DigiFed

Open Call 2 Digital Challenge
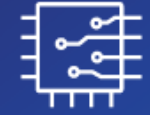
Advanced Technology

Expertise

Funding

Networking

General Information

&

Application Process
June 2021

Innovative Solutions

Competencies

Presenters

- Alice Perez-Morillas
- Isabelle Chartier
- Isabelle Dor
- Ana Gheorghe
- Michael Setton
- Bastien Hualpa

DigiFed : Digitising Europe's Industry Together

DigiFed is a H2020 funded project dedicated to support **European cross-border** partnerships to foster industry to digitalize their product/service and reach get into new markets enabled by **Cyber Physical Systems (CPS)** **& embedded Systems**

- **12 Partners from 9 European Countries**
- **Duration**: 3 years, 01/01/20 to 31/12/22,
- **Budget:** 8 M€
- **Direct support to SMEs & MidCaps**
  - ➢ 3,9 M€ Cascade Funding financing to SMEs
  - ➢ 1,1 M€ Resource from DigiFed partners for technical and innovation support
- → **Last Open Call: Digital Challenge**

DigiFed is part of the European Commission "Digitising European Industry - DEI- strategy"
https://smartanythingeverywhere.eu/

DigiFed 3 main innovation pathways

DigiFed EXPERIMENTAL PATHWAYS

Application Experiment

- Get **50k€** funding and technical expertise to develop your CPS prototype
- Access to innovation management training program

Digital Challenge

- Get **100k€** funding to develop a CPS prototype answering a large company need
- Get access to new markets

Generic Experiment Community

- Get **5k€** funding to participate to the technical roadmap of main RTO
- Stay in the loop of latest technological results to be ready for market movements

3 Open calls - 45 projects

3 Open Calls - 3 projects

4 GE Open Calls

DigiFed Open Calls

Total cascade funding : 3,5M€
> 40 projects will be funded
3 Open Calls for AE projects :

- ***1st call :*** 14 projects running, 22 companies - 1,1M€ *Link to the results :*

- ***2nd call :*** 16 projects selected, 25 companies – 1,3M€ *Link to the results*

- ***3rd call Closed 08/06/2021*** ~ 70 proposals submitted , Selection process started

How to join a DigiFed GE Community

Secure Platform 4IOT

IOT Gateway
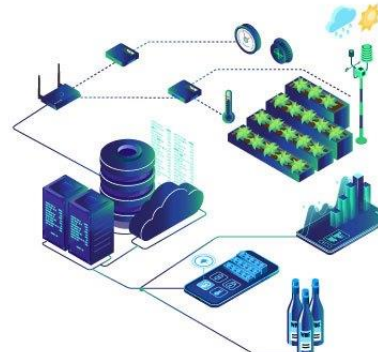Security monitoring

**Open Call closed
20 members recruited**

Industrial Cybersecurity

Trust platform for digital
assets management

**Call Open until 30/06/21
Apply link**

IoT prototyping in agriculture

IoT devices & data
management platform

**Open Call closed
14 members recruited**

Energy- Efficient lighting
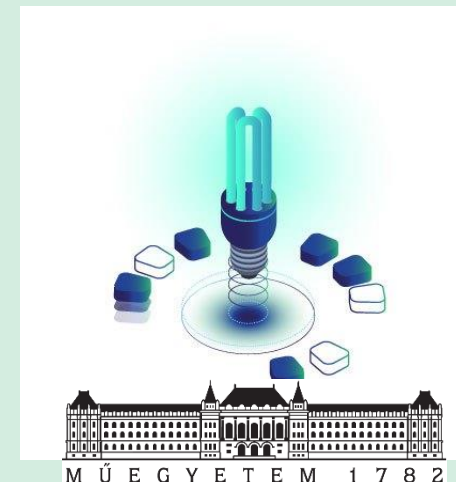
Digitalized LED
application design

Open call closed 15/06/21

DigiFed Digital Challenge Open Call 2

DigiFed and European Enterprises offer you:

NEW!

- **Up to 100k€** Funding *(70% of the project declared budget)* to respond to digital challenges for which NO CPS or embedded systems solutions have been identified in the market

- Added value to your product, through high-level technical expertise, innovation support and access to pilot sites to deploy your solution

- If the pilot project is successful, opportunity to implement the full solution for the Digital Challenge Owner

Funding

Expertise

Innovative Solutions

Competencies
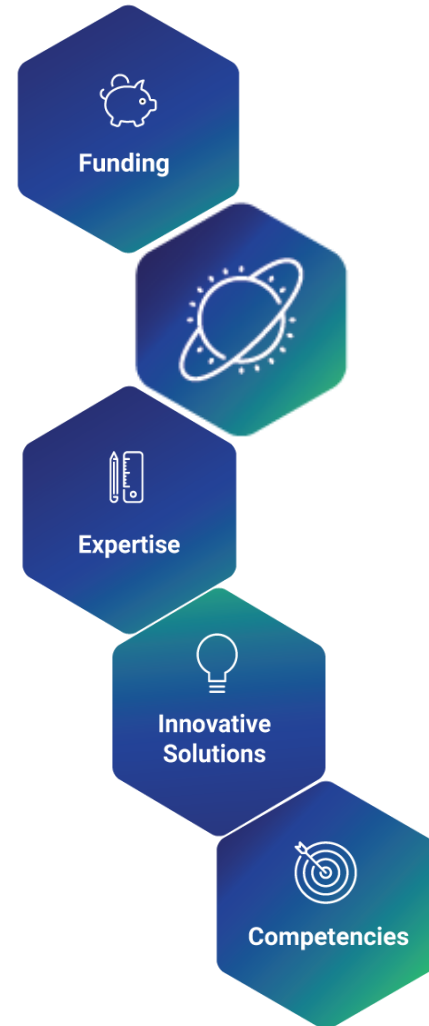
DigiFed Digital Challenge Open Call 2 - Targeted companies

Targeted companies: Start Ups and SMEs who are -

- Developing innovative smart solutions worthy of market leaders

- Bridging the physical and virtual worlds with advanced technologies and industrialised solutions

- High digital mature and have existing Customer experience or ideally, successfully taken a product or a service from TRL 3 to TRL 8

- Will be using an agile approach during the development and work closely with the Digital Challenge Owners to deliver the proposed solution

Funding

Expertise

Innovative Solutions

Competencies

Digital Challenge?

Digital Challenge - a 9-12 months project where the selected 3rd party develops a solution/product/service for which **NO** CPS or embedded system solutions has been identified in the market yet

The proposed solution, product or service will respond to the needs of a Digital Challenge Owner who is happy to co-fund this experiment

Digital Challenge Owner?

The **Digital Challenge Owners** are:

- Large/midcap European based companies

- Which have identified specific business needs which need innovative solutions

- Are happy to act as early adopters of the accelerated innovations

- Are happy to provide additional support to the programme in the form of co-funding, access to innovation support and pilot sites

- For this call DigiFed is working with **ACCIONA** and **EDF Hydro France**

Acciona Digital Challenge

'Next-generation conductivity sensors for predictive operation of water treatment plants'

DigiFed Digital Challenge Owner: ACCIONA

- Acciona is a global company with a business mode based on sustainability and operating in more than 30 countries on 5 continents.

- The water business of Acciona is putting its innovative and technical potential into action to create solutions to water scarcity, sanitation problems, access to this vital resource and increased demand.

- The company leads the water treatment sector through the design, construction and operation of:
  - reverse osmosis desalination plants,
  - drinking water treatment plants,
  - wastewater treatment plants and
  - tertiary treatments for water reuse

DigiFed Digital Challenge Owner: ACCIONA

- Acciona partners with DigiFed to address one of its key challenges around water control and monitoring solutions.

- Acciona wants to know and understand how they can measure and use conductivity data to optimise the operations of reverse osmosis desalination plants.

- **Industry Sector:** water treatment and supply

- **Funding:** Euro 100,000

- **Digital Challenge:** 'Next-generation conductivity sensors for predictive operation of water treatment

plants'

- For more information visit https://digifed.org/open-calls/digital-challenges/digital-challenge-open-call-2/next-generation-conductivity-sensors-for-predictive-operation-of-water-treatment/

ACCIONA Digital Challenge: Next-generation conductivity sensors for predictive operation of water treatment plants

- Acciona is looking to establish an end-to-end digital wireless solution for measuring, reporting, and visualizing the conductivity of each reverse osmosis membrane from pressure vessels part of their desalination facilities.

- The solution should provide a wireless sensor to measure and report the conductivity and a basic backend application with data storage and a data visualization dashboard.

For more information, please visit DigiFed website

https://digifed.org/open-calls/digital-challenges/digital-challenge-open-call-2/next-generation-conductivity-sensors-for-predictive-operation-of-water-treatment/

ACCIONA Digital Challenge: Next-generation conductivity sensors for predictive operation of water treatment plants

What is ACCIONA looking for:

Acciona are looking to partner with innovative companies in the EU with experience in working in the water, power, pharma, chemicals, food & beverage industry, or developing solutions for monitoring groundwater salinization, soil health monitoring, Clean-In-Place systems etc.

Acciona's Support

- Challenge specific knowledge

- Access to Acciona's testbed facilities

- Resources and manpower to work with innovators to implement the technical solution

- Technical reviews and sign off meetings to ensure the development stage runs according to plan

- Benefit of joint marketing exposure

Engagements With Selected 3rd Party Beyond Digifed

- Opportunity to start a commercial partnership (manufacturing of the solutions) with Acciona

- Opportunity to participate to solve additional challenges for Acciona

For more information, please visit DigiFed website

https://digifed.org/open-calls/digital-challenges/digital-challenge-open-call-2/next-generation-conductivity-sensors-for-predictive-operation-of-water-treatment/

EDF Hydro France Digital Challenge

'How can drones guarantee visual inspection in a confined, metallic, humid, and complex environment?'

DigiFed Digital Challenge Owner: EDF Hydro France

EDF Hydro France part of the EDF Group, is the largest producer of hydropower in the EU and wants to be a key player in the energy programmes of France and the core European countries where it operates.

"This challenge is critical for our business operations because electricity generation is key for modern society. In the winter season, Europe just about satisfies its needs in terms of electricity generation. All the countries are relying on an interconnected electricity grid to respond to the demand. Therefore, if one or more electricity groups fail down due to the exhaustive diagnostic testing, there are considerable negative consequences." (EDF Hydro France)

DigiFed Digital Challenge Owner: EDF Hydro France

- **EDF Hydro France** partners with DigiFed to address one of its key challenges around hydraulic inspection going beyond the state of art and providing innovative solving market solutions

- **EDF Hydro France** is looking for a solution to tackle the challenge of short-term hydroelectric group dismantling

- **Industry Sector:** hydroelectricity production

- **Funding:** Euro 100,000

- **Digital Challenge:** 'How can drones guarantee visual inspection in a confined, metallic, humid, and complex environment?'

- For more information visit https://digifed.org/open-calls/digital-challenges/digital-challenge-open-call-2/how-can-drones-guarantee-visual-inspection-in-a-confined-metallic-humid-and-complex-environment/

EDF Hydro France Digital Challenge: How can drones guarantee visual inspection in a confined, metallic, humid, and complex environment?

- At EDF Hydro Alpes, 16 of the electricity groups are facing this challenge; the pumped hydroelectric energy storage (PHES) turbines can have between 1 and 5 Francis turbines on top of each other and it can take up to 8 years to estimate the status of each group

- The current inspection made by endoscopy does not allow to inspect in-between Francis turbines; in addition, this process involves the dismantling of the production group, resulting in operational inactivity

Example of wheel

Wheel's access
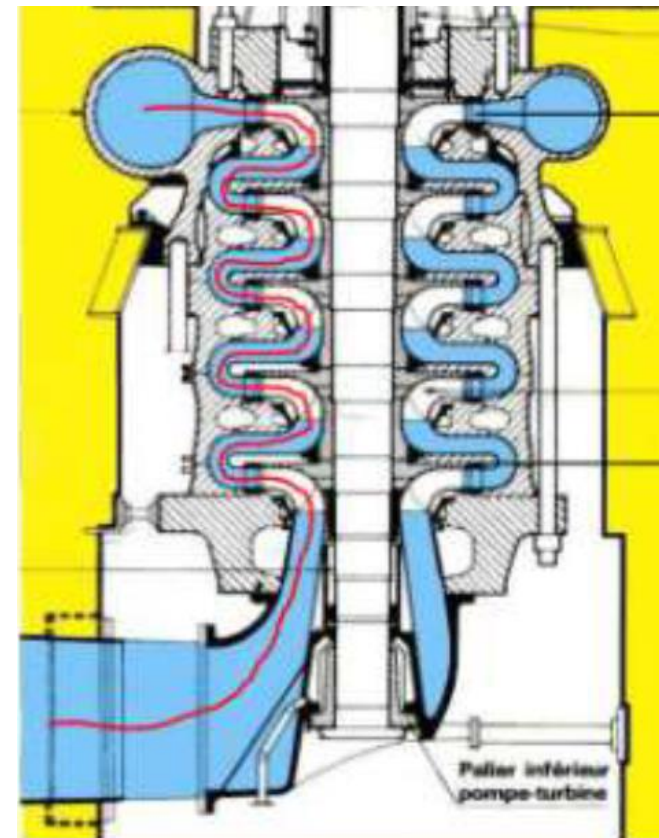
Pumped Storage Power Station (PSPS)

For more information, please visit DigiFed website

https://digifed.org/open-calls/digital-challenges/digital-challenge-open-call-2/how-can-drones-guarantee-visual-inspection-in-a-confined-metallic-humid-and-complex-environment/

EDF Hydro France Digital Challenge: How can drones guarantee visual inspection in a confined, metallic, humid, and complex environment?

What is EDF Hydro France looking for:

European startups/SMEs which are innovative, mature and qualified to work in wireless real time image transmission and RF propagation in challenging metal rich industrial environments (i.e., chemical plants or oil and gas). The development of such solution requires skills and expertise in robotics, miniaturization and conception.

Must have:

- Resistance to a metallic, humid, and complex environment.
- Resistance to shocks (50cm height absorption)
- Distance control and autonomy (between 30min to 60min)
- Build to pass through narrow spaces (<10cm)
- Power for ascends and descends surfaces
- Video emission quality and pitch cam control
- Localizing the pictures or video

Desirable:

- An accurate position in the turbine
- In case the of lost transmission, the robot should be able to go to the exit of the turbine alone
- Thermal imaging
- Visual mark (graduated ruler) for dimensioning of faults

For more information, please visit DigiFed website

https://digifed.org/open-calls/digital-challenges/digital-challenge-open-call-2/how-can-drones-guarantee-visual-inspection-in-a-confined-metallic-humid-and-complex-environment/

EDF Hydro France Digital Challenge: How can drones guarantee visual inspection in a confined, metallic, humid, and complex environment?

EDF Hydro France's Support

- Challenge specific knowledge

- Access to facilities

- Resources and manpower to work with innovators to implement the technical solution

- Technical reviews and sign off meetings to ensure the development stage runs according to plan

- Benefit of joint marketing exposure

Engagements With Selected 3rd Party Beyond Digifed

- Possibility of future work extending the scope of the current challenge

For more information, please visit DigiFed website

https://digifed.org/open-calls/digital-challenges/digital-challenge-open-call-2/how-can-drones-guarantee-visual-inspection-in-a-confined-metallic-humid-and-complex-environment/

Innovation management support

The selected project / 3rd party **will receive Innovation Management support :**

→ To prepare the new product/service go-to-market strategy,

→ To get access to further funding or to attract private investors.

- **Blumorpho:** Innovation Management Training program BLUMORPHO

- DigiFed **Digital Innovation Hubs** open their network to identify new partner for your company

Expertise

Networking

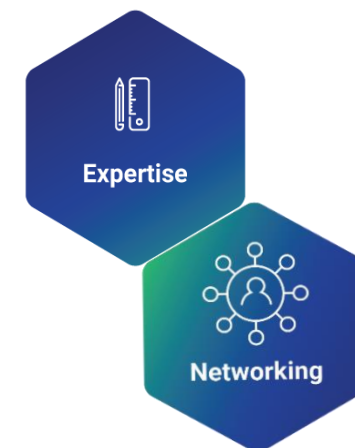❖ **Digital Catapult** – UK   ❖ **University Ljubjana** - Solvenia

❖ **Steinbeis** – Germany   ❖ **BME** - Hungary

❖ **MINALOGIC** - France   ❖ **Ikerlan** - Spain

Digital Challenge 2nd Open Call - how2

Apply to one of 3 rounds of open calls

www.digifed.org for more info

- **Opening: 09/06/2021 – Closing: 14/09/2021**
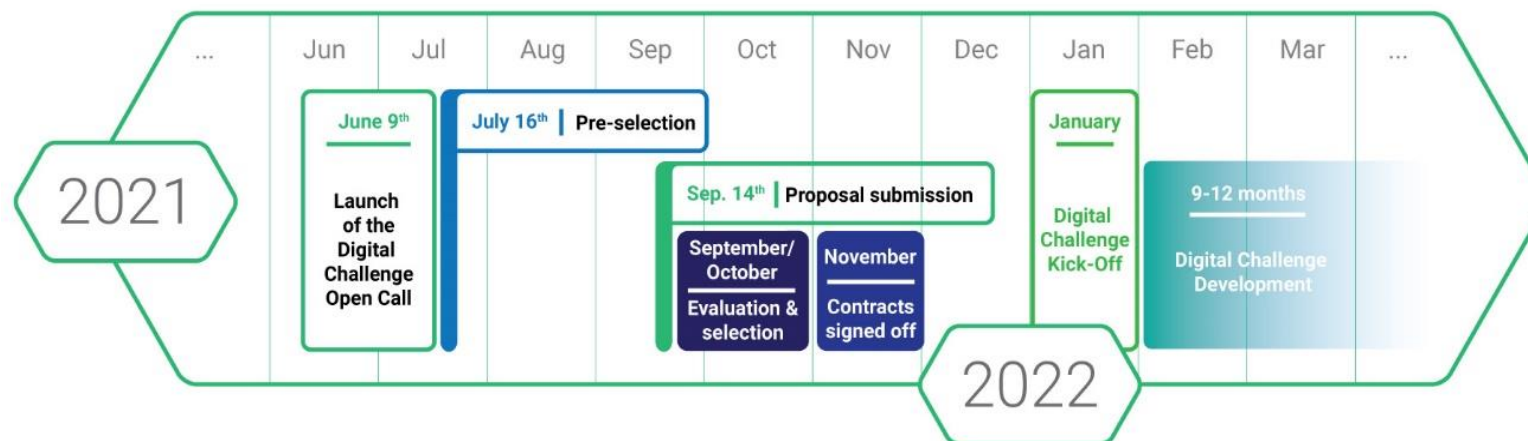
- **Pre-Selection: 16 July 2021**

https://digifed.org/open-calls/digital-challenges/digital-challenge-open-call-2/
https://digifed.org/upload-dc/

2nd Open Call - Pre-Selection Submission

Due Date: 16 July 2021

Registration on the DigiFed portal https://digifed.org/upload-dc/

- **Pre-selection form submission**
  - Link to Pre-selection form: https://digifed.org/open-calls/digital-challenges/digital-challenge-open-call-2/
  - Submission link: https://digifed.org/upload-dc/

- **REQUIREMENT: all interested companies need to submit a signed NDA**
  - Please contact info@digifed.org to request access to the NDA template
  - Submission link: https://digifed.org/upload-dc/

- **Why pre-selection stage?**
  - Collect initial information about interested companies, your expertise, proposed solution and whether or not you interacted with the Digital Challenge Owner
  - Invite pre-selected companies to engage with the Digital Challenge Owners during a bespoke webinar during **August, 2021**

Apply to one of 3 rounds of open calls

www.digifed.org for more info

Open Call: Final Proposal Submission

- **Proposal submission in two documents**
  - **Proposal description**
    - 20 pages MAX, pdf document, written in English
    - Technical oriented
    - Proposal template

  - **Recorded pitch**
    - 5 min, in English
    - Business oriented
    - Slide deck template

- **Guidelines through bootcamp, webinars**

- **Guide for applicants: https://digifed.org/open-calls/digital-challenges/digital-challenge-open-call-2/**

Apply to one of 3 rounds of open calls

www.digifed.org for more info

Interested in the Open Call but you do not have all the skills/ expertise?

DigiFed can help you to find partners (startups/smes)!

NEW!

- Fill in the Digital Challenge Twin Proposal Partnerships Express of Interest form
- Upload it on the portal or email it to info@digifed.org
- Register and attend the **Q&A session** on the 30th of June (registration link to be updated)

https://digifed.org/open-calls/digital-challenges/digital-challenge-open-call-2/

DigiFed Support to applicants

For Digital Challenge:

- Contact info@digifed.org or Ana Gheorghe (ana.gheorghe@digicatapult.org.uk) if you want to learn more about the Digital Challenge mechanism or the application process

- If you want to learn more about the Digital Challenges, please contact:
  Ana Gheorghe (ana.Gheorghe@digicatapult.org.uk) → ACCIONA Digital Challenge
  Bastien Hualpa (bastien.hualpa@minalogic.com) → EDF Digital Challenge

- Submit Pre-Selection form to engage with the Digital Challenge Owner (via webinars or 1-to-1 sessions) (https://digifed.org/upload-dc/)

- For more information visit https://digifed.org/open-calls/digital-challenges/digital-challenge-open-call-2/ and download the pre-selection form

FAQ

Apply to one of 3 rounds of open calls

www.digifed.org for more info

1. Can two companies apply for the Digital Challenge?

Yes, two companies can apply to the open call an propose a solution to the Digital Challenge (one solution / application)

2. **How many candidates will be selected for the Digital Challenge Open Call?**

Only one solution for each of the proposed digital challenges will be selected at the end of the open call. If the selected solution is proposed by one company only, then the selected company will receive up to 100k Euros; if the selected solution is proposed by two companies than the two companies will share the 100K Euro funding (each company receiving up to 50k Euro)

3. Who can apply for the Digital Challenge Open Call?

Start-up / SME who can guarantee required resources to implement the DigiFed Digital Challenge and are not in any situation which would exclude them from receiving financial support and

- Agree to sign the standard contract if selected
- Are based in EU member state or EU associated country*

Company category	Staff headcount	Turnover	or	Balance sheet total
Medium-sized	< 250	≤ € 50 m		≤ € 43 m
Small	< 50	≤ € 10 m		≤ € 10 m
Micro	< 10	≤ € 2 m		≤ € 2 m

FAQ

Apply to one of 3 rounds of open calls

www.digifed.org for more info

4. I have missed the Pre-Selection deadline, can I still apply for the Open Call?

We recommend submitting your pre-selection form by the 16th July, if selected you will have the opportunity to engage with the Digital Challenge Owners during August and learn more about the specifics of the Digital Challenge.

If you missed the pre-selection deadline, please get in touch with us at info@digifed.org

5. I am not based in the same country as the Digital Challenge Owner, can I still apply?

Yes, we are looking for European companies to propose solutions to the Digital Challenge; if during the development stage you will be required to travel to the Digital Challenge Owner site, the travel costs will be covered by the DigiFed funding (you need to include these costs in your budget proposal).

FAQ

Apply to one of
3 rounds of
open calls

www.digifed.org
for more info

6. **Am I eligible to apply for this call?**

The EU Associated Countries participate in Horizon 2020 under the same conditions as EU Member States. A list with all eligible Associated Countries can be found here: https://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/3cpart/h2020-hi-list-ac_en.pdf

Legal entities established in any other country or region cannot receive funding in this open call.

UK companies remain eligible for grants and procurement procedures as if the UK was a member state for the entirety of the Horizon 2020 framework programme and previous framework programmes. This also applies for to financial support to third parties according to Article 204 FR (cascading grants) and applies for the duration of H2020 projects.

Thank you!

Details about the proposals preparation

Open Calls: Pre-selection form

2 pages pre-selection form:

- Generic information: name, address, company description etc.

- Solution/Product description

- Expertise description

- Confirm any previous engagements with the Digital Challenge Owners

- NDA requirement / submission

* evaluation criteria, detailed in the Guide for Applicants https://digifed.org/open-calls/digital-challenges/digital-challenge-open-call-2/ (to be uploaded)

Open Calls: Pre-selection selection criteria

- The **Pertinence of the solution** (responding to the digital challenge)

    How is your proposed solution is responding to the digital challenge?

    Does your solution meet the specific success criteria of the challenge?

- The **Applicant's expertise in the technology area**

    Do you have expertise in the technology area required to deliver a solution for the digital challenge?

- The **Digital maturity of the 3rd party / applicant**

    Do you have evidence in bringing products / services from TRL3 to TRL8?

    Do you have customer experience?

- The **expected outcome of the proposed solution**

    What are the expected outcomes of the proposed solution and how do these respond to the digital challenge?

    Are the expected outcomes in line with the specific criteria?

    What benefits the expected outcomes will bring to the Digital Challenge Owners?

- **evaluation criteria, detailed in the Guide for Applicants:**

https://digifed.org/open-calls/digital-challenges/digital-challenge-open-call-2/ **(to be uploaded)**

Open Calls: Proposal description

Pdf documents of typically 10 – 12 pages MAX 20 pages

- General proposal

- Identity & administrative declarations

- Proposition abstract

- *Excellence* :* Description of the concept & objectives, potential innovation, targeted progress, targerted CPS/embedded prototype description

- *Impact* :* Description of the industrial relevance & potential impact, business plan brief presentation

- *Quality* :* Description of the implementation, eg company(ies), workplan, justification of planned resources & revenues

* evaluation criteria, detailed in the Guide for Applicants

Open Calls: Recorded pitch

Typical 5 min : business quality*

- Company profile, product & targeted market

- Introduction of management team

- Selected techno, targeted use case, definition of the prototype to be developed

- Expected differentiation, competitte advantage, business model, go to market strategy & targeted customers

- Expected level of demonstration

***evaluation criteria, detailed in the Guide for Applicants**

Open Call: Support to applicants

DigiFed website

- FAQ section https://digifed.org/aside/faq-digital-challenge/
- Proposal template (to be uploaded)
- Recorded pitch guidelines https://digifed.org/video-pitch-preparation/
- Guide for Applicants: timing, eligibility criteria, proposal insights, evaluation criteria, check-up list, etc. (to be uploaded)
- Webinar, Q&A session, webinars with the Digital Challenge Owners (during August)

DigiFed helpdesk: info@digifed.org

https://digifed.org/open-calls/digital-challenges/digital-challenge-open-call-2/

Open Call: Eligibility criteria

Pre-selection form submission and selection

NDA submission (with the Digital Challenge Owner)

To submit on time

- Proposal written in English, pdf format
- Recorded pitch, in English

Company profile:

- Start-up / SME
- Can guarantee required resources to implement the DigiFed Digital Challenge and is not in any situation which would exclude them from receiving financial support.
- Agree to sign the standard contract if selected
- Based in EU member state or EU associated country*

(**https://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/3cpart/h2020-hi-list-ac_en.pdf**)

Open Call: Company definition

SME

Company category	Staff headcount	Turnover	or	Balance sheet total
Medium-sized	< 250	≤ € 50 m		≤ € 43 m
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Micro	< 10	≤ € 2 m		≤ € 2 m

Financial support to 3rd party

Subvention through Cascade funding scheme

- 70% of the budget (declared costs)
- Max of 50 k€ per company per project
- Max of 100 k€ per company if DigiFed multiple projects
- Max of 100 k€ Cascade Funding per company under SAE and I4MS (H2020)

As per European Commission's rules, financial support will not be awarded for work previously or currently funded under any other (Regional, National or EU) programme.

Schedule of payment

- 50% at Standard Digital Challenge Agreement signature*
- 50% balance payment at completion of Digital Challenge and validation of final report (deliverables validated)

*Standard Agreement Template available (to be uploaded on the website)

Elligible cost

- Direct personnel Costs
- Other direct costs (for example materials, travel costs -technical meetings, dissemination activities etc. – but only inside Europe)
- Indirect costs – up to 25% of all direct costs
- Subcontracting – up to 15% of the proposed cascade funding

Selected Third Party Costs declaration (Balance Payment and in-kind)	Estimated Standard Agreement			Declared			Short description
	Total estimated cost EUR	rate Max 70%	Maximum Digifed contribution EUR	Total declared cost EUR	rate Max 70%	Maximum Digifed contribution EUR	
1. Personnel							
2. Consumables, materials, component							
3. Travel							
4. Subcontracting							
Total costs							

Open Calls: Proposal evaluation & selection

- To pass eligibility criteria
- 3 steps evaluation
  - "technical evaluation" (pdf proposal) by the Digital Challenge Owners
  - Business evaluation (recorded pitch) by DigiFed partner
  - DigiFed evaluation committee
- Evaluation criteria: (Excellence, Quality, Impact) + Business case
- Only the first rank proposal will receive the funding
- Validation of the selection by the EC
- Notification send to all applicants with scoring & comments.

Pitch training and support

How to prepare your pitch for Digifed Application:
https://youtu.be/q9DjQcGNkqc