

EARTO Working Group Emerging Technologies for Healthcare Recommendations to new European Health Innovation Public-Private Partnership's Strategic Research Agenda

21 November 2019

The EARTO WG Emerging Technologies for Healthcare (Medtech) welcomes the European Health Innovation Public-Private Partnership under Horizon Europe (www.euhealthppp.org). It is a key initiative to foster innovative solutions for patients, sustainability of EU healthcare systems and industrial competitiveness.

We expect to take an active role in the operational and governance structures of the new European Health Public-Private Partnership (PPP) being a key stakeholder for health innovation. Indeed, we propose to bring the following capabilities to the Health PPP:

- Provide inputs to the scientific and technology road mapping,
- Commit to actively participate to Health PPP's programmes and projects,
- Connect the new Health PPP's activities to their national and regional ecosystems including companies (especially SMEs and start-ups/spin-offs), clinical centers, academic labs, patient associations and local authorities to leverage the PPP actions and deliver its expected impact.

In addition to our [earlier recommendations](#), we would like to contribute to the Health PPP setting-up with further propositions as follows:

1. New technologies ought to be considered as critical assets, with RTOs being key providers and integrators of innovative health solutions

RTOs play a central role in developing enabling technologies such as microelectronics, micro, nano and omics technologies, advanced materials and processes, bioengineering, photonics, computing, digital, robotics, as key assets for innovative products and services in healthcare. The ability of RTOs to develop, mature and further integrate technologies from other sectors, with respect to specific regulatory constraints in healthcare is unique. Through their focus on translational/applied research, RTOs can contribute to accelerate development of health technologies and thereby reduce their development time and costs. See EARTO Paper on [Accelerating the Digitization and Market Access of Emerging Technologies for Healthcare - The Pivotal Role of RTOs](#).

2. Partnering MedTech SMEs and Start-ups with RTOs accelerates scaling-up and market delivery of innovation

RTOs participation will guarantee openness and diversity of technological offers to the future Health PPP. RTOs' Technology Infrastructures are one of the crucial elements of Innovation Hubs. Indeed, one essential mission of RTOs' laboratories or field labs is to manage and provide access to their excellent technology infrastructures, both virtual and physical:

- To reach high enough maturation level via early stage experimenting, developing upscaling, prototyping,
- To validate new solutions before they can enter the market,
- To demonstrate their value for healthcare systems as well as investors.

Industry (large and small) relies on RTOs to access such excellent technology infrastructures, as they very often cannot afford the investment and skills needed to operate them even if a public grant is provided.

RTOs provide the following value to SMEs and start-ups: new technology piloting, spin-off incubation, validation of emerging concepts, testing solutions in real environment together with Key Opinion Leaders, being compliant with IVDR and MDR. Sharing such technology infrastructures and expertise is crucial to lower the costs and the risks of RD&I investment. For more details, see [EARTO Paper on Innovation Hubs](#).

3. Enable RTOs to foster their spin-offs participation in Health PPP

With their open-innovation business model, one of the core missions of RTOs is to transfer research and technology to the market with high impact for society. RTOs have many ways of doing so, one of which being the incubation, creation and development of spin-off companies (deep-tech start-ups). RTOs are venture builders: they accelerate the incubation of business opportunities converting innovative technological assets into investment-ready deals capable of generating value for society. The deep-tech start-ups created by RTOs have several specificities:

- They are based on deep-technology: unique, differentiated, protected with strong IP.
- They have a strong industry focus.
- They focus on two major types of technological innovation increasing productivity with high societal value: 1. Breakthrough innovation creating new markets, based on intensive development of disruptive technologies deriving from research laboratories and typically associated with industrial challenges, 2. Innovation through use, resolving large profit & loss problems (decreasing costs or increasing revenues) based on the combination of mature technologies for the development of new uses and/or economic models, present in the digital economy.

In addition, those deep-tech start-ups nurtured by RTOs have generally a better life expectancy after 5 years than average start-ups. They also have much greater chances of scaling-up in the deep-tech area, creating new industrial champions in Europe. The new Health PPP should take profit of such capability by looking further at RTOs spin-offs. For more details, see [EARTO Paper on RTOs spin-offs](#).

EARTO WG Medtech experts are ready to further discuss these propositions with the Industry Associations and the European Commission representatives involved in the preparation of the new European Health Partnership.

Note to the reader:

EARTO - European Association of Research and Technology Organisations

Founded in 1999, EARTO promotes Research and Technology Organisations and represents their interest in Europe. EARTO network counts over 350 RTOs in more than 20 countries. EARTO members represent 150.000 highly skilled researchers and engineers managing a wide range of innovation infrastructures.

RTOs - Research and Technology Organisations

From the lab to your everyday life. RTOs innovate to improve your health and well-being, your safety and security, your mobility and connectivity. RTOs' technologies cover all scientific fields. Their work ranges from basic research to new products and services development. RTOs are non-profit organisations with public missions to support society. To do so, they closely cooperate with industries, large and small, as well as a wide array of public actors.

EARTO Working Group Emerging Technologies for Healthcare is composed of 40 Medtech Experts working within our membership.

<p><u>EARTO WG Medtech Chair:</u> Françoise Charbit, European Affairs Senior Manager, CEA francoise.charbit@cea.fr Tel: +33 4 38 78 44 15</p>	<p><u>EARTO Contact:</u> Erwan Kermadec, Policy Officer kermadec@earto.eu Tel: +32 2 502 86 98</p>
--	--