



HORIZON2020

Photonics in - ICT WP 2020

November 2019

<https://www.youtube.com/watch?v=h-1ezyAsVTc>

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The Israel Innovation Authority

Innovation Divisions



Technological Infrastructure



Startup



Growth



Societal Challenges



Advanced Manufacturing



International Collaborations

The Different Needs of Israeli Hi-tech Firms Require Different Policies and Tools

Research infrastructure, disruptive technologies

Maintaining a sufficient deal flow of tech startups and helping them reach fundable milestone

Helping tech firms grow in Israel

Supporting tech solutions for societal and public goals

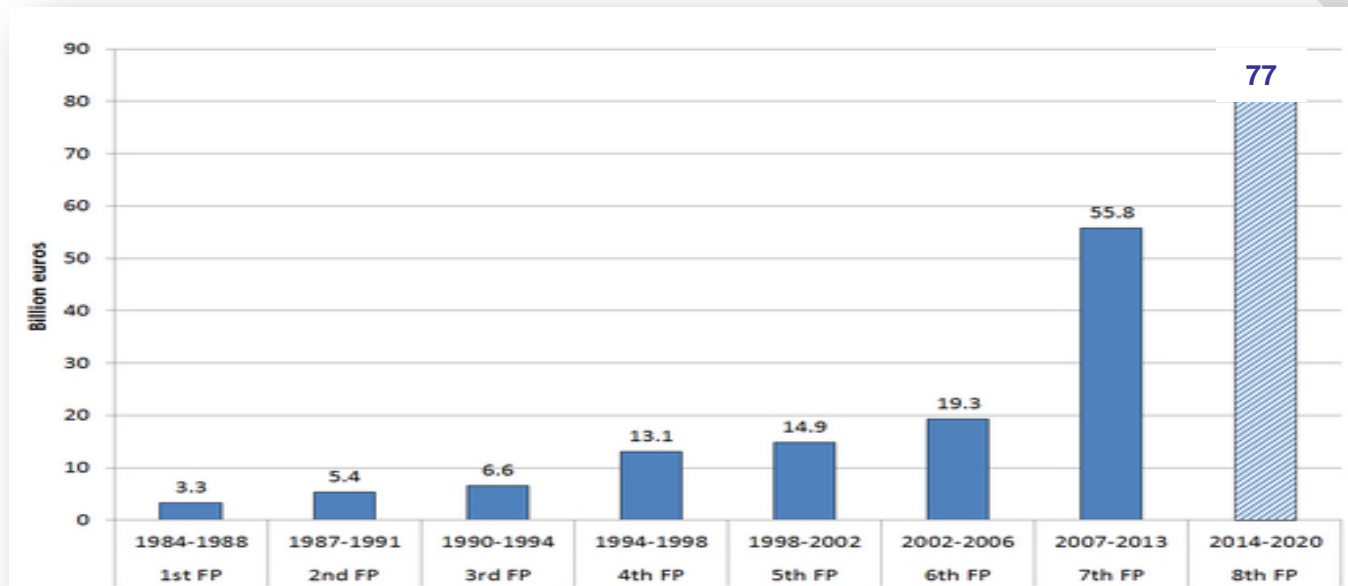
Pushing the manufacturing industries to a sustainable competitive path

Enabling Israeli technology industry to find its path in the global arena

Horizon 2020 European Framework Program (FP8)

- EU's main funding instrument for R&I (since 1984)
- Goals:
 - Strengthen the scientific & technological base of European Industry
 - Support EU policies and address major Societal Challenge
 - Create a “European Research Area” (ERA)
- Covering all major scientific and technological disciplines
- Targeting the major European industrial sectors

Progression of FP budgets over time



Funding Members of H2020



EU MEMBER STATES (28)

	Austria		France		Malta
	Belgium		Germany		Netherlands
	Bulgaria		Greece		Poland
	Croatia		Hungary		Portugal
	Cyprus		Ireland		Romania
	Czech Rep.		Italy		Slovakia
	Denmark		Latvia		Slovenia
	Estonia		Lithuania		Spain
	Finland		Luxembourg		Sweden
					UK

ASSOCIATED COUNTRIES (16)

	Albania		Norway
	Bosnia and Herzegovina		Serbia
	Faroe Islands		Switzerland
	FYROM - Macedonia		Turkey
	Iceland		Ukraine
	Israel		Tunisia
	Moldova		Georgia
	Montenegro		Armenia

Conditions for participation

➤ **MINIMUM CONDITION**, general rule, at least 3 independent participants from 3 different MS or AC

➤ **ADDITIONAL CONDITIONS** can be established by the WP (number or type of participant, place of establishment)



More than funding opportunity

If you succeed in forming or joining a consortium that submits a proposal for R&I project (even if it doesn't eventually win) you may gain new:

- Customers
- Suppliers
- Beta sites
- Data providers
- Application fields for your technology
- Solutions for your challenges
- New markets in Europe
- Government relations

Funding tracks

	IA	RIA	CSA
Profit	70%	100%	100%
Non for profit	100%	100%	100%

+25% Overhead

➤ RIA - Research and Innovation Action:

- R&D to establish new knowledge
- Feasibility of a new or improved technology, product, process, service or solution (including basic & applied research, technology development and integration)
- Testing and validation on a small-scale prototype in a laboratory or simulated environment

➤ IA (innovation actions):

- Producing plans and arrangements or designs for new, altered or improved products, processes or services
- prototyping, testing, demonstrating, piloting, large-scale product validation and market replication...

ICT-36-2020 Disruptive photonics technologies

Dates	Research and Innovation Action (RIA) 1/2	Budget (M€)	Funding Terms
<p>Opening: 19 Nov 2019</p> <p>Deadline: 22 April 2020</p>	<p><u>Address one of the following:</u></p> <p>I. 3D light field and holographic displays:</p> <ul style="list-style-type: none"> Develop photonics components & systems to enable 3D light field or holographic displays for use in mixed-reality applications: gaming, automotive, healthcare, telecommunication & entertainment, etc. Must include validation in validation settings. May also include development of sensors & actuators for functionalities as sensing, connectivity, user interaction, etc. <p>- Past funded project (in a close technology field) for example</p> <p>II. Packaging and module integration for Photonic Integrated Circuits:</p> <ul style="list-style-type: none"> Develop packaging, assembly, module integration technologies or testing approaches, offering breakthrough advances for the automated, flexible, low-cost, high volume, scalable production of PIC-based photonic components or modules. <p>- Past funded project (in a close technology field) for example</p>	<p>2020: 47.5</p>	<p>RIA – 100% €3-6M per project</p> <p>At least one project per subtopic.</p>

ICT-36-2020 Disruptive photonics technologies

Dates	Research and Innovation Action (RIA) 2/2	Budget (M€)	Funding Terms
<p>Opening: 19 Nov 2019</p> <p>Deadline: 22 April 2020</p>	<p>III. Light to Fuel:</p> <ul style="list-style-type: none"> Develop photonics devices at TRL 5-6 (technology validated-demonstrated in relevant environmentfor) the direct and efficient conversion of solar energy into chemical fuel. Demonstrate technical and economic feasibility. <p>IV. Next generation Bio photonics methods and devices as research tools to understand the cellular origin of diseases:</p> <ul style="list-style-type: none"> Photonics-based in-vivo/in-vitro imaging systems and techniques which deliver greatly increased penetration, resolution, sensitivity, specificity and depth of focus. Real time data handling and processing may also be addressed. Include medical/clinical doctors or research laboratories. 	<p>2020: 47.5</p>	<p>RIA – 100% €3-6M per project.</p> <p>At least one project per subtopic.</p>

ICT-37-2020 Advancing photonics technologies & application driven photonics components, and the innovation ecosystem

Dates	a) Research Innovation Action (RIA)	Budget (M€)	Funding Terms
<p>Opening: 19 Nov 2019</p> <p>Deadline: 22 April 2020</p>	<p>I. Flexible Farm-to-Fork Sensing: Develop portable, easy-to-use, flexible & adaptable, Photonic Sensor solution in the UV-FIR range, to monitor food quality, microbiological & chemical contamination, along production chain, with focus on:</p> <ul style="list-style-type: none"> • Production on small/medium farms; • Novel types of food production, such as aquaponics; • On-site food processing and vending (e.g. farms or food markets). • Must demonstrate in real settings involving stakeholders. <p><u>-Past funded project in a close technology/application field</u></p> <p>II. Novel Photonics Integrated Circuit (PIC) Technology building blocks:</p> <ul style="list-style-type: none"> • Develop building blocks with enhanced or novel functions. • Build Integration platforms for established or new application fields, enabling sensitivity, energy efficiency, speed and chip density. • Validation of results with PIC prototypes. <p><u>PICs related H2020 funded projects</u></p>	<p>2020: 30</p>	<p>RIA – 100% €M3-5 per project.</p> <p>at least one proposal will be selected per subtopic.</p>

ICT-37-2020 Advancing photonics technologies & application driven photonics components and the innovation ecosystem

Dates	b) Innovation Action (IA)	Budget (M€)	Funding Terms
<p>Opening: 19 Nov 2019</p> <p>Deadline: 22 April 2020</p>	<p>III. Smart Photonic Sensing for Environmental Pollution Detection:</p> <ul style="list-style-type: none"> • Prototyping, demonstration and validation in real settings of an innovative, cost-effective, portable, smart hyperspectral sensing system in visible to mid-infrared range, for pollution detection in environmental sensing applications. • System based on a miniaturised optical setup with high diagnostic measurement precision • System combined with massive Cloud-based data analysis capability using advanced Deep Learning algorithms and Big Data sensor signal repositories for comprehensive analysis. 	<p>2020: 15</p>	<p>IA – 70% €M4-7 per project at least one proposal will be selected</p>

Funded project for example - PHASMAFOOD

- [ICT-03-2016 \(closed\) - Smart System Integration](#)
- Mini-portable system for on-the-spot food quality sensing and shelf-life prediction.
- Detect food hazards in the following use cases:
 - Mycotoxins in various grains and nuts.
 - Spoilage in fruits, meat, fish: combined with product expiration date.
 - Food fraud: Adulteration of alcoholic beverages, oil, milk and meat.
- The data will be communicated to a smartphone, where the analysis will take place with the help of a cloud-base application connected to a reference database.
- Advanced detection algorithms will be deployed both in the level of cloud and the smartphone application.



Project site: <https://phasmafood.eu/about-phasmafood>
Project in the EU (CORDIS) database.

Submission Timeline

Preparation for
proposal
submission:
Nov 2019

Evaluation
of
proposals
(up to 5
months)

Grant
Agreement
Preparation
(GAP)
phase (~3
months)

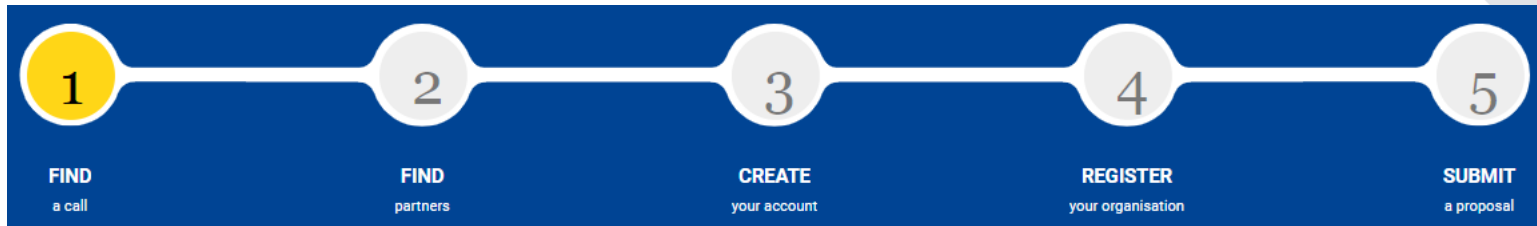
Submission
Deadline:
22 Apr 2020

ESRs sent
and
winners
announced
~ Sep 2020

GA signed –
projects start
and become
public
knowledge
~Dec 2020

~ 8 months

Prepare and Submit a Proposal



1. Find a call topic relevant to your field of expertise.
2. Decide whether you would like to coordinate or to join a consortium.
3. Find partners.
4. Prepare for submission.

Things you can do NOW in order to find partners



Form a Consortium:

- Use your network
- Search **(European) partners** in the [online partner search tool](#):
 - [ICT-36-2020 online partner search](#)
 - [ICT-37-2020 online partner search](#)
- Look for **potential partners presentations** from the photonics network session in a recent matchmaking event (ICT proposer' day 2019) – actively looking for partners
 - [ICT-36-2020 presentations of potential partners](#)
 - [ICT-37-2020 presentations of potential partners](#)
- Send us a specific one-page brochure to post in platforms and networks, like [EEN](#)
- Identify & contact leading groups in previously funded projects:
 - ["Photonics" - CORDIS](#) ; ["Photonics" with Israeli partners - CORDIS](#)
 - [Photonics21 cPPP projects webpage](#)
- **Contact me for help with all the above – nir.s@iserd.org.il**
- Consultants

Writing a proposal

You can get help from:

- National Contact Point (NCP)
- [Pre-Proposal check](#)
- Idealist [toolbox](#)
- Horizon 2020 [website](#)
- [Photonics EC policies](#); [Potonics21 publications](#)
- Experienced colleagues
- Free Full Proposal check > ISERD Red Team; Idealist
- Consultants

The Funding and Tenders Portal

- about Horizon 2020 calls
- Find partners or apply as individual
- Register in the Participant Register**
 - Registration of your organisation
 - LEAR appointment
 - Validation of potential beneficiaries
 - Bank account validation
 - Financial capacity assessment
 - Data update
 - Certifications
- Submit a proposal
 - Get prepared
 - Electronic proposal submission
- From evaluation to grant signature
 - Admissibility and eligibility check
 - Evaluation of proposals
 - Evaluation criteria
 - Evaluation process and results
 - Grant preparation
 - Enter & submit grant data
 - Ethics review
 - Security scrutiny
 - Grant signature

Register in the Participant Register

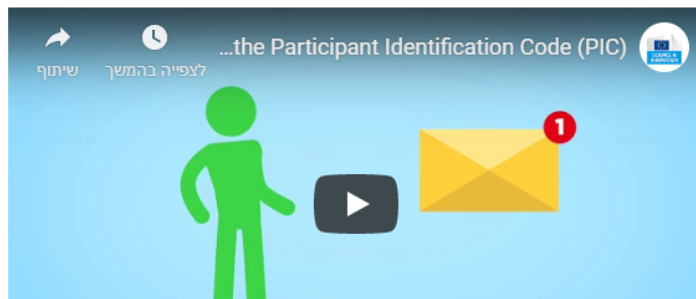
HOW TO

If you want to participate in a project proposal, your organisation needs to be registered in the **Participant Register of the Funding & Tenders Portal** and have a 9-digit Participant Identification Code (PIC).

You can verify whether your organisation is already registered and has a PIC on the Funding & Tenders Portal. If not, you can start the registration process on the same page and, once completed, get the PIC to be quoted in your proposal and in any correspondence with the Commission.

If your proposal is successful, you will receive a notification that your proposal is selected for funding. When needed, the Commission will ask you to:

- provide supporting documents to confirm the information declared during the registration of your organisation (validation of the legal entity)
- appoint a "Legal Entity Appointed Representative" (the so-called "LEAR")
- provide supporting documents to verify the financial viability of your organisation



Search by
Organisation details

Organisation name

Elbit

Organisation type

Private for profit organisation

Country

Israel

City

Select a city ...

PIC number

Enter a PIC number (ex: 324657891) ...

Search partners

Clear filters

The Funding and Tenders Portal

This portal is a one stop portal for everything you need -

- [Registration](#) manual and guide
- [Guidelines for participation](#)
- [Reference documents](#)
- [Projects and results](#) – A statistic tool to display information graphically and see success rates and funds granter by country, topic, type of organisation, etc...
- Working as an [expert](#) – information and steps to register

ISERD Aid Fund

➤ Route 37a – Provides support to entities from the industry to participate in H2020 topics.

Eligible reimbursements of 75% of up to 40,000 NIS for –
Travel to a PS event, hosting potential partners in Israel,
and the cost of a consultant to help write the proposal



THANK YOU

INNOVATION
BREAKS BOUNDARIES

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