

Photonics call 2022

for multilateral R&D&I project proposals

addressing
next generation integrated photonic sensing

supported by
Austria, Belgium-Flanders, Denmark, Finland,
France, Germany, Ireland, Poland, and Switzerland

R&D project applications under this call can be submitted
between 14 April 2022 and 27 June 2022.

Timetable

Call opens	14 April 2022
Submission deadline for Eureka project proposals	27 June 2022 (date of receipt / CET)
Feedback to proposers and start of national funding procedures	October 2022
Start of projects	as from November 2022*
* i. a. depending on the national funding procedures of the countries involved in a project	

1 Background

The participating funding bodies from the countries and regions listed below intend to fund joint research and development in the field of photonics. Applicants are expected to undertake research aiming at market-able products, services, or technologies with high market potential in the participating countries and/or Europe.

Eureka is the world's biggest public network for international cooperation in R&D and innovation, present in over 45 countries. It is a decentralised intergovernmental organisation aiming to boost the productivity and competitiveness of industries by funding and supporting international collaborative market-driven R&D projects.

This call for projects has been launched at <https://www.eurekanetwork.org/open-calls/> following Eureka's Network projects framework based on mutual consent between participating national and regional funding bodies. It is the second joint call for projects between Eureka and Photonics21, building on the initiatives of Photonics21 Mirror Group institutional members who have implemented a series of transnational calls under the ERA-Net Cofund scheme of the EC Research Framework Programmes FP7 and Horizon2020.

2 Participating countries / funding agencies

- Austria: BMK (fund owner) / FFG (funding agency)
- Belgium-Flanders: VLAIO
- Denmark: IFD
- Finland: Business Finland
- France: BPI France
- Germany: BMBF (fund owner) / VDI TZ (funding agency)
- Ireland: Enterprise Ireland
- Poland: NCBR
- Switzerland: Innosuisse

Please note that when the terms 'national' or 'country' are used in this call document, they equally refer to and include the participating region(s).

3 Thematic scope

Interested parties are invited to submit R&D&I project proposals substantially contributing to the development and the deployment of novel integrated photonic sensors or sensing techniques.

Project proposals under this call are expected to relate to at least one of the three subtopics:

1. PICs (photonic integrated circuits):
integrating photonics and electronics for novel photonic sensors and sensing systems,

considering packaging and connection approaches, scalability, CMOS-compatibility, and new material systems

2. QPICs (photonic quantum sensors):
combining and integrating classical and quantum optics (e. g. onto a photonic chip) to use quantum properties or quantum phenomena to perform a measurement of a physical quantity
3. Hybrid sensing:
combining two or more sensing methods - at least one of which originates from the field of photonics - to enable new sensor applications or to substantially improve existing ones

The proposed R&D work should aim at future-oriented sensor technologies and systems that centrally address at least one of the following challenges:

- Climate and environmental protection, including reducing energy consumption
- Enabling novel end consumer products and accessing volume markets by means of robust, miniaturized, scalable, and sustainable photonic sensors and systems

Proposers shall clearly identify application areas and applications (preferably products) aimed at by the project. Potential application areas include – but are not at all limited to – environmental monitoring, process control, mobility (traffic and motion control), health monitoring and food surveillance.

4 Eligibility criteria

4.1 General rules for participation

To be considered for funding, consortia and their project proposals must meet the following conditions:

- The call is open to enterprises, research institutes/organisations and universities.
- The project idea must represent international cooperation in the form of a specific project.
- The project consortia must consist of at least two independent legal entities (at least one private enterprise per country) requesting funding from at least two of the participating countries or regions (see section 2).
- The project proposal must be in scope according to section 3 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 include a commercialisation plan (with a timeline), demonstrating how the results of the project will be exploited, applied and/or commercialised through subsequent innovatory steps.
- 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 70 % 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 have a civilian purpose and aim at civilian use only.
- The requested project duration shall be limited to a maximum of 36 months, notwithstanding possible subsequent extensions.

4.2 National and regional conditions for participation

In addition to the general rules (see 4.1) applying to all participants, specific national or regional conditions apply to the participants according to their origin. These conditions may specify, inter alia, a requirement for national registration or for the simultaneous filing of national forms.

The national and regional conditions can be found in the separate annex to this call document.

In addition, it is strongly recommended to consult the relevant national contact person listed below before submitting a project proposal.

Contact:

<p>Austria:</p>	<p>Michael Walch Eureka National Project Coordinator FFG Austrian Research Promotion Agency</p> <p>Phone: +43 (0) 57755 – 4901 Email: michael.walch@ffg.at</p>
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<p>Finland:</p>	<p>Kari J. Leino Business Finland Telephone: +35 8505577698 E-mail: kari.leino@businessfinland.fi</p>
<p>France:</p>	<p>Charlotte CALVET Bpifrance Head of International Collaborative Innovation Responsable du Domaine Innovation Collaborative Internationale M: +33 (0)6 75 25 00 25 charlotte.calvet@bpifrance.fr</p>
<p>Germany:</p>	<p>Sebastian Krug VDI Technologiezentrum GmbH European Operations Coordinator Quantum Systems Phone: +49 211 6214 472 E-mail: krug@vdi.de</p>
<p>Ireland:</p>	<p>David Flood Senior Executive R&I Internationalisation M: +353 (0)86 8372832 E-mail: David.flood@enterprise-ireland.com</p>

Poland:	<p>Andrzej Wajs Project Coordinator National Centre for Research and Development (NCBR) M: +48 516 958 527 E-mail: andrzej.wajs@ncbr.gov.pl</p>
Switzerland:	<p>Colette John-Grant Eureka National Project Coordinator Innosuisse Phone : +41 58 466 77 32 Email: colette.john@innosuisse.ch</p>

5 Funding details (overview)

Country/ Region	max. funding per partner	max. funding per project	SME eligible / max. funding rate	LE eligible / max. funding rate	universities eligible / max. funding rate	research institutions eligible / max. funding rate	prior national / regional registration	additional national / regional forms
AT	n. a.	€ 500 k	IR: 80% ED: 60%	IR: 55% ED: 35%	IR: 85% ED: 60%	IR: 85% ED: 60%	Y	Y
CH	n. a.	n. a.	n. a.	n. a.	100 %	100 %	Y	Y
DE	n.a.	n.a.	Y / 60 %	Y / 50 %	Y / 100 %	Y / 100 %	Y	not for the 1 st stage
DK	€300K	€500K	Y / 75%	Y / 65%	Y / 90% + 44% overhead	Y / 60%	N	Depending on application form
FI	n.a.	n.a.	50%	40%	70%	70%	recommended	not for 1st stage
FLA (BE)	3,000 k€	3,000 k€	50%/60%	50%/60%	indirect	indirect	N	Y
FR	3M€	n. a.	Y/80%	Y (up to 2000 employees) / 40%	N/ Self funded	N/ Self funded	Y	-
IE	SME/LE: n.a. RPO: 250K	n. a.	Y / 50 %	Y / 25 %	Y / 100 %	Y / 100 %	recommended	R&D Fund / IRF
PL	750 K PLN	1,5 m PLN	Y/ 80%	Y /60%	Y / 100%	Y / 100 %	Y	Y

6 How to apply (submission procedure)

- A consortium wishing to submit a project proposal must complete the Eureka project application form online which is available at the Eureka portal (https://eureka.smartsimple.ie/s_Login.jsp). Access to the Eureka application portal requires previous registration.
- In addition to information concerning the overall project (including commercialization plan and Gantt chart) which must be provided jointly by the partners, there are sections to be completed individually by each partner. All information in the form and its annexes must be provided in English.
- The completed Eureka project application form must be uploaded / submitted electronically by the main participant / coordinator (on behalf of the consortium) before the submission deadline (27 June 2022 – date of receipt / CET).
- In addition, in some countries prior registration of the participants and/or the submission of supplementary national forms is mandatory.
- 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 annex).
- Early consultation with the respective national funding bodies (for contact details see section 4.2) and with the respective national Eureka offices is strongly advised.

7 Evaluation and selection procedure

- The Eureka project application form will be reviewed according to the Eureka Network projects evaluation methodology (for evaluation criteria see separate annex).
- 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 the national funding procedures. A project can start once all its participants have received their respective grant agreements/contracts, which will be issued nationally for each individual partner.
- The project participants are required to sign a consortium agreement in due time.



8 Links and downloads (from Eureka website)

- Photonics call website: <https://www.photonics21.org/MG-Call-2022.php>
- Eureka call announcement: <https://www.eurekanetwork.org/open-calls/> .
- Eureka application portal: https://eureka.smartsimple.ie/s_Login.jsp
- Call document (download)
- Annex: national and regional conditions (download)
- Annex: Eureka evaluation criteria / Network projects evaluation methodology (download)
- User guidelines for Eureka application platform (download)