



# DigiFed



Digital Innovation Hubs Federation  
For Large Scale adoption of  
digital technologies by European SMEs

## DigiFed Innovation Pathways Information package for DigiFed reproducibility

V4.0



## Information Package

Single/Twin Application Experiment (SAE/TAE)	
<b>Definition</b>	The SAE/TAE facilitates the collaboration of a European company with another European company of complementary expertise and a technical partner – here member of the DigiFed (DIH) consortium. This Pathway has been especially designed to foster the digitalisation of low digital companies through SME-SME collaboration by providing them with additional technology expertise beside the Financial Support to Third Party.
<b>Implementation within DigiFed</b>	In the DigiFed framework, individual SAEs involved a DigiFed-technical partner and an SME (the applicant), which is awarded up to 55K EUR. TAEs considered two European SMEs with complementary expertise, which are awarded a maximum grant up to €55k for each SME. TAEs that include one non-digitally savvy company may also request technical support from a DigiFed-technical partner. The AEs were implemented via the launch of 3 dedicated open call for implementing the project over a 12-month period.
<b>Minimum requirements to reproduce it according to the DigiFed-experience</b>	<ul style="list-style-type: none"> <li>• Human resources:               <ul style="list-style-type: none"> <li>○ Community, marketing, and open call management. Legal management for contracts, NDAs, and IP/knowledge management</li> <li>○ Training programme to skill-up of the existing workforce in cooperation with SMEs</li> <li>○ Strong and permanent cooperation between the companies and the involved RTOs</li> </ul> </li> <li>• Financial resources:               <ul style="list-style-type: none"> <li>○ Awareness on public &amp; private funding opportunities, sustainable cascade funding. A minimum of 100K EUR to be allocated for larger projects with pilot testing</li> <li>○ Funding to explore innovation in areas of high risk-high reward</li> </ul> </li> <li>• Infrastructures resources:               <ul style="list-style-type: none"> <li>○ Collaborative hardware &amp; B2B platforms</li> <li>○ E-catalogue of services &amp; technical expertise available</li> </ul> </li> <li>• Ecosystem building resources:               <ul style="list-style-type: none"> <li>○ Network of E-DIHs, clusters for matchmaking facilitation.</li> <li>○ Legal framework for the go-to-market strategy.</li> <li>○ A follow-up process to improve the implementation of the solutions developed and thus the sustainability and interest of such AE.</li> </ul> </li> <li>• Technical resources:               <ul style="list-style-type: none"> <li>○ Access to an RTO to facilitate SAE/TAE for low tech companies</li> </ul> </li> </ul>
<b>Possible revenue stream</b>	<ul style="list-style-type: none"> <li>• Funding by local authorities/programmes</li> <li>• Include registration/participation fees</li> </ul>
<b>DigiFed partners to partner with</b>	<ul style="list-style-type: none"> <li>• <b>Minalogic / Minasmart</b> interested in the instrument as a whole</li> <li>• <b>CEA</b> potentially interested in a TWIN model also including RTO technology.</li> <li>• <b>BLUMORPHO</b> interested in (i) Partnership building; (ii) Business mentoring; (iii) Go-to-market strategy</li> <li>• <b>IKERLAN</b> interested in (i) Providing technical expertise for CPS/embedded, sensing, SHM, cybersecurity, AI and communication systems for industrial and harsh environments</li> <li>• <b>BME</b> interested in implementing adapted versions of the instrument</li> <li>• <b>AVL</b> interested in providing technical expertise for (i) SAE: CPS/ embedded, sensing, human centric; (ii) TAE: Automotive or general human sensing</li> <li>• <b>Digital Catapult</b> interested in providing technical expertise for AI Compute, Machine Learning and AI Ethics, experimentation with new network technologies, performance evaluation and benchmarking</li> </ul>

Digital Challenge (DC)	
<b>Definition</b>	<p>The DC-Innovation Pathway consists of a partnership between an industry leader (Digital Challenge Owner - DCO) and technology start-ups or mid-caps to accelerate the adoption of advanced technologies within the CPS and Embedded Systems sector while addressing some of the key challenges and opportunities across the industry.</p> <p>The DC-Innovation Pathway aims to consolidate collaboration between large corporate organisations, with unique challenges and looking for tailored solutions, and European Technology Innovators (SMEs/midcaps), with the right experience and expertise to solve /develop such technical digital challenges. The model includes the DigiFed methodology and guidelines which gives the DIHs the necessary tools to implement</p>

<b>Implementation within DigiFed</b>	In the DigiFed framework, the DCO with a specific need co-financed the selected innovative company, together with DigiFed, with up to 110K EUR (55K EUR each party) to allow them to develop the solution in 9 to 12 months.
<b>Minimum requirements to reproduce it</b>	<ul style="list-style-type: none"> <li>Finding of an industrial partner with a specific need and willing to invest in an open innovation process to identify or develop new solutions and POCs.</li> <li>Skills and resources to lead the process with/for them, such as: challenge definition, communication material, open calls process and methodology, contracting and project management and controlling (of the product/solution/PoC)</li> </ul>
<b>Possible revenue stream</b>	<ul style="list-style-type: none"> <li>100% costs covered by the DCO (for the open innovation services and associated with the development of the bespoke solution)</li> <li>Possible co-funding with some regional/national authority depending on the expected impact of the DC results on the local ecosystem.</li> </ul>
<b>DigiFed Partners to partner with</b>	<ul style="list-style-type: none"> <li><b>Digital Catapult, Minalogic/Minasmart, CEA, and Ikerlan</b> interested in the DC as a whole</li> <li><b>BLUMORPHO</b> interested in (i) Ideation process; (ii) Open call &amp; development management; (iii) Solutions scouting; (iv) Technology and business assessment</li> </ul>

### Generic Experiment Communities (GEC)

<b>Definition</b>	<p>Generic Experiments (GE) are designed to test new collaborations between research institutes and a group of SMEs as well as evaluate new co-financing mechanisms between European and regional funding to foster European industry digitalization.</p> <p>The goal of each GE is to build and animate a community of SMEs (between 6 and 20) around a specific technical topic (GE Topic) proposed by one DigiFed research centre, the GE owner. The GE co-creation mechanism connects the GE owner, being either the local DIH or the technology research center, and a community of European SME-participants that help to identify market needs, co-create technological solutions, and validate the prototypes. The GE community gather SMEs either from market or a technical sector.</p> <p>GE Topic and market segment can be designed to attract low or not digitized SMEs. Activities include workshops, demonstrations, interviews, surveys, etc., through which the GE-owner gathers inputs for the technological development roadmap and prototype development.</p>
<b>Implementation within DigiFed</b>	In the DigiFed framework a GE is financially supported through a combination of EU funds with regional funding instruments. Four GEs have been launched, involving 51 SMEs coming from 13 EU countries. A total of 230k€ of cascade funding has been distributed to the selected SMEs and 270k€ of co-financing have been leverage from regional authorities. Each GE member receives a 5K€ voucher for compensation for involvement in this community activity in a defined timeframe (6-12 months).
<b>Minimum requirements to reproduce it</b>	<ul style="list-style-type: none"> <li><b>Human resources:</b> Community management, collaborative project management, marketing, technical expertise, legal skills to manage contracts, NDAs &amp; IP. At least 3PM for a 12-months GE.</li> <li><b>Financial resources:</b> depending on the business model and the technical objectives but a minimum of 200K (or 12-18PM) for the technical development seems reasonable.</li> <li><b>Infrastructures resources:</b> places for collaborative working sessions, workshops, and technical test &amp; demonstration.</li> <li><b>Ecosystem building resources:</b> <ul style="list-style-type: none"> <li>Create specialized networks related to the specific topic of each GE.</li> <li>Access to a community of potential members through EDIHs to gather at least 10 members in each experiment.</li> </ul> </li> <li><b>Technical resources:</b> <ul style="list-style-type: none"> <li>a well-designed tech offers</li> <li>interested tech providers</li> <li>minimum TRL5</li> <li>agile infrastructure for fast technical development</li> <li>portfolio of technical solutions to enable innovation and support SMEs to overcome their digital gap.</li> </ul> </li> </ul>
<b>Possible revenue stream</b>	Co-funding, membership fees, programme-access/registration fee, priority access to technology to participants, regional/local co-funding
<b>DigiFed Partners to partner with</b>	<ul style="list-style-type: none"> <li><b>CEA, UL, IKERLAN</b> and BME are interested in the GE as a whole</li> <li><b>BLUMORPHO</b> interested in (i) Ideation process; (ii) Open call &amp; development; (iii) management; (iv) Solutions scouting; (v) Technology and business assessment</li> </ul>

## Value Proposition Mapping

	TWIN Application Experiments (TAE)	Digital Challenge (DC)	Generic Experiment Community (GEC)
<b>Product/service offered by DigiFed through the Instrument</b>	A DigiFed-Model for the implementation of an instrument to foster digitalization of SMEs through cross-border innovation-based collaboration. The model considers a methodology and guidelines for the implementation of the instrument	A DigiFed-Model for the implementation of an instrument to consolidate collaboration between large corporate companies and SMEs to develop tailored solutions for specific technical challenges. The model considers a methodology and guidelines for the implementation of the instrument	A DigiFed-Model for the implementation of an instrument to consolidate collaboration between SMEs and technical organisations to evaluate, refine and facilitate the adoption of digital technologies. The model considers a methodology and guidelines for the implementation of the instrument
<b>Proposed DIH-issues addressed/solved by the Instrument</b>	<ul style="list-style-type: none"> <li>Remove access barriers to new markets for DIH-customers, i.e. SMEs</li> <li>Reducing risks and removing obstacles for DIH-customers for the development and implementation of new innovative solutions</li> <li>Bridge the gap between businesses and technology, as well as between different technologies</li> </ul>	<ul style="list-style-type: none"> <li>Enhance the engagement between key stakeholders of the ecosystem, in particular between large organisations and the innovators community</li> <li>New services in the form of simpler procurement for large organisations</li> <li>New services in the form of reduced costs for large organisations (the PM/Procurement done by the DIH)</li> <li>New services in the form of targeted outreach to identify suitable solution providers</li> <li>Business growth within its (local) ecosystem</li> <li>Encouraging the competitiveness of technology innovators</li> <li>Improve market awareness around the industry needs</li> <li>Reduced uncertainty of larger corporate companies when outsourcing the development of solutions</li> <li>Mitigate red tape restrictions in large organisations through operating in a more dynamic setting</li> <li>Access to DIH ecosystems and its expertise</li> </ul>	<ul style="list-style-type: none"> <li>Improve and facilitate the usage and development of test-before-investing services</li> <li>Eliminate barriers and fears of SMEs to access and implement digital/technical solutions</li> <li>Limit and reduce errors SMEs may undertake when adopting new digital technologies</li> <li>Flatten the learning curve of SMEs when being introduced to new digital technologies</li> <li>Active involvement of local SMEs to build market awareness regarding digital/technical needs in local and more accessible markets</li> <li>Active involvement of European SMEs to identify global market trends and provides opportunities for cross-border networking and market expansion for all parties</li> </ul>
<b>Identified DIH-gains, outcomes, and benefits</b>	<ul style="list-style-type: none"> <li>Improve the opportunities to consolidate collaboration between companies in different</li> </ul>	<ul style="list-style-type: none"> <li>Unveil niche opportunities by consolidating collaboration with large corporate companies,</li> </ul>	<ul style="list-style-type: none"> <li>Improve and increase the usage of the infrastructure of technical partners of DIHs</li> </ul>

<b>through the instrument</b>	<p>countries, i.e. achieve concrete collaboration while promoting digitalization of companies across Europe.</p> <ul style="list-style-type: none"> <li>• Create programmes to foster digitalization of non-digital SMEs</li> <li>• Improve cooperation between compatible businesses that would otherwise be unlikely to collaborate</li> <li>• Increasing the offering of services to customers</li> <li>• Unveil or create new revenue streams for affiliates and customers of DIHs, and potentially attract new customers</li> </ul>	<p>including opportunities to finance new DIH-services</p> <ul style="list-style-type: none"> <li>• Facilitate access to business opportunities for SMEs</li> <li>• Extend DIH-ecosystems and activities</li> <li>• Increase the services' offering to customers</li> <li>• Unveil or create new revenue streams for affiliates and customers of DIHs, and potentially attract new customers</li> </ul>	<ul style="list-style-type: none"> <li>• Facilitate the development of programmes for testing, refining, promoting, and implementing advanced digital/technical development</li> <li>• Trust creation within the local ecosystem and for engagement with DIHs</li> <li>• Facilitate access to a typically untapped set of customers, i.e. non-digitally savvy SMEs</li> <li>• Increase the offer of services to customers</li> <li>• Unveil or create new revenue streams for affiliates and customers of DIHs, and potentially attract new customers</li> <li>• Access to combined EU and regional funding opportunities dedicated to improving access to non-digitally savvy SMEs</li> </ul>
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