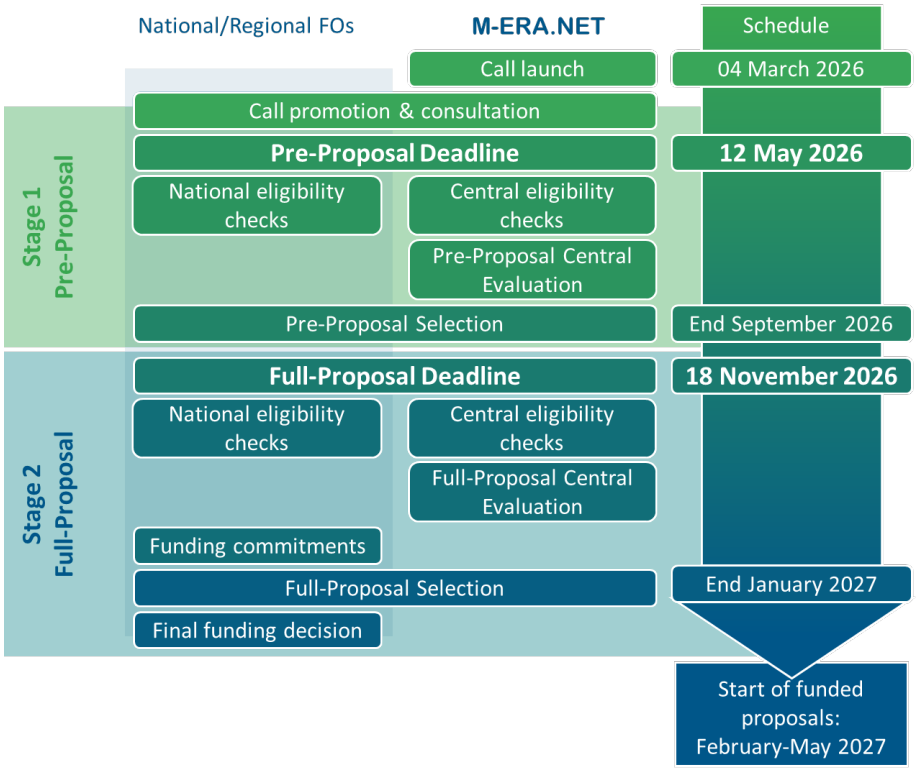


Fig. 2: workflow of the call 2026

Call schedule

Date	Action
4 March 2026	**Launch of the Call 2026**
12 May 2026	**Deadline for submission of Pre-Proposals**
early June 2026	Eligibility checks of Pre-Proposals
June - August 2026	Central evaluation of eligible Pre-Proposals by international independent experts
end September 2026	**Coordination Meeting – selection of Pre-Proposals invited to full-porposal submission**
early October 2026	Feedback to applicants
18 November 2026	**Deadline for submission of Full-Proposals**
late November 2026	Eligibility checks of Full-Proposals
Late November **– early January 2026**	Central evaluation of eligible Full-Proposals by international independent experts
late January 2027	**Selection Meeting – national/regional funding decisions for final M-ERA.NET selection list**
early February 2027	Feedback to applicants
February 2027	Contract negotiations of selected proposals at nat/reg level
Feb - May 2027	**Start of funded projects**

2.2 Call 2026 documents

- **Guide for Proposers**
- **FAQs**
- **Pre-Proposal form**
- **Full-Proposal form and Annex to the Full proposal form**
- **Documents concerning national / regional programme information**
- **Additional documents for funded projects:**
  - tutorial for project coordinators on how to submit the final report
  - final reporting template
  - publishable summary report
  - change request form
  - consent form for photos and videos

All call-related documents are available on the Call 2026 webpage.

2.2.1 Strict formatting conditions for the proposal forms

The proposal templates provided by M-ERA.NET for the applicants must be used in the submission procedure.

The structure of the templates must be followed when writing your proposal. They have been designed to ensure that the important aspects of your planned work are presented in a way that will enable the experts to make an effective assessment against the evaluation criteria. Sections "e*xcellence, impact and implementations"* each correspond to an evaluation criterion.

Page limit:

- **Pre-Proposal**: The title, the content, the summary, the consortium overview and the sections "*excellence, impact and implementation"* together, must not be longer than **17 pages**.
- **Full-Proposal**: The title, the content, the summary, the consortium overview, the sections "*excellence, impact and implementation"* and the table for ethical issues together, must not be longer than **40 pages.**

The page limit will be applied automatically. Only the text in blue in the proposal templates (which is for information purpose) can be deleted.

The proposal is a self-contained document. Experts will be instructed to ignore hyperlinks or any other links to information that is specifically designed to expand the proposal, thus circumventing the page limit.

Please, do not consider the page limit as a target. It is in your interest to keep your text as concise as possible, since experts rarely view unnecessarily long proposals in a positive light.

The following **formatting conditions** apply.

- The reference font for the body text of proposals is **Arial size 11 points**.
- The minimum font size allowed is 11 points. Standard character spacing and a minimum of single line spacing is to be used. This applies to the body text, including text in tables.
- Text elements other than the body text, such as headers, foot/end notes, captions, formula's, may deviate, but must be legible.
- The page size is A4, and all margins (top, bottom, left, right) should be at least 15 mm (not including any footers or headers).
- The structure, the order and number of chapters as well as the formatting conditions of the proposal form must not be changed.

Any deviations from the above-mentioned formatting conditions will result in a formal rejection of the proposal.

2.3 Call 2026 procedures

The M-ERA.NET application and evaluation process is implemented as a 2-step procedure: Pre-Proposal and Full-Proposal.

2.3.0 Funding conditions and eligibily

- **Funding rules**

  Funding is provided and granted by funding organisations participating in the Call 2026. Each project partners requesting funding has to apply individually for national/regional funding, and is subjected to the rules of the respective national/regional programme. This means that - depending on the respective national/regional funding rules - some project partners may have to submit additional proposals or information on national/regional level.
  To obtain detailed information on the specific funding rules and programme priorities we strongly recommend contacting the respective national/regional funding organisations (contact details see Annex 3; first overview on the selected topics and provided funding; details on national / regional funding rules see Call 2026 website).

- **Eligible project structure**

  M-ERA.NET eligibility requirements:
  - Project consortia must consist of at least 3 partners (all requesting funding from a funding organisation listed in Annex 3) from at least 3 different countries (at least 2 EU member state or associated countries) participating in the M-ERA.NET Call

2026. In addition to the minimum consortium, the participation of further partners is possible, including applicants not asking for funding (self-funded).

- Proposal must be uploaded and submitted to the M ERA.NET submission tool until submission deadline.
- Coordinator is eligible and requests funding from a funding organisation listed in Annex 3.
- Proposers (SMEs, large companies, academic research groups, universities, public research organisations or other research organisations) must be eligible for funding according to their national/regional regulations (to be checked with funding organisations listed in Annex 3). **If one or more partner(s) responsible for more than 15% of the total project efforts (measured in persons month) is/are deemed ineligible, the project will not be invited for Pre- or Full-Proposal evaluation.**
- The total effort of one single applicant cannot exceed 60% of the total project efforts (measured in person months) in the proposal.
- **The total effort of applicants from one country cannot exceed 70% of the total project efforts (measured in person months) in the proposal.**
- Proposers must be involved in activities within the eligible TRL range of their respective funding agencies to the relevant Topic. Proposal should overall address appropriate TRLs for selected M-ERA.NET Call 2026 topics.
- Mandatory proposal forms must be used (provided for download at the Call 2026 website). The formatting conditions of the proposal forms aim to ensure the equity and fairness of the evaluation. Therefore, any restructuring and change of formatting conditions of proposal forms will result in the formal rejection of the proposal (this includes changing the font and its size, interline interval, spacing, margins, document size, tables, individual sections of the template).
- Proposers must fill in all tables. Incomplete tables will result in a formal rejection of the proposal.
- Proposal must be written in English.
- Proposers must select only one of the M-ERA.NET Call 2026 topics. The topic selected in the proposal template must correspond to the topic selected in the submission tool. In case of discrepancies, the topic selected in the submission tool will prevail.
- Maximum project duration is 36 months.
- Only Proposals recommended to stage 2 by M-ERA.NET after the Pre-Proposal stage will be allowed to submit a Full-Proposal.
- Proposers must provide their respective PIC -numbers in the proposal; proposers without a validated PIC will be able to use a temporary PIC for submission.
- Conflict of Interest: the following individuals are not eligible for proposal submission: M-ERA.NET Steering Board members, researchers affiliated to Russian entities and/or exercising in Russia and researchers from participating Funding Organisations. In addition, proposers cannot act as evaluators of the M-ERA.NET Call 2026.

Typically, small to medium sized consortia (3-5 partners on average per proposal) are expected. However, there is no upper limit and consortia may involve as many partners as necessary for a convincing proposal, ensuring that all participants have a valid role. Each partner within the consortium should clearly add value to the objectives of the proposed project. Depending on the nature of the project, each partner in the consortium must demonstrate how they will exploit the expected results. National/regional funding rules apply. Therefore, certain topics, TRLs or types of organisations might be ineligible to certain funding organisations (e.g., some national/regional programmes fund only industrial but no academic partners, low/high TRLs). It is highly recommended to contact the respective national/regional funding organisation before proposal submission (see Annex 3 for contact details).

A consortium agreement between the project partners is recommended for funded projects based on national/regional funding rules. However, the principles of the agreement should already be clear when submitting the proposal. The purpose of the consortium agreement is to clarify:

- the responsibilities of the partners;
- decision processes inside the project;
- management of any change of partners;
- how to exploit and/or commercialise the results (for each partner);
- IPR issues.

A template for the consortium agreement can be found at: https://www.desca-agreement.eu/desca-model-consortium-agreement/

- **Project budget**
  No overall limits have been defined on M-ERA.NET level but national/regional limits regarding the available funding may apply. Budget shares in project consortia have to be in line with eligibility criteria.

- **Project duration**
  The maximum project duration must not exceed 36 months. National/regional limits regarding the duration of projects will apply.

2.3.1 Call announcement and support

The Call launch is published on the M-ERA.NET website https://www.m-era.net/joint-calls/joint-call-2026. This website is the main source of information, documents and updates on the call.

Support to the applicants:

- Partner Search Facilty: This partnering tool supports potential applicants for the M-ERA.NET in finding partners and building a consortium for a project proposal. Here, you can search for new partners for the dedicated call topics and also offer participation in newly formed consortia.

- M-ERA.NET Call 2026 webinar: This webinar provides the applicants with all relevant information about the Call 2026, including a questions & answers session.
  The registration link will be available on the Call 2026 webpage.
- Additional (trans-)national call webinars could be organised. See Call 2026 webpage.

2.3.2 Application and proposal submission

In both stages, the electronic submission (accessible via the M-ERA.NET homepage) has to be done on project level (by the coordinator) and on partner level (by each project partner) via M-ERA.NET submission tool until the respective submission deadline. In the M-ERA.NET submission tool information is requested on two levels:

Project level:

- project acronym
- project title
- publishable project abstract (up to 1000 characters)
- project summary (up to 4000 characters)
- addressed call topic[1]
- keywords best describing the content of the proposal

Partner level:

- partner details (organisation, organisation type, PIC, address, contact person, email, country, funding programme, TRL in submitted project)
- costs / requested funding per partner
- applicants not eligible for proposal submission are:
  - M-ERA.NET 3 Steering Board members
  - evaluators of the M-ERA.NET Call 2026
  - researchers affiliated to Russian entities and/or exercising in Russia

Use of AI
M-ERA.NET does not prohibit the use of AI but highlights that applicants accept the full responsibility for the whole content, including text generated or refined by AI. Special care should be taken when AI is used for novel concepts, inventions, or IP-sensitive content, as using external AI tools may create confidentiality or patentability risks. In addition, applicants should ensure that the AI tools used comply with data protection and confidentiality requirements (e.g. GDPR).

2.3.2.1 Stage 1: M-ERA.NET Pre-Proposal form

A Pre-Proposal submission is mandatory using the M-ERA.NET proposal template. The Pre-Proposal must be submitted by the project coordinator through the M-ERA.NET submission tool until deadline. **M-ERA.NET Pre-Proposal templates of the Call 2026 must be used.**
At the same time national/regional funding applications must be submitted to each of the involved funding organisation according to their specific rules (if applicable). Applicants

[1] Selected call topic in the submission system will prevail in the case that the selected call topic in the proposal form is different

are requested to contact the involved funding organisations before Pre-Proposal submission.
All information provided by the applicants via the M-ERA.NET submission tool (online form and Pre-Proposal (pdf)) are available for respective funding organisations.

2.3.2.1 Stage 2: M-ERA.NET Full-Proposal form and Annex 1

Only Pre-Proposals invited to Full-Proposal submission are allowed to participate in stage 2. A Full-Proposal and Annex1 to the Full-Proposal must be submitted by the project coordinator through the M-ERA.NET submission tool until deadline. M-ERA.NET **proposal templates of the Call 2026 must be used.**
At the same time national/regional funding applications must be submitted to each of the involved funding organisation according to their specific rules (if applicable).
All information provided by the applicants via the M-ERA.NET submission tool (Full-Proposal form (pdf) and Annex 1 to the Full-Proposal form (pdf)) are available for respective funding organisations.

Changes from Pre- to Full-Proposal

- Project objectives stated in the Pre-Proposal cannot be changed
- Changes in the consortium should be avoided. Modifications of the consortium are restricted to applicants from countries already part of the Pre-Proposal consortium. It is not accepted to introduce new countries into the existing consortium.
- In general, changes from Pre- to Full-Proposal should be avoided**.** In any case changes from Pre- to Full-Proposal stage have to be coordinated by the consortium leader with all involved funding organisations.
  This means that major changes regarding content, project duration, costs, funding or consortium have to be communicated and approved by all involved funding organisations at least 2 weeks before Full-Proposal deadline. The consortium leader is responsible to coordinate and ensure the acceptance of these changes by all involved applicants and funding organisations.

2.3.3 Proposal assessment

The assessement is implemented as a 2-step procedure according to EC rules for ERA-NET Cofund. In both stages eligibility checks are carried out by M-ERA.NET as well as national/regional funding organisations. Only eligible proposals are sent to the centralised evaluation organised by the M-ERA.NET call secretariat using the online M-ERA.NET evaluation tool.

2.3.2.1 Stage 1: Pre-Proposal phase

Pre-Proposal

Pre-Proposals will be selected for the second stage by the following steps

1. Check of M-ERA.NET eligibility criteria:
   - Please see chapter 2.3.0 for the M-ERA.NET eligibility criteria.

2. Check of national/regional eligibility and relevance:
   - presence of requested national/regional Pre-Proposal forms (if applicable)
   - minimum number of eligible, independent applicants (if applicable, criteria of involved funding programmes apply)
   - relevance to funding programme (if applicable, criteria of involved funding programmes apply)
   - national/regional thematic priorities going beyond, or more in details than, the M-ERA.NET Call 2026 topics and associated TRL.
   - financial status of applicants, especially industrial applicants (if applicable)

3. Central evaluation of Pre-Proposals
   In case one or more project partners are considered ineligible, the entire Pre-Proposal will not be invited to the Pre-Proposal evaluation if the not eligible partner(s) account for ≥15% of the total project effort (measured in person months.
   Details on the selection of evaluators, evaluation procedures, criteria and thresholds are described in **Annex 1 and 2.**

4. Selection of Pre-Proposal
   As a result of the M-ERA.NET central evaluation Pre-Proposals will be recommended for Full-Proposal submission at the **M-ERA.NET Coordination Meeting.** Pre-Proposal will either be::
   - Recommended for submitting the Full-Proposal
   - Not recommended

   The M-ERA.NET recommendation for funding decisions will be forwarded to the involved programme owners who will be in charge of the final funding decisions.
   In case one or more project partners are not recommended for funding, the entire Full-Proposal cannot be recommended for funding if the not the recommended partner(s) account for ≥15% of the total project effort (measured in person months).

5. Feedback emails to applicants
   After the Coordination Meeting, feedback emails will be sent by the call secretariat to the coordinators and all project partners including the compiled peer review report for applicants (anonymised result of central international peer review process excluding scoring).
   National/regional comments are not part of the feedback emails but will be provided by respective funding organisations at national/regional level (if applicable).

2.3.2.2. Stage 2: Full-Proposal phase

Full-Proposals will be selected for funding by the following steps

Full-Proposal

1. Check of M-ERA.NET eligibility criteria:
   - Please see chapter 2.3.0 for the M-ERA.NET eligibility criteria.

2. Check of national/regional eligibility criteria:

- programme regulations observed if applicable (e.g. financial standing of industrial applicants, presence of requested nat/reg proposal forms, maximum number of proposals per PI, etc.)

3. Central evaluation of Full-Proposals
   Only eligible Full-Proposals are sent to central evaluation. In case one or more project partners are considered inelegible the entire Full-Proposal will not be invited to the Full-Proposal evaluation if the not elegible partner(s) account for ≥15% of the total project effort (measured in person months).
   Details on the selection of evaluators, evaluation procedures, criteria and thresholds are described in Annex 1 and 2.

4. Selection of Full-Proposals to be funded
   As a result of the M-ERA.NET central evaluation Full-Proposals will be selected for funding by the Call 2026 consortium at the **M-ERA.NET Selection Meeting.** Full-Proposals will either be:
   - Recommended for funding or
   - Not recommended for funding

   The M-ERA.NET recommendation for funding decisions will be forwarded to the involved programme owners who will be in charge of the final funding decisions.
   In case one or more project partners are not recommended for funding, the entire Full-Proposal cannot be recommended for funding if the not the recommended partner(s) account for ≥15% of the total project effort (measured in person months).

5. Feedback emails to applicants
   After the Selection Meeting, feedback emails will be sent by the call secretariat to the coordinators and all applicants including the compiled peer review report for applicants (anonymised result of central international peer review process excluding scoring).
   National/regional comments are not part of the feedback emails but may be provided by respective funding organisations at national/regional level (if applicable).

6. Contract negotiation
   National/regional funding organisations invite applicants of selected proposals to contract negotiations. After successful negotiations the national/regional funding organisations and the applicants sign funding contracts and start the projects as soon as possible to avoid delays of the transnational projects.

7. Start of projects
   Depending on the national/regional regulations, a pre-condition might be the existence of a consortium agreement that also includes IPR related issues.
   It is highly recommended that the project start and end dates are synchronised for all project parties.

2.3.4 Monitoring and reporting of funded projects

The progress of each individual funding contract will be monitored by the respective national/regional funding organisation through individual project review processes and monitoring procedures.

Any substantial change (e.g. extension of the project duration, change of a project partner) in an on-going project must be reported immediately to the monitoring task force (monitoring@m-era.net) and the involved funding organisations. The latter should be aware that changes may affect their funding. A change request form is provided on the call website for the applicants to explain the requested change, which must be confirmed by all involved partner and funding organisations. According to the approved change, data must be updated in the monitoring tool be the respective funding organisation.

Reporting to M-ERA.NET

At the end of the project lifetime, the following final reporting documents must be submitted to M-ERA.NET by the project coordinator:

- Final reporting template
- Publishable summary report
- Change Request Form
- Consent form for photos and video

All documents as well as a "Tutorial for project coordinators" is provided for the applicants on the M-ERA.NET Call 2026 web page.

Assessment of funded projects

Apart from the national/regional project review, the transnational cooperation aspects will be assessed at M-ERA.NET level, e.g. by using online questionnaires. The beneficiaries are requested to contribute to the surveys.

2.3.5 Dissemination of projects results

Dissemination of project results

Project results and their exploitation and dissemination in publications, exhibitions, lectures, success stories, press information, etc. must refer to M-ERA.NET and to the involved funding organisations. Please use the following statement:

> "*Project [project acronym] was selected in the Joint Transnational Call 2026 of the EU-funded network M-ERA.NET. The project is funded by the [full name or abbreviation of all funding organisations, country/region]."*

The M-ERA.NET logo, available on the public website, should be used whenever possible. Higher resoluted M-ERA.NET logo as vector graphic can be requested by communications@m-era.net .

Materipedia

A data sheet (i.e. subpage) of a funded project is included in the online project database "Materipedia" after the project start. The project coordinator is invited to actively participate in shaping the project web page by sending additional information like pictures or lists of publications to the communication team.

At project end, the submitted publishable summary report and the submitted pictures will be included in "Materipedia".

Success stories

Beneficiaries are requested to share their success (at matured stage of the projects) to their funding organisation and /or M-ERA.NET. A success story form is available on the call website. The completed M-ERA.NET success story form is sent to the communication team

(communications@m-era.net), which publishes the success story on the website, provides a link to “Materipedia” and prepares a LinkedIn post.
In addition, beneficiaries have the possibility to submit their success story via the M-ERA.NET web page.

Annex 1: M-ERA.NET central evaluation of Pre-Proposals and Full-Proposals

A1.1 Selection of evaluators

Experts sign a confidentiality agreement and confirm no conflict of interest prior to evaluating the Pre-Proposals assigned to them.

The assignment of evaluators is based on the submitted proposals according to the following criteria:

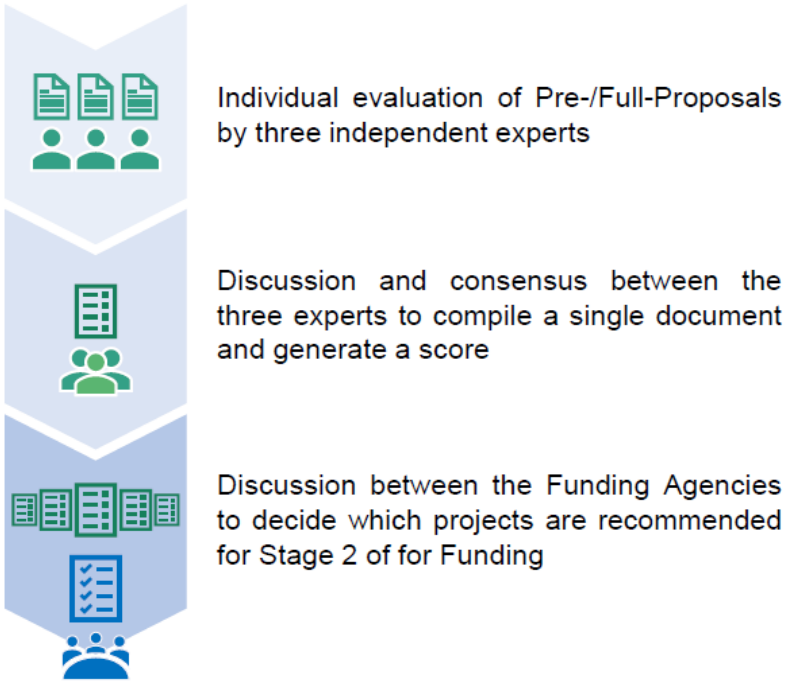
- call topics
- list of keywords provided by the experts (expertise) and the list of keywords provided in the proposal form (specific research topic)
- keywords extracted from the publishable abstract and the project summary of the proposal form
- CVs
- focus of the research activity (university and/or industrial experience)
- country where the expert is based. Experts do not evaluate proposals including the country where the expert is based.
- any detected or potential conflict of interest (including excluded evaluators as indicated by the proposers in the M-ERA.Net submission platform)

Experts excluded from the evaluation process are:

- applicants submitting a proposal to the call
- participants of the Strategic Expert Group (SEG)
- researchers affiliated to Russian entities and/or exercising in Russia

A1.2 Procedure of the online central evaluation

The central evaluation of Pre-Proposals and full proposals is performed online via the M-ERA.NET evaluation tool. Submitted propoals are evaluated by independent international evaluators based on the EC rules for ERA-NET COFUND, including the appropriate evaluation criteria.



The procedure for both stages comprises of the following steps:

- 3 individual written assessment reports (IAR): each proposal is evaluated by 3 allocated evaluators providing individual and independent written assessments without scoring
- 1 peer review report (PRR) incl. scoring: 3 individual assessments are compiled by one of the 3 experts (= rapporteur). The compilation consists of peer review report and scoring. All experts who provided individual written assessments confirm the compilation and consistency of peer review report and scoring. Evaluators will have the possibility to exchange opinions.
- quality check of the peer review reports by the M-ERA.NET call secretariat and task force members.
- ranking list based the scoring of each individual proposal (only proposals scored above threshold are included in the ranking list).
- involved funding organisations meet for a Coordination/Selection Meeting to agree on a final list of selected proposals

Annex 2: M-ERA.NET evaluation criteria, scoring and thresholds

A2.1 Evaluation criteria

Criteria for pre- and Full-Proposal evaluation are predefined by the EC for ERA-NET Cofund:

(a) Excellence
(b) Impact
(c) Implementation

Pre-Proposal evaluation criteria:

Main Criteria	*Sub Criteria*	*Score (points)*
Excellence	Clarity and pertinence of research objectives and hypotheses	*max. 1.5*
	Novelty, originality, position of concepts and approaches in relation to the state of the art (ambition, innovation potential, ground-breaking objectives)	*max. 2.0*
	Appropriateness of the methodology, credibility of the proposed approach and soundness of the concept, including TRL and the approach to RRI	*max. 1.5*
Impact	Relevance to the objectives of the specific call topic and to the cross-cutting objectives	*max. 2.0*
	Contribution at the European or international level to the expected impacts listed in the Guide for Proposers under the relevant topic	*max. 2.0*
	Engagement of the proposed research with the horizontal objectives, sustainability and RRI	*max. 1.0*
Implementation	Competences, experience and complementarity of each of the consortium members and the consortium as a whole (including complementarity, balance, inter- or transdisciplinarity)	*max. 2.0*
	Quality and effectiveness of the work plan including the overall management of the project	*max. 2.0*
	Overall appropriateness of the proposal budget and other resources to be committed by individual partners (overall person month balance)	*max. 1.0*

Full-Proposal Evaluation criteria:

Main Criteria	*Sub Criteria*	*Score (points)*
Excellence	Clarity and pertinence of research objectives and hypotheses	*max. 1.0*
	Extent of the proposal's ambition and innovation potential beyond the current state of the art. Originality of the strategies to reach the project's objectives, use of novel concepts and approaches.	*max. 2.0*
	Soundness of the methodology proposed to reach the project's objectives, credibility of the proposed TRL range and coherence of the approach to RRI.	*max. 2.0*
Impact	Contribution at the European or international level to the expected impacts listed in the Guide for Proposers under the relevant topic	*max. 1.0*
	Enhancing innovation capacity and integration of new knowledge to facilitate replicability and valorisation of the project results.	*max. 1.5*
	Strengthening the competitiveness and growth of companies by developing innovations meeting the needs and values of European and global markets; and, where relevant, by delivering such innovations to the markets	
	Engagement of the proposed research with circularity, environmental as well as ethical, political, social and/or cultural dimensions	*max. 1.0*
	Effectiveness of the proposed measures to exploit and disseminate the project results (including management of IPR), to communicate the project, engage with stakeholders and user groups, and to manage research data where relevant	*max. 1.5*
Implementation	Quality and effectiveness of the work plan, assessment of risks, and appropriateness of the effort assigned to work packages, and the resources overall	*max. 1.5*
	Quality of the consortium as a whole including complementarity, balance, inter- or transdiciplinarity and appropriateness of the management structures and procedures	*max. 1.5*
	Quality and relevant experience of the individual participants	*max. 1.0*
	Appropriate allocation of tasks, ensuring that all participants have a valid role and allocation and justification of the resources to fulfil that role (including overall person month balance)	*max. 1.0*

Ethical issues: Full-Proposals include HEU "Ethical Issues Table". In case ethical issues apply (applicants mark respective issues in the table) M-ERA.NET recommends that the national/regional organisations observe these issues (e.g. post-evaluation review) for their respective funded projects.

A2.2 Scoring and thresholds

Scoring

Individual assessment report (IAR): Each criterion will be composed by sub-criteria. The individual evaluators have to provide an evaluation consisting of written statements for each of the sub-criterion. Scores are not provided for the IAR.

Peer review report (PRR): the rapporteur will compile a peer review report, to be accepted by all 3 evaluators. PRR will include scoring of each sub-criterion to be provided by the rapporteur and agreed by all evaluators. Each criterion will be scored between 0.0 and 5.0 in multiples of 0.5 points.

Threshold

The threshold for individual criteria will be 3.0; the overall threshold, applying to the sum of the individual scores will be 10.0.

Annex 3: Funding organisations participating in the M-ERA.NET Call 2026

Country	National / regional coverage	Funding organisation	Contact person:
Austria	national	Austrian Research Promotion Agency (FFG)	Name: Fabienne Nikowitz Phone: +43 57755 5081 e-mail: fabienne.nikowitz@ffg.at
Belgium	regional: Flanders	Flanders Innovation & Entrepreneurship (VLAIO)	Name: Maarten Rockele Phone: +32 2 432 43 27 e-mail: maarten.rockele@vlaio.be
			Name: Elsie De Clercq Phone: +32 2 432 42 78 e-mail: elsie.declercq@vlaio.be
	regional: French-Speaking Community	Fund for Scientific Research – FNRS (F.R.S.-FNRS)	Name: Florence Quist Phone: +32 2 504 93 51 e-mail: international@frs-fnrs.be
			Name: Joël Groeneveld Phone: +32 2 504 92 70 e-mail: international@frs-fnrs.be
	regional: Wallonia	Service public de Wallonie (SPW)	Name: Pierre Demoitié Phone: +32 81 77 86 85 e-mail: pierre.demoitie@spw.wallonie.be
Brazil	regional: Sao Paulo	São Paulo Research Foundation (FAPESP)	Name: Virginia Sanches Subinas Phone: + 55 11 3838 4000 e-mail: chamada_meranet@fapesp.br
Bulgaria	national	Bulgarian National Science Fund (BNSF)	Name: Milena Aleksandrova Phone: +359 884 171 363 e-mail: aleksandrova@mon.bg

Country	National / regional coverage	Funding organisation	Contact person:
Canada	regional: Québec	PRIMA Québec	Name: Michel Lefèvre Phone: +1 514 241 3322 e-mail: michel.lefevre@prima.ca
Croatia	national	Ministry of Science and Education and Youth (MSEY)	Name: Mateo Ante Bosnić Phone: +385 01 4594 166 e-mail: mateoante.bosnic@mzom.hr
Czech Republic	national	Technology Agency of the Czech Republic (TA CR)	Name: Kateřina Volfová Phone: +420 778 463 138 e-mail: katerina.volfova@tacr.cz
Estonia	national	Estonian Research Council (ETAG)	Name: Margit Suuroja Phone: +372 731 7360 e-mail: margit.suuroja@etag.ee
France	national	Agence Nationale de la Recherche (ANR)	Name: Larissa Chaperman e-mail: Larissa.chaperman@agencerecherche.fr
			Name: Léa Gardie e-mail: Lea.gardie@agencerecherche.fr
Germany	national	Bundesministerium für Forschung, Technologie und Raumfahrt (BMFTR) / Projektträger Jülich (PtJ)	Name: Alexander Eckert Phone: +49 2461 61 2621 e-mail: al.eckert@ptj.de
			Name: Eva Gerhard-Abozari e-mail: e.gerhard-abozari
			Name: Show-Ling Lee-Müller Phone: +49 2461 61 4471 e-mail: s.l.lee-mueller@ptj.de

Country	National / regional coverage	Funding organisation	Contact person:
			Name: Katrin Witten Phone: +49 2461 61 85317 e-mail: k.witten@ptj.de
	regional: Freestate of Saxony	Saxon State Ministry for Science, Culture and Tourism (SMWK)	Name: Gabriele Süptitz Phone +49 351 564 64210 e-mail: Gabriele.Sueptitz@smwk.sachsen.de EuProNet@smwk.sachsen.de
Hungary	national	National Research, Development, and Innovation Office (NKFIH)	Name: Elod Nemerkenyi Phone: +36-1-896-3987 e-mail: elod.nemerkenyi@nkfih.gov.hu
Israel	national	Ministry of Innovation, Science and Technology (MOST)	Name: Avi Raveh Phone: +972 (2) 5411136; +972 (55) 8864207 e-mail: AviR@most.gov.il
Italy	regional: Calabria	Regione Calabria	Name: Roberta Saladino e-mail: roberta.saldino@regione.calabria.it
			Name: Caterina Loddo e-mail: ca.loddo@regione.calabria.it
Latvia	national	Latvian Council of Science (LZP)	Name: Maija Bundule Phone: +371 26514481 e-mail: maija.bundule@lzp.gov.lv
Lithuania	national	Research Council of Lithuania (LMT)	Name: Saulius Marcinkonis Phone: +370 676 17256 e-mail: saulius.marcinkonis@lmt.lt
Luxembourg	national	Luxembourg National Research Fund / Fonds National de la Recherche (FNR)	Name: Christiane Kaell Phone: +352 691 362 817 e-mail: christiane.kaell@fnr.lu

Country	National / regional coverage	Funding organisation	Contact person:
Malta	national	Xjenza Malta (XM)	Name: Maria Vella Phone: +356 2360 2308 e-mail: maria.vella.9@gov.mt
			Name: Kaylen Borg Phone: +356 2360 2134 e-mail: kaylen.borg.1@gov.mt eusubmissions.xjenzamalta@gov.mt
Norway	national	The Research Council of Norway (RCN)	Name: Cecilie A. Mathiesen Phone: +47 4569 0357 e-mail: cam@forskningsradet.no
Poland	national	National Centre for Research and Development (NCBR)	Name: Krzysztof Jabłoński Phone: +48 22 25 66 702 e-mail: krzysztof.jablonski@ncbr.gov.pl
	national	National Science Centre (NCN)	Name: Alicja Dyląg Phone: +48 532 086 494; +48 12 341 90 69 e-mail: alicja.dylag@ncn.gov.pl
Slovak Republic	national	Slovak Academy of Sciences (SAS)	Name: Martin Novák Phone: +421 2575 10 119 e-mail: martin.novak@urad.sav.sk
			Name: Jana Pastieriková Phone: +421 2575 10 118 e-mail: jana.pastierikova@urad.sav.sk
Slovenia	national	Ministry of Higher Education, Science and Innovation (MVZI)	Name: Doroteja Zlobec Phone: +386 (0)1 478 46 24 e-mail: Doroteja.zlobec@gov.si

Country	National / regional coverage	Funding organisation	Contact person:
South Africa	national	Department of Science, Technology and Innovation (DSTI)	Name: Tugela Matubatuba e-mail: tugela.matubatuba@dsti.gov.za
			Name: Ntombi Mchuba Phone: +27 60 974 6773 e-mail: Ntombi.mchuba@dsti.gov.za
South Korea	national	Korea Institute for Advancement of Technology (KIAT)	Name: Sohyeon Lee Phone: +82 (0) 2-6009-3765 e-mail: sy27@kiat.or.kr
Spain	national	Agencia Estatal de Investigación (AEI)	Name: Jorge Sotelo Santos e-mail: era-mat@aei.gob.es
			Name: Raquel Fernández Reyes e-mail: era-mat@aei.gob.es
			Name: Beatriz Gómez Miguel e-mail: beatriz.gomez@aei.gob.es
	regional: Asturias	Asturian Agency for Science, Business Competitiveness and Innovation (SEKUENS Agency)	Name: Ana E. Fernández Monzón Phone: +34 985 98 00 20 e-mail: anae@sekuens.es
	regional: Basque Country	EUSKO JAURLARITZA – GOBIERNO VASCO (EJ-GV)	Name: Catalina Chamorro Silgado Phone: +34 945 018 210 e-mail: cat-chamorro@euskadi.eus
			Name: Judith de Prado Olivenza Phone: +34 944 209 488 e-mail: jdeprado@innobasque.eus

Country	National / regional coverage	Funding organisation	Contact person:
Sweden	national	Verket för innovationssystem (VINNOVA)	Name: Anders Marén Phone: +08 473 31 88 e-mail: anders.maren@vinnova.se
Switzerland	national	Swiss Federal Office of Energy (SFOE)	Name: Stefan Oberholzer Phone: +41 58 465 89 20 e-mail: stefan.oberholzer@bfe.admin.ch
Taiwan	national	National Science and Technology Council (NSTC)	Name: Dr. Ching-Mei Tang e-mail: cmtom@nstc.gov.tw
			Name: Ian Liau e-mail: ianliau@nycu.edu.tw
			Name: Randy Chang e-mail: mcchang76@sinica.edu.tw
Türkiye	national	The Scientific and Technological Research Council of Türkiye (TÜBİTAK)	Name: Elif Sena Yıkılmaz, Phone: +90 3122 9817 65 e-mail: elif.yikilmaz@tubitak.gov.tr
			Name: Hale Ay Phone: +90 3122 9818 47 e-mail: hale.ay@tubitak.gov.tr
			Name: Tayyip Kösoğlu Phone: +90 3122 9818 06 e-mail: tayyip.kosoglu@tubitak.gov.tr

Commitment per funding organisation (to be revised)

Please be aware of national / regional funding restrictions!
More details in the national / regional annexes: https://www.m-era.net/joint-call-2026/participating-countries-regions-call-2026

	Topic 1	Topic 2	Topic 3	Topic 4	Topic 5	Topic 6	Indicative call budget (Mio €)
	Materials for energy storage and distribution systems	Materials for energy conversion	Innovative surfaces, coatings and interfaces	Innovative functional materials with defined architectures	Materials addressing environmental challenges	Next generation materials for electronics	
Austria: FFG (KLWPT)			X	X			3.00
Belgium (Flanders): HERMESFUND / VLAIO	X	X	X	X	X	X	1.00
Belgium (French Speaking Community): F.R.S.- FNRS	X	X	X	X	X	X	0.30
Belgium (Wallonia): SPW	X	X	X	X	X	X	1.00
Brazil (Sao Paulo): FAPESP	X	X	X	X	X	X	0.80
Bulgaria: BNSF	X	X	X	X	X	X	0,45
Canada (Québec): PRIMA	X	X	X	X	X	X	0.60
Croatia: MSEY	X	X	X	X	X	X	0.15
Czech Republic: TA CR	X	X	X	X	X	X	1.50

	Topic 1	Topic 2	Topic 3	Topic 4	Topic 5	Topic 6	Indicative call budget (Mio €)
Estonia: ETAG	X	X	X	X	X	X	0.15
France: ANR	X	X		X		X	1.00
Germany: BMFTR/PtJ (Batteries)	X	X	X	X			5.00
Germany: BMFTR/PtJ (Mat2Twin)			X	X	X		2.00
Germany (Saxony): SMWK	X	X	X	X	X	X	3.00
Hungary: NKFIH	X	X	X	X	X	X	0.30
Israel: MOST	X	X	X	X	X	X	0.20
Italy (Calabria): Regione Calabria	X	X	X	X	X	X	0.30
Latvia: LZP	X	X	X	X	X	X	0.60
Lithuania: LMT	X	X	X	X	X	X	0.50
Luxembourg: FNR	X	X	X	X	X	X	0.35
Malta: XM	X	X	X	X	X	X	0.30
Norway: RCN	X	X	X	X	X	X	2.40
Poland: NCBR	X	X	X	X	X	X	2.50

	Topic 1	Topic 2	Topic 3	Topic 4	Topic 5	Topic 6	Indicative call budget (Mio €)
Poland: NCN	X	X	X	X	X	X	1.50
Slovak Republic: SAS	X	X	X	X	X	X	0.36
Slovenia: MVZI	X	X	X	X	X	X	2.40
South Africa: DSTI	X	X	X	X	X	X	0.40
South Korea: KIAT	X	X	X	X	X	X	0.90
Spain: AEI / FECYT	X	X	X	X	X	X	1.00
Spain (Asturias): SEKUENS	X	X	X	X	X	X	0.25
Spain (Basque Country): EJ-GV	X	X	X	X	X	X	0.50
Sweden (VINNOVA)	X	X	X	X	X	X	1.00
Switzerland (SFOE)	X	X					2..00
Taiwan: NSTC	X	X	X	X	X	X	0.75
Türkiye: TÜBITAK	X	X	X	X	X	X	1.00

Annex 4: RRI Guidelines

M-ERA.NET guidelines for Responsible Research and Innovation (RRI) in the context of materials science

1. What is RRI and why do we need it?

For M-ERA.NET, RRI is about making sure science and new technologies help people and the planet. It asks scientists to think about who might benefit or face challenges from their work and to prepare for possible problems. RRI encourages involving others, like future users or communities, to understand their needs and concerns. It also pushes researchers to reflect on their goals and change plans if new issues come up. By focusing on sustainability and fairness, RRI helps ensure that science and innovation supports global goals like protecting the environment and creating a better future for everyone. Rather than providing strict rules, RRI offers a flexible framework with techniques and tools to guide researchers in considering the ethical, environmental, and social aspects of their work.

Acknowledging that science is separate neither from society nor the environment but part of them confers a social responsibility on science. It is important, therefore, that funders, researchers and other key groups involved in the development of science, technology and innovation think about: (i) the potential directions of research being taken; (ii) who might benefit and who might not from new inventions; and (iii) how consideration of the potential social, environmental and ethical issues can be considered *throughout* the science and innovation process. Responsible research and innovation (RRI) is not about adjudicating what is ‘good ’or ‘bad’, ‘positive ’or ‘negative’, or ‘responsible ’or ‘irresponsible’. Instead, RRI offers techniques, tools and frameworks to think about questions of social responsibility and ensure scientists, funders and technologies do not lose sight of the context in which they do science, technology and innovation.

2. M-ERA.NET’s approach to RRI

M-ERA.NET’s approach to RRI recognises that the materials resulting from the programme need to be designed for a *sustainable* society in the near to medium future. A sustainable society is one that respects and operates within the ecological boundaries of the planet and considers current and future generations in its decision-making. M-ERA.NET’s approach to RRI thus highlights the need to address the social, environmental, political, cultural or ethical dimensions of the proposed research. We operationalise this approach through four dimensions that researchers, funders and technologists should engage with to maintain focus on the social context of their work:

- ***Anticipation*** suggests that actors should map the plausible intended and unintended effects of their work. Anticipation is not about exhaustively predicting all outcomes but about building a sense of preparedness so that potential downsides can be addressed as they are foreseen and arise.

- ***Inclusion*** encourages researchers, funders and developers to engage with future users, interest groups or potentially concerned groups or those affected most by the problems we tackle, to gain insights about the application contexts and what desirable trajectories would be. Engagement here should move beyond dissemination or outreach to pursue a two-way exchange of information, with the understanding that knowledge that is not‘ scientific ’in the traditional sense of the word might still be valuable.
- ***Reflexivity*** asks researchers, funders and developers to create specific opportunities to consider the underlying assumptions and values driving their funding programmes and projects.
- ***Responsiveness*** reminds us that science and innovation are processes of exploration and learning. It urges scientists, funders and developers to change course if any of the above dimensions (anticipation, inclusion or reflexivity) generate new knowledge, identify public concerns, or reveal potential harms.

As the involvement of societal groups is essential in RRI it is often connected to co-creation, co-design and co-production – methodologies in which R&I projects are structured to include stakeholders from the beginning (e.g. users or interest groups) – and is related to the general Open Science agenda, prominent in Horizon Europe. Additionally, M-ERA.NET has fundamental commitments to sustainability in line with frameworks such as the UN Sustainable Development Goals, and the European Green Deal. This means that methods analysing the current or future ecological impacts of materials and their supply chains are appropriate. In sum RRI provides a framework to ask *how* research and innovation should be carried out in order to ensure that we achieve the sustainability goals in an open and inclusive way.

Sustainability and RRI in the M-ERA.NET calls

The specific requirements for each topic in the current call are detailed in a section labelled ‘sustainability and RRI requirements’.

However, RRI is not a one-size-fits-all approach but must be adapted to the actual social, environmental and ethical issues raised by the R&I activities funded in the programme. Foundational, exploratory research will require a different approach to applied, high-TRL research. Disruptive, pathbreaking research may require a more substantive approach to RRI than tentative, incremental research. And the specific issues raised by the biological sciences differ to those raised by the physical sciences. This means that *the commitment* to RRI is clear and fixed in the programme, but there is an openness about the issues addressed and the specific ways to practice responsibility – these must be adapted to each project.

3. How can you include RRI in your proposal?

Recalling the above explanation, the diversity of material science and the range of local contexts engaged within M-ERA.NET means that there cannot be a one size fits all approach. Overall, the goal is to demonstrate that you have engaged and seriously considered the tensions associated with materials science.

While RRI may focus on broadly recognised issues, the approach taken should be specific to the project. Nevertheless, these three points provide general principles from which to develop your approach to RRI:

1. M-ERA.NET's philosophy is to have **RRI as an integrated part of the project** involving all project participants.
2. Developing a **shared understanding of the project's RRI aspects** as early as possible is important. With 'RRI aspects 'we mean implications or characteristics of your research that touch upon environmental, societal and ethical values. This implies having conversations about their importance and potential actions to address RRI aspects. Such understanding will evolve in a learning process that should be encouraged throughout the project.
3. Considering RRI-related issues and acting upon them, must be done as a cross-cutting part of the project or a separate work package. RRI in the project needs to be **coordinated** and should have a **lead**.

Web resources for including RRI in your project:

The Societal Readiness Thinking Tool guides you through the steps of including RRI in a project.

The Digital Life Centre offers practical advice that may help develop your approach.

Further examples specific to material science will in the future be provided on the RRI webpage of M-ERA.NET.

4. But what should you actually do?

The following list provides examples of different RRI perspectives applicable for materials science research projects. **Please be aware that these guidelines and reflections neither represent the only RRI approach nor a complete list of examples of measures when implementing RRI in materials proposals.** You should identify the points relevant for your project.

1. Address **environmental impacts and sustainable solutions**, in line with the **Do No Significant Harm principle[2],** by including, for example:
    a. lifecycle analysis (LCA)
    b. ecotoxicology studies
    c. Safe and Sustainable by Design (SSbD) methodologies
2. Involve **relevant stakeholders in the project at the earliest stage as possible**, and provide opportunities for them to contribute to your work.
    a. Co-design methodologies are important to generate trust and **allow stakeholders to contribute knowledge** of the social, environmental or commercial problem you are trying to address in your project.
    b. Think also about the appropriate **timing** of different stakeholders 'inclusion: certain kinds of knowledge may be more useful than others at different points of your project.

[2] For more information on this principle see Horizon Europe's Programme Guide, page 37: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/programme-guide_horizon_en.pdf

   c. It will likely be valuable (but not obligatory) to include **expertise beyond the natural and physical sciences** – such as lawyers, social scientists or philosophers – to provide anticipatory and reflective methodologies or to address key challenges.
   d. Think about **how** the involvement of such researchers and their knowledge can be formalised within your project. Are they best placed as scientific collaborators, as members of an advisory board, or as consultants to deliver only specific tasks? Please check if your approach is in line with the national/regional funding rules before designing your proposal.
3. **Create good deliberative spaces** for a range of partners, stakeholders and participants to anticipate, discuss and reflect on the social, political, ethical or environmental context of your research. RRI experts may be able to help you with this in project design and implementation. A number of different approaches are possible, e.g.:
   a. Focusing on your day-to-day research work ("philosopher in the lab approach")
   b. At bi-annual/annual consortium meetings
   c. By using stage-gate approaches where explicit decisions about technological choices are taken.
4. Consider **who will benefit** and who may experience new risks from your project.
   a. Does your project address a specific societal or environmental problem or need?
   b. Does your discription of the problem fit with other people's understanding of it? Can you gain access to these alternative understandings?
   c. In addition to societal benefits, also consider benefits to the research community through the generation of knowledge, access to infrastructure, the creation of networks and funding.
   d. Reflect on the most the appropriate form of intellectual property (IP) to suit your project goals. Do classical IP strategies deliver the broadest benefit? Can new strategies (e.g. Open Material Transfer Agreements) be adopted at certain points of the research process?
   e. Could commercial or non-commercial organisations benefit from your research? If so, how?
   f. Consider also the risks and ways that these can be ameliorated. For instance, what are the risks of potential risks of data being released? How can you take care to ensure these data are interpreted appropriately?
5. Reflect on/consider adapting **your choice of research methods** regarding, for example:
   a. ethical issues,
   b. in vivo/in vitro experiments,
   c. use of new approaches such as SSbD.
   d. Are there ways that your project can advance common practices on these issues?
6. Engage with important aspects of **your research environment** such as:
   a. gender, ethnicity and intersectional equality, diversity and inclusivity
   b. Open Science and other publication practices
   c. career progression and precarity
   d. equity between partners in your research consortium

7. Show how the project (and product) satisfy requirements for **production safety** and efficiency.

5. How does M-ERA.NET support and evaluate RRI?

RRI requires a multi-level approach that pays attention to the different sites of research and innovation (e.g. universities, companies, policy arenas), different stages of research (i.e. across the TRL spectrum) and different research cultures. Responsibility must be shared, and RRI is therefore a cross-cutting issue for M-ERA.NET. It is considered in development of the annual work programme and the resulting funding calls.

At the level of research projects, ***M-ERA.NET requires that all proposers explain how their projects demonstrate a commitment to investigating and addressing the social, environmental, ethical, political or cultural dimensions of the proposed research***. Integration of RRI should lead to an improved awareness of the possible benefits, risks, and uncertainties of material science across a broad cross-section of society. This may include (but is not limited to) any of the approaches described in the above section.

RRI should not be thought of as 'distinct from the science', but central to it. ***RRI components will therefore be evaluated by experts as integral components within the scope of all evaluation criteria (Excellence, Impact, and Implementation)***. RRI does not detract from the overall scoring but contributes to it: Proposals that explicitly aim to advance processes of anticipation, reflection, inclusion and responsiveness by developing new analyses or methodologies will be rewarded in the review process and the scores will be adjusted accordingly. The kinds of questions the reviewers will ask regarding RRI are:

- Is the RRI approach proposed proportionate to the content of the scientific proposal?
- Is there appropriate RRI expertise in the project?
- Is RRI work adequately resourced? Is it clear *how* the objectives will be achieved?
- Does RRI extend across the lifespan of the project? (e.g. as a sub-project, an advisory board or to be considered in annual meetings)
- Is it clear how the RRI work is organised? (e.g. as a WP, a cross-cutting issue, outsourced etc.)
- Is it clear who is doing the RRI work?
- Are there clear opportunities for the RRI work to shape scientific course?
- Does the work advance RRI scholarship or generate new knowledge of the social, political, ethical or environmental dimensions of material science?