# ICT INDUSTRY

**Open call specifications and materials** 

2<sup>nd</sup> call Apr. 1st 2019-Jun. 11<sup>th</sup> 2019 at 17CET

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European Union's Horizon 2020 Programme This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 777455.







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# OBJECTIVES



- Raise awareness of the IoT opportunities for the industry
- Help industries (in particular SMEs) to modernize their production
- Develop, text and deploy innovative products / solutions in Industry 4.0
- Accelerate the access to the market to IoT SMEs (solutions providers)
- Build a sustainable network





# SCOPE OF THE 2<sup>nd</sup> CALL

## Application of IoT Technologies in the Manufacturing Environment

Integration and Use of IoT technologies (including Big Data, Artificial Intelligence and Digital Security) into machines, robots, manufacturing tools, industrial processes and factories environments.

#### Proposal requirements:

- International dimension
- Innovative
- Industrial application in a vertical sector (end-user identified)



## **ONLY for profit SMEs can be funded**



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# **TECHNOLOGIES**

- Robotics and Automation (including communication technology)
- Simulation and Modelling (including VR and AR)
- Sensors and Data Acquisition (including Big data and analytics)
- Cyber Security
- Batteries and Energy Harvesting
- Chips and Electronic Components
- Smart Systems
- Embedded Software

- Low-energy
- RFID
- Communication Protocols & Networks
- Cloud/fog/edge Computing
- High Performance Computing
- Artificial Intelligence (machine learning, deep learning, cognitive computing, ...)
- Biometry and Human-Machine Interaction
- Mobility and Wearables



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# **INDUSTRIAL APPLICATIONS**

- Predictive Maintenance
- Logistics & Supply Chain
- Track and Trace
- Monitoring Applications
- Process analysis & Data analysis and management
- Assets management
- Re-configuration
- Quality control
- Safety & Security

- Energy saving and Sustainability smart advice
- Decision support
- Smart elaboration
- Process/product improvement
- Ergonomics
- Product Life Cycle Management
- Smart packaging
- Additive manufacturing



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# **VERTICAL SECTORS**

- Electronics
- Nanotechnologies
- Automotive
- Mechanicals
- Aerospace
- Defence
- Medical & Pharmaceutical
- Construction
- Energy & Utilities
- Marine (naval industries)
- Metal working

- Chemicals
- Food & Beverage
- Logistics
- Print
- Textile
- Luxury
- Cosmetics
- Wood, paper
- Furniture
- Consumer products



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# **IMPACT (on SMEs)**

- The **increase in efficiency of the production means** of the manufacturing company, improving its competitiveness on the international market.
- The growth opportunity for technology providers of the implementation of their technology into a machine or a factory and the **replicability and scalability of the same solutions** in other industries and use cases.
- By means of KPI (employment, turnover, market share, environmental impact...) the sustainability and scalability of the approach and the business perspective for both technology providers and manufacturing actors.





# **TYPE OF PROPOSALS**

#### **Feasibility studies**

Companies having an idea of the intended project a purpose but with needs for further analysing the technical aspects, the intellectual property issues, the design study. (TRL 4-5)

#### **Prototyping instrument**

Companies having already carried out a feasibility study, and having the need to develop a prototype, spend efforts in miniaturisation, testing. (TRL 6)

#### Demonstration / Pilot Instrument

Companies having already developed and tested a prototype, with the need to demonstrate its efficiency on a larger scale. (TRL 7-8)

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# **TYPE OF PROPOSALS**

	Feasibility study	Prototyping	Demonstration / pilot		
TRL of envisaged project	4-5	6	7-8		
Maximum amount granted per beneficiary (SME)	25 000 €	45 000 €	60 000 €		
Maximum Lump sum per project	50 000 €	90 000 €	120 000 €		
Funding rate	Lump Sum				
Project duration	Up to 6 months	Up to 12 months	Up to 12 months		

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## TIMING

## 1<sup>st</sup> April 2019: Opening of the call

## 11<sup>th</sup> June 2019: Deadline of the call at 17:00 CET

11<sup>th</sup> June 2019-25<sup>th</sup> July 2019: evaluation process

25<sup>th</sup> – 31<sup>st</sup> July 2019: Evaluation Summary Reports sent to the project proponents

1<sup>st</sup> September 2019 – 15<sup>th</sup> September 2019: Grant Agreement signature

16<sup>th</sup> September 2019-15<sup>th</sup> September 2020: Projects Execution





# **ELIGIBILITY CONDITIONS (1)**

The applicant is a Legal Entity located in an EU Member State or an H2020 Associated Country

https://europa.eu/european-union/about-eu/countries\_en http://ec.europa.eu/research/participants/data/ref/h2020/grants\_manual/hi/3cpart/h2020-hi-list-ac\_en.pdf

- 2
- At least **two legal entities** based in **two different NUTS 1 regions** of European Member States and H2020 Associated Countries <u>http://ec.europa.eu/eurostat/web/nuts/nuts-maps-.pdf</u>
- 3 At least **one** legal entity of the consortium must be based in a Country of one the consortium partners (i.e. **France, Italy, Germany, Belgium or United Kingdom)**.
- 4
- At least one of these entities is a for-profit SME http://ec.europa.eu/growth/smes/business-friendly-environment/sme-definition\_en
- 6
- Proposals shall gather at least one entity representing the "**IoT**" **side** (technology offer) AND another entity representing the **industry side** (demand)



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# **ELIGIBILITY CONDITIONS (2)**

- Each SME can receive a **maximum amount of 60 000 € as a total of the two calls** issued by IoT4Industry project (the total budget requested per partner must not exceed this amount). Following information are mandatory in the proposal text: Type of proposals , the TRL envisaged, the maximum financial contributions per beneficiary and per project and the project maximum duration(maximum 12 months).
- Proposals must be submitted through the **FundingBox** platform before 17:00 CET of the deadline indicated in the timetable. Link from <u>https://iot4industry-innovation-</u><u>vouchers.fundingbox.com/</u>
- 8 Proposals must be written in English, **in scope** and all sections of the template complete within the 10 page limit (for section 1-2-3).



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# **ELIGIBILITY CONDITIONS (3)**

- The SME proves its financial capacity satisfying the following formula: NET WORTH>= (A+ B) Where:
  - Net Worth is the total capital of the SME in the last year: total value of all the <u>assets</u> owned by an institutional unit or sector including bank accounts, minus the value of all its outstanding liabilities.
  - A is the requested Lump sum
  - B is the sum of all public fundings active at the time of the call FOR startups funded in 2018: they should indicate the NET WORTH calculated in one year from their establishment. Startups that operate from less than 1 year cannot participate.
- The company declares not to be and "undertaking in difficulty" which definition is given in article 2.2 of the *Communication from the European Commission on Guidelines on State aid for rescuing and restructuring non-financial undertakings in difficulty* (p.9 of this document: <a href="http://ec.europa.eu/competition/state\_aid/legislation/rescue\_resctructuring\_communication\_en.pdf">http://ec.europa.eu/competition/state\_aid/legislation/rescue\_resctructuring\_communication\_en\_.pdf</a>)



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# **FUNDING CONDITIONS**

## 2<sup>nd</sup> Call total funding: 1,535,800 euro

- Only for-profit SMEs eligible to funding and receive maximum 60 000 € over the IoT4Industry project duration.
- Provide an explanation in the proposal on how the lump sum will be used (personnel, subcontracting, ...), but detailed reporting of the spending, cost statements and time sheets are not requested after the end of the project.
- The applicants (SMEs) will receive the requested Lump sum (20% as pre-financing and 80% at the end).
- No cost statements required, but a final technical check of the results by at least 2 persons with technical skills from the project consortium will be done.
- The approval process will check that all the technical KPIs (defined by the applicants) are 100% met and demonstrators and deliverables are satisfactory.
- Furthermore a **physical or virtual meeting** with an interactive session will be organised to better verify the quality of the technical results.
- Should the technical check be unsatisfactory, IoT4Industry Steering Committee can decide to revoke part or all the funding.

THE FUNDING IS NOT PROVIDED UPON ADMINISTRATIVE AND FINANCIAL CHECKS BUT UPON VERIFICATION OF CONCRETE TECHNICAL RESULTS!



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# **EVALUATION CRITERIA**

#### A score from 1 to 5 including half scores will be assigned to each the 3 criteria (Threshold 10/15)

#### Excellence (Threshold 3/5)

- Soundness and pertinence of Objectives with the scope of the call
- Credibility of the technological KPIs to measure the results
- Concreteness of the technical approach
- Innovativeness of the proposed solution

#### 2 **Impact** (Threshold 3/5)

- Industrial and individual relevance
- Credibility of targets for business KPIs
- Quality of the Exploitation, IPR and knowledge protection strategy

#### 3) Implementation (Threshold 3/5)

- Soundness of the workplan, including relevance of the tasks described, and the timing of the activities
- Appropriateness of the consortium: evaluate completeness (IoT Technology providers and industrial users) and complementarity (the provided solutions match with the needs of the final users)
- European dimension (the transnational dimension of the consortium and exploitation intentions)
- Cost-effectiveness of the workplan
- Operational capacity (technical capacity of the proposers related to the proposed work, see also section 4)



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# **EVALUATION SCORING**

## 0.

The proposal fails to address the criterion under examination or cannot be judged due to missing or incomplete information.

## **3. Acceptable**

The proposal addresses the criterion, although significant improvements are possible.

## **1. Very Poor**

The criterion is addressed in an inadequate manner, or there are serious inherent weaknesses.

## 2. Poor

While the proposal broadly addresses the criterion, there are significant weaknesses.

## 4. Good

The proposal addresses the criterion well, although certain improvements are still possible.

## **5. Very Good**

The proposal successfully addresses all relevant aspects of the criterion in question. Any short comings are minor.



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# **EVALUATION PROCESS**

- Eligibility check is performed internally by consortium members.
- Each project will be evaluated by two external experts selected by the consortium in the domain of ICT and manufacturing.
- Experts sign a non-disclosure and a non-conflict-of-interest agreement and receive a contract with IoT4Industry coordinator.
- Experts evaluate independently the proposals and the final score is an **average of the two experts** evaluation.
- After the evaluation proposals are ordered according to the total score. An Evaluation Summary Report with scores and evaluators justifications will be provided to proposal coordinators. Those above threshold are funded until the available sum for the call is totally assigned.





# **APPLICATION PROCEDURE**

Using Funding box (Link from <a href="https://www.iot4industry.eu/">https://www.iot4industry.eu/</a>), 4 sections:

Section 1 > Excellence Section 2 > Impact Section 3 > Implementation Section 4 > Description of the consortium

THE MAXIMUM NUMBER OF PAGES FOR SECTION 1-2-3 ALL TOGETHER IS 10



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# **APPLICATION TEMPLATE (1)**

#### ACRONYM

#### **Title of Proposal**

**Type of Proposal** - Feasibility Study, Prototyping or Demonstrator/Pilot **Industrial sector (**specify the vertical sector to which the proposal refers to – list of vertical sectors : electronics, nanotechnologies, automotive, mechanicals, aerospace, defence, medical & pharmaceutical, construction, energy & utilities, marine (naval industries), metal working, chemicals, food & beverage, logistics, print, textile, luxury, cosmetics, wood, paper, furniture, consumer products, other).

### List of participants

Participant No	Participant organisation name	Country	Region NUTS1 (if applicable)	SME/Large Enterprise/RTO
1 (Coordinator)				
2				
3				



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# **APPLICATION TEMPLATE (2)**

## **Section 1 > Excellence**

#### **1.1 Objectives**

- Specific objectives for the project
- Industrial/economic/social problem to overcome and how your solution solves it
- How your project addresses the scope of the call
- Expected results of your project and (technical) KPIs to measure them. KPIs are very important, they will be checked in the end of project execution (if funded) to approve the project results

#### **1.2 Technical Approach**

- Explain the current stage of development of the project and refer to TRL where relevant
- Concept and activities
- Describe which technologies, architectures, processes and methodologies you will use to obtain the results and how you will use them according to the objectives

#### 1.3 Innovation

- Explain the innovations of your project compared to the current situation in the considered vertical sector (e.g. automotive) at SME level.
- Describe the expected key market application(s) of the results of your project, that differentiates it from competitors and provides the highest added value for potential customers



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# **APPLICATION TEMPLATE (3)**

### Section 2 > Impact

2.1 Industrial and Individual relevance

#### 2.2 KPIs for impact measurement

• Identify a set of (economic/social) KPI to measure your impact and potential targets.

#### 2.3 Exploitation Strategy

• Describe the dissemination material you will provide to the IoT4Industry partners for promoting the product or service during the period of the grant (pictures, presentations, not confidential descriptions of the project and its results).

Provide exploitation intentions for the project results by each partner.

#### 2.4 Intellectual Property, knowledge protection and regulatory issues





# **APPLICATION TEMPLATE (4)**

## **Section 3 > Implementation**

**3.1 Task Description** 

1 work package, T1.1 management, T1.x technical tasks, T1.n Exploitation Deliverables: D1.1Intermediate report

D1.2 Final report

D1.3 Feasibility study/Prototype/Demonstrator

D1.x Additional deliverables can be added if necessary

#### 3.2 Consortium as a whole and international dimension

• Describe the consortium. Describe how the consortium has an international approach to the development or exploitation of the results.





# **APPLICATION TEMPLATE (5)**

## **Section 3** > **Implementation**

#### **3.3 Budget Allocation**

			Budget (in €)					
Participant No[1]	Participant organisation name	Type of organisatio n (SME, Large Enteprise, RTO)	Personnel	Subcontracting	Equipment	Travels	Other	Total Lump Sum
1								





# **APPLICATION TEMPLATE (6)**

## **Section 4 > Partners description** (for each partner)

- A description of the proposing organisations (no more than 1 page)
- A CV or description of the profile of the persons who will be primarily responsible for carrying out the proposed activities (no more than 10 lines per CV)
- A brief description of relevant products, services (including widely used datasets or software) or other achievements (which may also include previous projects or activities connected to the subject of the proposal)
- A description of any significant infrastructure and/or any major items of technical equipment relevant to the proposed work





## Any questions or suggestions? Choose your country





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EXPRESSION OF INTEREST SINO AL 5 MAGGIO 2019 APERTURA 2 BANDO IOT4INDUSTRY 1 APRILE -11 GIUGNO 2019

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https://www.iot4industry.eu/innovation-vouchers



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