## Medtech4 Europe

Interreg Europe





Auvergne-Rhône-Alpes Region





## PART I - GENERAL INFORMATION

Project: MEDTECH4 EUROPE

Partner organisation: Auvergne-Rhône-Alpes Region

Other partner organisations involved (if relevant):\_\_\_

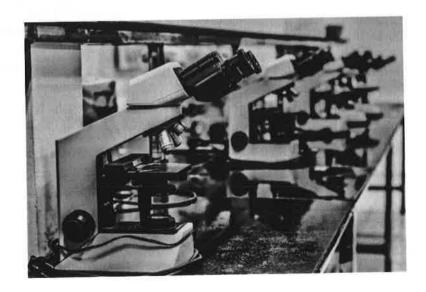
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NUTS2 region: Rhône-Alpes

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### PART II - POLICY CONTEXT

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The Action Plan aims to impact:	
	☐ European Territorial Cooperation programme
	Other regional development policy instrument

Name of the policy instruments addressed:

- Regional Operational Programme Rhône-Alpes (ERDF ESF 2014-2020)
- Region Operational Programme Auvergne Rhône-Alpes (ERDF ESF 2021-2027)
- Regional policy instruments supporting research and innovation

Further details on the policy context and the way the action plan should contribute to improve the policy instruments:

## 1. Auvergne-Rhône-Alpes, a region with a strong Health sector and proactive policies in favour of RDI activities

Auvergne-Rhône-Alpes is the second largest employer in Health industry in France. The region is well-known for its centres of excellence working with research and economy in the fields of life sciences, biotechnologies, micro-nanotechnologies. There are four university hospitals, national R&D actors (research centres like CEA) and specialised innovation platforms (ECCAMI on computer assisted medical intervention, Bioaster on microbiology, Accinov on biomanufacturing, Clinatec on biomedical technologies, 3DFab on 3D printing for advanced biology etc).

This strong Health sector integrates a well-developed field around medical technologies, counting around 300 SMEs, mainly small firms, representing around 20 000 jobs. Medical technologies, which are the focus of the Medtech4 Europe INTERREG project, cover many different products, all intended to perform a therapeutic or diagnostic action on human beings to improve health.

Medical technology is a regulated EU sector (2017/745, 2017/746) and comprises:

- Medical devices (MDs) which are products, services or solutions that prevent, diagnose, monitor, treat and care for human beings by physical means;
- In vitro diagnostics (IVDs) which are non-invasive tests used on biological samples (for example blood, urine or tissues) to determine the status of one's health.
- Tools and services for Digital Health and Care can be included, depending on sectorial definition and regulatory status.

Medical technologies are used to diagnose, prevent, monitor, treat or alleviate a disease or injury. In addition to the above, the Medtech4 Europe project will also consider the link to Enabling technologies (ICT, manufacturing, materials...) that contribute to the improvement of MDs and IVDs.

Among the main application domains identified in the field of personalised medicine technologies, Auvergne-Rhône-Alpes is specialised in "in vitro diagnosis", biomaterials and implants, medical imaging and computer assisted systems. The region can also lean on complementary assets in the field of plastic processes, textile fabrics, mechanics, 3D printing, digital or biotechnologies.

Auvergne-Rhône-Alpes regional Council is the managing authority of the regional ERDF-ESF operational programme 2014-2020 for Rhône-Alpes and will pursue with the ERDF-ESF operational programme for Auvergne-Rhône-Alpes for the next programming period 2021-2027. As such, it is responsible both for the elaboration, implementation and evaluation of these programmes.





The Region is leader of economic development and research & innovation planning. It has elaborated a regional S3 and proactive policies in favour of RDI activities. The regional strategy aims to create favourable conditions to develop innovative projects in niches for the future, jobs growth and enhance life quality, security and health of the inhabitants.

# 2. SMEs of the medtech sector do not take as much advantage as they could of regional technological platforms, in spite of the strong support of the Auvergne-Rhône-Alpes Region to these innovation infrastructures

As it is facing an even stronger international competition, the medtech sector needs to be better structured while taking into account its polymorphous and multidisciplinary nature (from materials to human and social sciences). It includes allowing medtech companies to have better access to technology and experts through shared infrastructures. Technological platforms (or RDI platforms) play a major role in innovation support for companies: we defined them as a gathering of technical and scientific competences, technical settings and cutting edge equipment, operating in one or a few technological fields, and offering services that are at least partially aimed at private companies who plan on innovating (service provision such as imaging or scientific analysis/measurements, RDI collaborative projects, technology transfer, training...). A technological platform has a dedicated accounting management system as well as communication tools and actions (although they can be shared between a few platforms).

Despite the strong involvement of the Region to finance RDI platforms for years (through regional as well as ERDF-ESF funds), some of them highly specialized in medtech, many SMEs of the medtech sector do not call on them in their research and innovation processes and projects:

 Services offer of technological platforms lacks visibility: SMEs do not know about it and do not identify what they can provide to their R&D projects and processes.

 Services offer of technological platforms is poorly accessible – or seems to be so – for SMEs, as these small companies do not have – or think they do not - the financial resources or expertise allowing them to work with these platforms.

The policy instruments addressed by this Medtech4 Europe action plan (regional operational programmes ERDF-ESF and regional policies) have to be improved to allow the adaptation of the RDI ecosystem and facilities to the specificities of the medtech sector and encourage SMEs to take better advantage of them.

### 3. Objectives of the Medtech4 Europe action plan for Auvergne-Rhône-Alpes Region

The Medtech4 Europe action plan for Auvergne-Rhône-Alpes Region intends to improve the impact of regional policies (including European structural funds) aimed at research and innovation infrastructures for regional companies in the medical technologies sector, in order to:

- Reinforce the innovation ecosystem in the medical technologies sector;
- Identify strengths and complementarities in this regional ecosystem to create new collaborations;
- Improve the access to technological platforms for SMEs of the medical technologies' sector.

To achieve this, the action plan will pursue three operational objectives:

- 1) Get a better knowledge of existing regional technological platforms offering services to the medical technologies' sector and analyse the impact of regional policies that have been and are supporting them;
- 2) Increase the use of technological platforms by regional companies of the medical technologies' sector;
- 3) Increase the visibility of the regional policy and the technological platforms offering services to the medical technologies' sector it supports.





## 4. Policy instruments addressed by the Medtech4 Europe action plan for Auvergne-Rhône-Alpes Region

Auvergne-Rhône-Alpes regional Council is the managing authority of the regional ERDF-ESF operational programme 2014-2020 for Rhône-Alpes: it is responsible for the elaboration, the implementation and the evaluation of the programme.

As written in the INTERREG application form, the policy instrument primarily targeted by this action plan is the Regional Operational Programme Rhône-Alpes ERDF-FSE 2014-2020. The first priority axis of the Rhône-Alpes ERDF operational programme for 2014-2020 focuses on innovation to tackle the main societal issues. Through the specific objective 1.1 (related to the IP 1.A), it supports the increase of research offer and the development of innovation for companies in the fields of smart specialisation. ERDF is used to settle or reinforce technological and innovation infrastructures (notably technological platforms) and associated skills and services, so that regional SMEs can carry out RDI projects (technological readiness level 3 to 6). The Operational Programme supports the reinforcement of knowledge production in the 8 domains of smart specialisation of the regional S3 among which the personalised health (that includes medical technologies). It enhances projects collaboration between public research institutions and industrial actors. The Operational Programme has been implemented through a call for projects (called IRICE), to finance RD equipment acquisitions, technological skills (human resources, technical knowledge, patents...), external expertise and dissemination actions.

However, considering this action plan was established during the last semester of 2020 and will be implemented starting from the very beginning of 2021, it will also naturally address the Auvergne-Rhône-Alpes Operational Programme on the next programming period (ERDF 2021-2027), which is currently being drafted.

In addition, the action plan will have an impact on the **regional policy instruments supporting research and innovation**, and specifically on the regional financing instruments aiming at improving companies' competitiveness through the transfer of innovation.

The exchange of experience within Medtech4 Europe and the active contribution of regional stakeholders of the medtech sector allowed the identification of **3 actions**.



## PART III - DETAILS OF THE ACTIONS ENVISAGED

#### **ACTION 1**

Name of the action: Better knowledge and follow-up of technological platforms offering services to medtech companies

#### 1. Relevance to the project

Many of our partners in Medtech4 Europe showed us that obtaining a mature and efficient research and innovation ecosystem in medical technologies goes along with gaining a fine knowledge of the entities that are part of it. Indeed, gaining a better knowledge of our ecosystem of technological platforms offering services to the medical technologies' sector will be strategic to adapt our calls supporting these platforms, which will allow for better projects financed through the ERDF OP. It is also necessary to make the most of the technological platforms already supported through the ERDF OP 2014-2020 and our regional financing tools.

Three initiatives we observed respectively in Limburg, Baden-Württemberg and Helsinki-Uusimaa specifically inspired us to build this first action:

- a) During the first study visit in March 2019, we discovered the Brightlands health Campus in Maastricht, where we visited Scannexus, a world leading ultra-high field MRI platform, opened for research and development with companies, financed through public funding, especially ERDF Operational Programme South Netherlands. A further discussion with our partners from Limburg Province, which supported the investments and introduced a follow-up process of the platform implementation conditioning the aid payment, inspired us to improve the follow-up we implement for the technological platforms we finance.
- b) Exchanging with our partners from Baden-Württemberg that also have a very plentiful ecosystem, we discovered that a comprehensive overview of the Land's healthcare industry was produced in 2015, and recently updated. At the same time, we got aware that the data on our regional medtech sector was more than 10 years old, showing a strong need to update our sectorial overview which was highly demanded by our regional stakeholders.
- c) Discussing with our partners from Helsinki-Uusimaa, we identified that we shared an issue on facilitating matching between academical or business competences and company needs. We got inspired by the business and innovation services for life science and health tech directory they built.

#### 2. Nature of the action

We need to gain a better knowledge of our ecosystem of technological platforms offering services to the medical technologies' sector and improve the follow-up of the platforms we support, to make sure that the public funding invested by the Region into platforms through both the ERDF and regional funds really reaches its target, that is in the end that SMEs of the medtech sector have access to innovation. Additionally, having a more precise knowledge of our medtech ecosystem and RDI infrastructures would allow us to fine-tune the next generation of public funding (both ERDF and regional funds) to the needs.

To do so, we plan to:

a) Implement a closer monitoring of already financed platforms, to check their actual level of opening to medtech companies and identify the support they could need to improve their services and attractivity to companies. This aspect will be taken into consideration when evaluating the financial support to platforms through the ERDF and regional funds. The precise goals and method (nature and frequency of reporting, etc) will have to be defined.





- b) Update the regional overview of the medtech sector, as the data that is available is ten years old and doesn't allow a reliable vision of the regional medtech sector.
- c) Build a close to comprehensive directory of technological platforms that could be relevant for medical technology innovation development, so that existing equipments, in particular the ones that benefited from public funding, are more easily identified by potential users.

The scope and sections of the directory, as well as the means of diffusion (most probably Internet website) and update will have to be carefully defined, so as to be cost and time effective, in terms of construction and upkeep. The construction of this tool will have to be focused on the end users: companies that are looking for technological competences and the academic platforms that try to reach clients for their innovation services.

#### 3. Stakeholders involved

a) Implement a closer monitoring of financed platforms offering services to the medical technologies' sector:

This monitoring will be defined and implemented by the policy officers of the Research and Innovation Unit of Auvergne-Rhône-Alpes Region. The information gathered will be shared with our innovation ecosystem leaders (Economic development agency, health cluster, Economy Department of the Region).

b) Update the regional overview of the medtech sector:

This regional overview could be implemented d by the business intelligence unit of our regional economic agency, based on shared specifications between the Economy and the Research and Innovation Departments of the Auvergne-Rhône-Alpes Region.

c) Directory of technological platforms that could be relevant for medical technology innovation development:

The creation of this directory will involve all innovation ecosystem leaders (Economy and Research and Innovation Departments of the Auvergne-Rhône-Alpes Region, economic development agency, health cluster), as well as probably the platforms themselves (to create and update their profile). One lead to explore is to take advantage of an existing website managed by the Digital Department of Auvergne Rhône-Alpes Region.

#### 4. Timeframe

The timeframe envisaged for the activities in the first action is an estimation that will need adjustment with the parties involved.

- a) Implement a closer monitoring of financed platforms offering services to the medtech sector:
  - Definition of frame and methods through S2 2020 S1 2021
  - Implementation from S2 2021
- b) Update the regional overview of the medtech sector:
  - Agreement on the principle of the updated overview and the scope and specifications: S2 2020
  - Implementation: S1 2021
- c) Directory of technological platforms that could be relevant for medical technology innovation development:
  - Definition of scope and sections of the directory, means of diffusion and update: S1 2021
  - Construction of the directory: S2 2021 for putting online end for 2021





#### 5. Indicative costs

- a) Implement a closer monitoring of financed platforms offering services to the medtech sector: internal costs as the staff involved are permanent employees of the Auvergne-Rhône-Alpes Region, and financing and monitoring technological platforms is part of their missions (one day per month for 1,5 officer = 4 500 €/ year).
- b) Update the regional overview of the medtech sector: internal costs as the regional economic agency is already financed by Auvergne-Rhône-Alpes Region for this kind of business intelligence activities (the issue is mostly to give priority to this study among others). 20 days for collecting and processing the data: 5 000 €
- c) Directory of technological platforms that could be relevant for medical technology innovation development:
  - Directory conception and gathering of data about technological platforms to flow into it, promotion of the directory: internal costs as the staff involved are permanent employees of Auvergne-Rhône-Alpes-Region, the Economic regional agency, with the help of the regional Health cluster. (25 days: 6 250 €)
  - Web design and website hosting: to be defined

#### 6. Indicative funding sources

All three activities in the first action will be funded through the Region's own costs as they are staff costs: (either through the team in charge of Research and Innovation policies at the Region, Economy or Digital Departments) or through the organisations that are leaders of the regional Research and Innovation ecosystem's own costs as well (Economic development agency, regional Health Cluster Lyonbiopôle).





#### **ACTION 2**

Name of the action: Better visibility for technological platforms in the medtech sector

#### 1. Relevance to the project

We have diagnosed that our regional technological platforms suffer from a lack of visibility, that hinders their use by medtech companies. Indeed, the Region invests quite a lot of money in supporting platforms through IRICE calls (funded through ERDF OP and regional fundings) but these platforms are not used enough by SMEs in the field of medtech, which is the goal in the end, to foster economic development through innovation.

We observed inspirational initiatives in the Province of Limburg and the Helsinki-Uusimaa Region that focus on making scientific competences visible and matchmaking them with companies:

- Visiting the impressive <u>Brigtlands Campus in Maastricht</u>, we got aware of the level of effort they put in connecting all actors of their health ecosystem, public and private, educational training and scientific investigators, notably through key organisations of the ecosystem, as well as through a program of events.
- During a brainstorming session on action plans in Copenhagen on 7 February 2020, a colleague from the Province of Limburg advised us to get in touch with LifeTecZone, an organisation that proposes thematic events and matchmaking events especially for SMEs in medical technologies and life sciences. They presented us their events' programme consisting in small workshops (around 25 participants) as well as wider networking events (with 80 to 100 participants).
- During our regular working sessions on action plans with Medtech4 Europe partners, our Finnish partner raised our interest on the events programme the Health Capital Helsinki organisation offers.

These initiatives inspired us to build our own visibility actions for our technological platforms ecosystem.

#### 2. Nature of the action

The aim of this action is to facilitate the connexion between technological platforms and companies of the medtech sector so that the financial tools used to finance platforms (ERDF OP and regional policies) have a better impact.

To increase technological platforms visibility for medtech companies, we drafted 3 activities;

a) Organisation of "medtech platforms' days" at the Auvergne-Rhône-Alpes Region headquarters, to gather technological platforms around the medtech sector as a whole, a field of application or a specific technological field in medtech.

These events would be the occasion for them to meet with targeted medtech SMEs and to be better identified by regional medtech innovation ecosystem leaders so that they can relay their offer. These events could take place once or twice a year.

b) Increase the visibility of events (meet-ups, training sessions, open innovation days...) organised by technological platforms offering services to medtech companies, using existing diffusion channels (through competitiveness clusters and the economic regional Agency notably), as platforms currently don't take full advantage of these opportunities.





- c) Adapt our financing tools in order to encourage platforms to be more visible and to offer services more adapted to collaboration with medtech companies:
  - Adapt our calls for projects to insist more on the communication and visibility strategy of candidate platforms;
  - Reinforce the criteria around the credibility of the business plan and the commercial positioning as components of the quality assessment in the selection of projects to support;
  - Study the renewal of regional financial support aimed at implementing actions of platforms (communication cost, employment of business-oriented profiles...).

#### 3. Stakeholders involved

a) Organisation of "medtech platforms' days":

These platforms' days would be organised by the regional Research and Innovation team, with the support of the Events and Communication Department of Auvergne-Rhône-Alpes Region, in addition with the competitiveness clusters relevant for the theme of a given event, the Economy Department of the Region and the economic regional Agency.

b) Increase the visibility of events (meet-ups, training sessions, open innovation days...) organised by medtech technological platforms using existing diffusion channels:

This activity would enlist competitiveness clusters and the economic regional Agency to promote their diffusion channels, as well as the medtech platforms themselves to provide their events programmes.

c) Adapt our financing tools in order to encourage platforms to be more visible and to offer services more adapted to collaboration with medtech companies.

The Research and Innovation team, as well as the European Funds Department when relevant, would be in charge of the adaptation and implementation of the different financing tools concerned by these activities, both for drafting the financing instruments and analysing the projects asking for support.

#### 4. Timeframe

- a) Organisation of "medtech platforms' days": starting after the next regional elections (after June 2021, so probably S2 2021).
- b) Increase the visibility of events (meet-ups, training sessions, open innovation days...) organised by medtech technological platforms using existing diffusion channels: S1 2021.
- c) Adapt our financing tools in order to encourage platforms to be more visible and to offer services more adapted to collaboration with medtech companies: S1 2021, to be taken in account in regional policy instruments implemented in 2021, and the next ERDF operational programme for 2021-2027.





#### 5. Indicative costs

- a) Organisation of "medtech platforms' days": 10 days FTE : 2 500 € plus 3 0000 € external costs = 5 500 €
- b) Increase the visibility of events (meet-ups, training sessions, open innovation days...) organised by medtech technological platforms using existing diffusion channels: no additional cost expected as the diffusion channels already exist.
- c) Adapt our financing tools in order to encourage platforms to be more visible and to offer services more adapted to collaboration with medtech companies:
- No additional cost when adapting existing calls for projects and selection processes;
- To be estimated for the regional financial support aimed at implementing the actions of platforms.

#### 6. Indicative funding sources

All activities of this second action will be funded by the regional policy instruments supporting research and innovation: either through the team in charge of Research and Innovation policies at the Region or through the regional financing instruments aimed at technological platforms. Specifically, for financial support aimed at implementing the actions of the platforms, if the financing conditions appear adapted to the targeted missions and costs, the ERDF operational programme 2021-2027 could be considered.

In addition, most contributing organisations (Economic regional Agency, competitiveness clusters) are largely financed by the Region for the activities they would be involved in.





#### **ACTION 3**

# Name of the action: Voucher for research and innovation projects of medtech companies

#### 1. Relevance to the project

While we were looking for inspiration to improve our financing tool aimed at medtech companies who implement R&D projects relying on cooperation with academics, we were presented in detail the voucher programme operated by the Danish Technical University (and funded through ERDF) during our study visit in Copenhagen, on 6 February 2020. Their approach showed us that a cascade funding scheme under ERDF to support companies R&D projects in their collaboration with academics was manageable and an interesting lead to improve one of our own financing tool, Easytech (identified as a good practice in Medtech4 Europe).

#### 2. Nature of the action

In addition to improving our ecosystem of technological platforms so that they offer services adapted and visible to medtech companies, it is relevant to fine-tune our policies that make these platforms services financially accessible for medtech SMEs when they need them to implement their R&D projects. This is why we want to study the extension of our Easytech voucher programme (cascade funding system) beyond exclusively digital applications, in all technological fields used in medical technologies (for instance materials, plastics and polymers, textiles, biocompatibility, etc), to have a tool to finance R&D projects of medtech SMEs working with a technological platform.

The expected result of these new vouchers will be more research and innovation projects developed by medtech companies, which will increase their competitiveness.

#### 3. Stakeholders involved

The introduction of such a cascade funding scheme in the next ERDF operational programme will be discussed and drafted between the European Funds Department and the Research & Innovation Department of Auvergne-Rhône-Alpes Region.

If the proposal receives a positive feedback, the implementation of the cascade funding scheme will involve the European Funds and the Research & Innovation Departments of Auvergne-Rhône-Alpes-Region, as well as probably competitiveness clusters (especially the regional health cluster).

#### 4. Timeframe

- Drafting and negotiation of next ERDF operational programme: S2 2020 to S1 2021
- If the proposal receives positive feedback at all needed levels, implementation of the cascade funding scheme: from S2 2021 if the implementation of ERDF on the next programming period allows it.

#### This timeframe is highly dependent on:

- the arbitrations on operational programmes that will be taken at regional level;
- the negotiation of the next ERDF operational programme, both within the Region and with the European Commission,
- the schedule of the next ERDF operational programme's implementation.





#### 5. Indicative costs

The volume of ERDF devoted to this cascade funding scheme will have to be determined during the feasibility examination, both in terms of ambition defined for the programme (experimental or widespread?) as well as considering the global financial arbitration at ERDF priorities and operations levels within the next programme.

#### 6. Indicative funding sources

Considering the timeframe envisaged for this action's implementation and the fact that at this moment, the Regional Operational Programme 2014-2020 is almost over (and the funds allocated to Research and Innovation almost completely drained), this "extended Easytech" programme would be funded by the Regional Operational Programme Auvergne-Rhône-Alpes (ERDF – ESF 2021-2027).





Date: 1/03/2021

Signature:

Le Directeur de l'Enseignement Supérieur, de la Recherche et l'Innovation

Charles THEROND

Stamp of the organisation (if available):