



First joint EUREKA / Photonics21 Mirror Group Call for R&D&I project proposals addressing

Photonics for advanced manufacturing

supported by
Austria, France, Germany, Israel, Poland,
Switzerland and the United Kingdom

Deadline for the submission of project applications: 25 July 2019

Time schedule

Opening of the Call	25 March 2019
Submission deadline for EUREKA project proposals	25 July 2019 (date of receipt / CET)
International selection meeting	29 October 2019
Feedback to proposers / EUREKA labelling and start of national funding procedures	November 2019
Start of projects	between January and June 2020*

* i. a. depending on the national funding procedures of the countries involved in a project



1. Background

The participating funding bodies from the above mentioned countries intend to fund joint research and development in the area of photonics. Applicants are expected to undertake research aiming at marketable products, services or technologies with high market potential in the participating countries and/or Europe. This call will be administered under the regulations of the intergovernmental EUREKA network.

This initiative continues the cooperation within the Photonics21 Mirror Group comprising research funders in the field of photonics in Europe (including associated countries) who jointly implemented a number of transnational calls under the ERA-Net / Cofund scheme of the EC research framework programmes.

2. Scope

Interested parties are invited to submit R&D&I project proposals addressing photonics for advanced manufacturing. Advanced (industrial) manufacturing is commonly defined as the use and/or integration of innovative technologies – here: photonics – in order to improve both products and processes. Proposals for R&D&I projects sought to be funded under this call should therefore

1. address at least one of the technologies and one of the industries mentioned below;
2. focus on photonic technologies and their integration in specific manufacturing processes and/or products;
3. demonstrate the potential to significantly improve the related processes and/or products.

Photonic technologies to be investigated particularly include (but are not limited to):

Laser machining, additive manufacturing, selective laser sintering, photonic curing, optical process control / process analytical technology (PAT), 3D optical sensing and imaging incl. spectral and hyperspectral imaging, millimeter wave imaging and lidar, lithography (photo-, stereo-, laser-based).

Industry sectors addressed particularly include (but are not limited to):

Electronic and computer components, electro-mechanical engineering, transportation and automotive manufacturing including for sport competition, aviation/aerospace, material, chemical and pharmaceutical industry, food control industries, safety and quality engineering and manufacturing technologies.

The participating funding bodies consider that proposals resulting in total implementation costs of between EUR 0.75 and 2 million would allow this area to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requiring higher or lower amounts.

Consortia composed of partners from the participating countries and regions are invited to present joint proposals for R&D&I projects until 25 July 2019 according to the rules and procedures described below.



3. General rules of participation

Expected project results will have to contribute to the development of commercial products, applications and / or technology-based services. The project proposals have to comply with the following guidelines:

- The project consortia must consist of at least two independent organisations from at least two of the participating countries.
(Information on the national eligibility of participants and on applicable national funding rules can be found in section 5 of this call document and in the relevant national funding guidelines.)
- The project proposal must be in scope according to section 2 and clearly address the call topic.
- The project proposal should demonstrate an obvious advantage and added value resulting from the technological cooperation between the participants (e.g. increased knowledge base, commercial leads, access to R&D infrastructure etc.).
- The proposed project must be innovative and there must be a technological risk involved.
- The project proposal must clearly demonstrate a plan to exploit, apply and/or commercialise the results of the project.
- The project proposal should demonstrate the contribution of all the partners from the participating countries on an equal base, and the project must be equally significant to them. At least, not more than 75% of the total eligible project costs shall be incurred by any single partner or by all partners from a single participating country collectively.
- The project must aim at civilian use.
- Organisations from other countries may also participate, but they will not receive funding under the terms of this call. Moreover, the necessity of the involvement of such third country participants as well as their financing must be set out clearly.
- Project duration shall be limited to a maximum of 36 months.

Any consortium whose cooperative R&D&I project is consistent with the above criteria can apply to the present announcement in accordance with the national laws, rules, regulations and procedures applicable to the individual consortium members.

4. Submission and approval procedures

- The consortium partners jointly have to complete the EUREKA Project Application Form: <http://www.eurekanetwork.org/eureka-project-application-form>.
- Early consultation with the respective national funding bodies and with the respective national EUREKA offices is strongly advised (for contact details see section 5).
Please note that in some countries a registration of the participants prior to the proposal submission and/or the completion of additional national forms is mandatory.
- The completed EUREKA Project Application Form should be submitted electronically by the main participant / co-ordinator (on behalf of the consortium) before the submission deadline (25 July 2019 – date of receipt / CET) to projects@eurekanetwork.org with reference to “EUREKA photonics call 2019” in the subject line.
- Participants are obliged to ensure that they provide all mandatory forms and information in time and that their project proposal complies with the applicable national eligibility criteria (see 5. National funding details and eligibility criteria). It is strongly recommended to consult with the responsible national contacts.
- The EUREKA Project Application Form will be checked on completeness and eligibility by the national EUREKA offices and by the EUREKA secretariat according to a joint assessment methodology. In parallel, the EUREKA Project Application Form and the additional national forms (if any) will be reviewed and assessed by the National Funding Bodies (NFBs), respectively by (technical) experts acting on their behalf, according to the applicable national procedural rules.
- A selection panel consisting of representatives from the participating national funding bodies will decide on the projects to be recommended for funding. The selection will be based on the results of the assessments (EUREKA and NFBs), while taking into account the availability of funds on the part of the respective NFBs,
- Participants of the projects being recommended for funding will be invited to enter into the national funding procedures. A project can start once all of its participants have received their respective grant agreements/contracts, which will be issued nationally for each individual partner (see 5. National funding details and eligibility criteria).
- The project participants are required to sign a consortium agreement in due time.
- The call announcement will be published on the central call website that is accessible at <http://www.eurekanetwork.org/calls-for-projects> .

5. National funding details and eligibility criteria

a. Austria:

The Austrian Research Promotion Agency (FFG) is the main public body to support industrial research, development and innovation in Austria.

For Austrian proposers two national FFG-funding schemes are available:

1. Funding programme “Production of the Future”
2. General Programme (“Basisprogramme”)

The Austrian partner of a project consortium have to submit a proposal either to “Production of the Future” funding programme or the General Programme at FFG.

FFG programme	Production of the Future	General Programme
Programme owner	Federal Ministry for Transport, Innovation and Technology (BMVIT)	Austrian Research Promotion Agency (FFG)
Programme website	https://www.ffg.at/produktion-der-zukunft-das-foerderprogramm	https://www.ffg.at/ausschreibungen/basisprogramm-laufend
Eligible proposers and funding regulations	<ul style="list-style-type: none"> • Companies • Research institutes - only in cooperation with at least one Austrian company <p>Further information on conditions and restrictions are given in the call documents: https://www.ffg.at/30-ausschreibung-produktion-der-zukunft/downloadcenter</p>	Companies (research institutions can be subcontracted only)
Research category	Industrial Research (IR): TRL 2-4 Experimental Development (ED): TRL 5-7	Experimental Development



FFG programme	Production of the Future	General Programme
Funding commitment	500.000 EUR	Will be financed out of the budget of General Programme
Language of the proposal	German or English	German or English
Max. Runtime of project	36 months	funding on a yearly basis
Max. Funding for SE	IR: 80%, ED: 60%	60%
Max. Funding for ME	IR: 70%, ED: 50%	50%
Max. Funding for LE	IR: 55%, ED: 35%	40%
Max. Funding for research institutions	IR: 85%, ED: 60%	Not applicable
NPOs and local administration	IR: 80%, ED: 60%	Not applicable
National submission deadline	26 July 2019, 12:00 C.E.T.	
Submission of the proposal at the national level	<p>Applications must be submitted in electronic form here: https://ecall.ffg.at/cockpit/cockpit.aspx</p> <p>Mandatory are:</p> <ul style="list-style-type: none"> • Eureka proposal form • Production of the future proposal application • Costs and requested funding. <p>No application will be considered after the final national submission date.</p>	<p>Applications must be submitted in electronic form here: https://ecall.ffg.at/cockpit/cockpit.aspx</p> <p>Mandatory are:</p> <ul style="list-style-type: none"> • Eureka proposal form • General Programme proposal application • Costs <p>No application will be considered after the final national submission date.</p>

National contact for FFG funding for:

Production of the Future

Dr. Fabienne Eder

Email: fabienne.eder@ffg.at

Tel: +43 (0) 57755 5081

National contact for FFG funding for:

General Programme

Astrid Janik MA

Email: astrid.janik@ffg.at

Tel: +43 (0) 57755 1218

National EUREKA contact (for questions about EUREKA):

Irina Slosar

Email: irina.slosar@ffg.at

Tel.: +43 (0) 5 7755 4901



b. France:

- **Regular procedure**

Bpifrance is a public investment bank which finances businesses from the seed phase to transfer to stock exchange listing, through loans, guarantees and equity. Bpifrance accompanies firms developing export activities and provides support to innovation projects.

At the earliest stage prior to the submission of the EUREKA Project Form, Bpifrance may provide funding support through grant of up to 50 000 € to cover French companies' needs in the preparation of their project via the Technological Partnership Aid (aide au partenariat technologique, APT, <https://www.bpifrance.fr/Toutes-nos-solutions/Aides-concours-et-labels/Aides-a-l-innovation-projets-individuels/Aide-au-partenariat-technologique-APT>).

No additional document needs to be submitted prior to the EUREKA application form. However, French partners must imperatively get in touch with the Bpifrance contact person ahead of submitting their EUREKA project application for its pre-check. Companies with pre-approved projects will then be invited to formally submit their national application for funding.

Bpifrance funding : French companies must submit their funding application to Bpifrance within one month of receiving their eligibility notice. The funding application form is available on Bpifrance website. A financing decision will be taken within three months after the receipt of a complete funding application.

In the framework of EUREKA and according to Bpifrance funding rules, French enterprises with less than 2.000 employees (on the basis of the consolidated figures) are financed through interest free reimbursable loan (commonly called “avances récupérables” in french). The global funding amount will be partially nonreimbursable in case of technical failure of the project. The funding rate is up to 65% (minimum amount 50 000 €, maximum amount 3 M€ per participant). Bpifrance does not fund University and Research organizations. Nevertheless, University/Research Organizations are welcomed as subcontractors of French companies. French companies must confirm their financial capacity (equity capital, funds raising etc.) to support their participation in the project.

Eligible costs for Bpifrance;

- Personal costs
- Overheads : 20% of personal costs
- Costs related to intellectual property, patent extension etc
- Feasibility study



- Market search
- Equipment (depreciation and amortization)
- Industrial research and experimental development
- Project management and associated costs (related travel costs of French participants).

The approval by Bpifrance of a financial support will depend on the finalization of a consortium agreement
For further information about financing of French participants please directly contact Bpifrance.

- **Double submission procedure**

Different national windows aimed at supporting innovation can also be used to fund French partners of this call, according to the respective funding rules applicable. However, this alternative procedure is only possible if innovative products or services can be developed in the sole scope of the work carried out by the French partners in the project. It is strongly recommended to proceed early with the submission of the project at the national window, as a favourable decision of the national funding body must be obtained before the end of 2019.



c. Germany:

In Germany, the Federal Ministry of Education and Research (BMBF) will finance research and/or technological development activities of German companies, universities and research centers.

In order to be eligible for BMBF funding project proposals must comply with the following conditions:

- The consortium must include at least one independent company based in Germany and one partner from one of the other participating countries. German research institutes or universities may participate as partners or subcontractors.
- In order to achieve a critical mass and to generate an adequate impact, the requested funding must account for at least 100.000 EUR per German partner.
- **In addition** to the EUREKA Project Application Form, German participants in a project proposal need to submit before the deadline of the call (25 July 2019) **a 15-page Project Outline** of the transnational project in German language. The prescribed template to use is available for download at <https://www.photonikforschung.de/foerderung/formularschrank.html> . The submission of the Project Outline in pdf format is requested by e-mail (subject: 'EUREKA Photonics Call 2019') to the German funding agency contact below (krug (at) vdi.de).
- The project proposal must be consistent with the provisions of the BMBF Funding Programme 'Photonik Forschung Deutschland'.
(see <https://www.photonikforschung.de/foerderung/foerderprogramm.html>)
- The project proposal must measure up to comparable national BMBF-funded projects and demonstrate an added value due to the transnational cooperation.
- The work plan must comprise R&D&I activities only. Activities to be attributed to the *definition phase* (see EUREKA Project Form, section 1.6) are not eligible for BMBF funding under this call.
- The consortium needs to describe the cooperation among the participants (workflow, deliverables and milestones) as well as the specific role, expertise and tasks of each partner in a convincing manner.

Funding of German participants is available:

- For companies (funding up to 50% of the total eligible costs; SMEs may receive an additional bonus of up to 10%);
- For universities and research institutes/organisations (funding up to 100% of the total eligible costs/expenditures).

Companies are expected to contribute to the costs/expenditures of the BMBF funded academic and research partners within the project consortium (if any) according to their economic capacity. In general, their contribution should amount to at least 50 % of the total eligible costs/expenditures on the part of all German participants in the project (national overall funding rate up to 50%).

The national regulations AnBest-P, NABF and/or NKBF 2017 apply. The documents can be found at:
http://foerderportal.bund.de/easy/easy_index.php?auswahl=easy_formulare&formularschrank=bmbf

German participants of selected are expected to provide complete BMBF application forms (AZA/AZK including annexes) within two months after the official notification of the project selection. Non-compliance may result in exclusion. German participants will be informed about the necessary further steps in due time.

Funding agency contact (for questions about national funding, rules and application):

VDI Technologiezentrum GmbH
Project Funding Agency
Quantum Systems
Sebastian Krug
Tel.: +49 211 6214-472
e-mail: krug (at) vdi.de

National EUREKA contact (for questions about EUREKA) :

DLR Project Management Agency
Juliane Kutenkeuler
Tel.: +49 228 3821-1335
e-mail: Juliane.Kutenkeuler (at) dlr.de



d. Israel:

Agency	The National Technological Innovation Authority - ISERD,
Contact	ICT department: Dan Seker (Dan@iserd.org.il), +972-3-5118121 Nir Shaked (Nir.S@iserd.org.il) +972-3-5118123 Eureka rules: Mr. Uzi Bar Sade (Uzi@iserd.org.il)
Eligible applicants	Eureka rules will apply Following entities are eligible to apply: • Industrial enterprises registered in Israel, with an R&D capabilities (Universities and RTOs only as Sub-contractors to Israeli companies) All Israeli project partners must contact ISERD (through Danny/Nir) before submitting a pre-proposal. For further Information (eligibility criteria, national rules on eligible costs, etc.) please go to: https://innovationisrael.org.il/international/programsrnd/multinationalagreements
Budget	0.5 Million Euro
Further specification	Financial viability and business soundness is verified by means of an internal check - companies that are in danger of insolvency cannot be funded

e. Poland:

Agency: National Centre for Research and Development (NCBR)

Contact (for both Photonics21 Mirror and EUREKA):

Andrzej Wajs
Project Coordinator
Department for International Cooperation
National Centre for Research and Development (NCBR)
e-mail: andrzej.wajs@ncbr.gov.pl
phone: +48 22 39 07 499

Type of RTD: NCBR supports the following types of research/development:

- Applied research
- Experimental development

Eligible applicants:

- Micro, Small, Medium and Large Enterprises;
- Research Organisations.

NB. Entities must be registered in Poland.

The project consortium with Polish participation must contain at least one Polish enterprise to be eligible for funding.

Budget: 600.000 Euro

Further specification:

All proposals must be aligned with national regulations, inter alia:

- The Law of 20 July 2018 on Higher Education and Science, published in Journal of Laws item 1668, 2018;
- The Act of 30 April 2010 on the National Centre for Research and Development, published in Journal of Laws item 1249, 2018, as amended;



- The Regulation of the Minister of Science and Higher Education of 25 February 2015 on criteria and rules on granting state aid and “de minimis” aid through the National Centre for Research and Development (Journal of Laws of 4 March 2015, item 299)

Eligibility of the costs and funding rates can be found at: <http://www.ncbr.gov.pl> .



f. Switzerland:

Innosuisse is the Swiss Innovation Promotion Agency. Its role is the promotion of innovation in the interests of industry and society and the representation of Switzerland in international innovation initiatives and programmes, such as EUREKA.

Eligible for grants from Innosuisse are Swiss project partners adhering to the Innosuisse funding rules, combining an industrial and academic partner on the Swiss side of the project. Please take into consideration that the proposal should be balanced in a way that the Swiss industrial partner has to carry at least the same amount of costs as the academic partner (University, RTO, University of Applied Science, etc.). The academic partner is 100% funded and receives a further 10% of the Innosuisse funding in cash from the industrial partner. The industrial partner receives in return on investment the right to exploit the project results in its business domain.

A participation based on self-funding is also possible if the ability to finance the project costs in-kind can be demonstrated.

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Participants are invited to contact their national project coordinators before submitting the documents in order to check the eligibility of the project idea and consortium and consult on possible alternative funding models if necessary. In addition to the centrally submitted EUREKA Project Application Form, Swiss partners need to submit a shortened Innosuisse project application form available on the call website.

Contacts

For Photonics 21 (partner search, advice on national funding rules and writing proposals)	For Innosuisse (eligibility, funding synchronization)
Swissphotonics Christoph Harder harder (at) swissphotonics.net +41 79 219 9051 https://www.swissphotonics.net/home	Innosuisse Claire Dové claire.dove (at) innosuisse.ch +41 58 466 79 51 https://www.innosuisse.ch/eureka



g. United Kingdom:

Innovate UK, part of UK Research and Innovation, is the UK's funding agency for this EUREKA Network competition. EUREKA Network projects are by design market-driven international R&D projects aiming to develop marketable products, services or processes.

Innovate UK is investing up to £2 Million to fund UK businesses, Research and Technology Organisations (RTOs) and Universities participating in collaborative projects conducting predominantly industrial research with partners from the current EUREKA Network participating countries.

In addition to the EUREKA Project Form, UK participants are required to submit a full application using Innovate UK's document-based application process (details on Innovate UK's general guidance below). The application will largely be based on Innovate UK's template which, in general, comprises 3 main sections: Application details, Application Questions and Finances.

NB - The UK part of the consortium should appoint a lead partner who will have to register with Innovate UK to complete and submit on behalf of the other UK organisations the required documentation as part of the application.

The national version of the EUREKA Network competition in Photonics will be made available through Innovate UK's live competitions web-site:

<https://apply-for-innovation-funding.service.gov.uk/competition/search>

The eligible conditions which UK organisations should satisfy in order to be considered for Innovate UK grant funding follow below:

- The consortium must include at least one UK-based SME and one partner from one of the participating countries in the EUREKA Network in Photonics.
Note: an international partner(s) must be separate, non-linked legal entity to a UK partner(s).
- UK-based businesses of any size can lead on a project proposal provided that the above minimum condition is met.
- Subject to the above minimum condition, research organisations, including RTOs and Universities, are welcome to participate as partners in a consortium.
 - Research organisations can share up to 30% of the total eligible UK project costs. If a consortium contains more than one RTO or University, this maximum will be shared between them.
 - Research organisations cannot lead on an application
 - RTOs must be able to show how they will exploit the results of the project to grow the wider sector in the UK.



- The amount of subcontracting must not be more than 20% of the UK's participation total eligible costs
- With reference to the EUREKA Project Application Form, UK participants are instructed to only give costs and duration for the 'implementation phase' and leave the 'definition phase' empty.
- UK organisations could have their eligible costs funded by Innovate UK up to the following rates (for more information please see the general guidance below):
 - Micro/Small business up to 70% for industrial research and 45% for experimental development
 - Medium businesses up to 60% for industrial research and 35% for experimental development
 - Large businesses up to 50% for industrial research and 25% for experimental development
 - Research organisations undertaking non-economic activity will be funded as follows:
 - Universities: 80% of full economic costs
 - All other research organisations: 100% of eligible costs
- The definition of micro, small and medium-sized enterprises (SMEs) used by Innovate UK is set out in the [EU definition of an SME](#).
- Innovate UK's *general guidance for grant applicants* is available at the web-link: <https://www.gov.uk/guidance/innovate-uk-funding-general-guidance-for-applicants>
- Innovate UK's *guidance on project costs* is available at the web-link: <https://www.gov.uk/government/publications/innovate-uk-completing-your-application-project-costs-guidance>
- Innovate UK reserves the right to apply a 'portfolio' approach for the selection of projects in this competition.
- Each partner must carry out the majority of their funded work within the country from which they receive funding (i.e., the UK for Innovate UK funding).
- Any UK business requesting Innovate UK funding must be eligible to receive state aid at the point of award. It is your responsibility to make sure that your organisation is eligible to receive state aid. For further information please see the general guidance.

Funding Agency contact:

Innovate UK Customer Support Services: support (at) innovateuk.ukri.org

Georgios Papadakis – Innovation Lead for Electronics, Sensors and Photonics
georgios.papadakis (at) innovateuk.ukri.org

EUREKA

EUREKA is a European intergovernmental network facilitating trans-boundary market-oriented R&D projects aiming at new products, processes and services with a civilian application. Founded in 1985, EUREKA now includes 39 European countries, Israel and the European Commission. South Korea holds the status of a partner country, Canada, South Africa and Chile are associated countries. Following a bottom-up approach, EUREKA has been the driving force of innovation in Europe for 30 years, boosting productivity & competitiveness of EUREKA members. Further information is available at www.eurekanetwork.org.