https://flexfunction2sustain.eu/

OITBs WORKSHOP

OPEN INNOVATION TEST BEDS AS A SERVICE TO THE INDUSTRY

May 4th 2021, 14:00 – 17:30
Virtual Session | Satellite event from EuroNanoForum 2021

Click here to access to stream the workshop

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Supported by: safe nmt

Executive Summary

The FlexFunction2Sustain Open Innovation Test Bed, supported by the Safe-N-Medtech OITB, have organised a public workshop with the core aim of promoting the OITB ecosystem to relevant stakeholders and Industry. The event gathered representatives of the most relevant participants in this ecosystem: industry, academia, research and technology organisations and business support actors. The workshop took place as a satellite event of the EuroNanoForum 2021, organised under the auspices of the Portuguese Presidency of the Council of the European Union.

Advanced Materials and nanotechnology are critical technologies for Europe's competitiveness. They contribute towards giving EU industries the competitive edge they need for industrial leadership in global markets and promise breakthroughs to solving global challenges towards the green and digital transition. To this respect, European Commission DG RTD, Head of Prosperity Directorate **Peter Dröll** emphasised the updated European Industrial Strategy which takes the lessons learnt in this one year of pandemic: *a single market matters if borders are closed and if there's no free movement of goods. Secondly, we are critically dependent in some areas, with not surprise we are dependent on, for example, pharmaceutical products and on materials needed for the energy transition. A third element very important to the OITB discussions is about accelerating the green and digital transition – in this context OITBs' tools can make a substantial contribution in the EU – increasing European competitive and technological leadership, building-up and strength the digital capacity and capabilities, supporting the move to climate-neutrality and circularity and embedding the spirit of industrial innovation.*

The materials development cycle is long and entails several steps such as characterisation, modelling, processing, upscaling and engineering, including a lengthy assessment in industrial environments. **To enable uptake by industry, especially SMEs and start-ups, the Horizon 2020 Framework Programme has supported the creation of an open innovation ecosystem in advanced materials.** Within the previous European Research and Innovation Framework Programme – Horizon 2020, the Commission has invested approximately 250 million euro in **Open Innovation TestBeds** (OITBs) with the aim to bring nanotechnologies and advanced materials within market reachby providing access to demonstration and upscaling facilities as well as advisory services to advance technologies from laboratory validation to prototypes in industrial environments. Scaling-up is the main objective. To reach this objective a couple of functions are key for OITBs, including: reducing costs, reducing the time to market, reducing the material usage making the path to the circular economy, accelerating the maturity of products, reducing the risk of investment and increasing the return on investment.

This open innovation ecosystem aims at gathering all the relevant actors while covering all relevant enablers and services needed for innovation based on new materials, therefore reducingtechnological risk thus attracting more investors and cutting the time to market.

Currently there are 25 OITB projects running in the following technology domains:

- Lightweight nano-enabled multifunctional materials and components
- Safety Testing of Medical Technologies for Health
- Nano-enabled surfaces and membranes
- Bio-based nano-materials and solutions
- Functional materials for building envelopes
- Nano-pharmaceuticals production
- Cross-cutting Open Innovation Test Beds for materials characterisation and modelling

European Commission DG RTD, Head of Prosperity Directorate **Peter Dröll** said: *these Open Innovation Test Beds provide an important element in the EU ecosystem for research and innovation. They can only reach their full potential if they are interconnected. This workshops is also about this interconnection so that OITBs can provide integrated support to innovators at different stages of technological development. We expect that this network of European Open Innovation Test Beds reach*

out and deliver services to many users, especially Small and Medium Enterprises. These OITBs are expected to provide services in a sustainable way, for many years and beyond the end of the projects' duration. These test beds will provide improved industry productivity and accelerate innovation in their specific dedicated domains. And this is already happening.

Peter Dröll also highlighted that i*f we look ahead in the new Horizon Europe, the first calls will be published very soon and we can already say that the support to Open Innovation Test Beds will continue and we will fund actions related to plans that are at the heart of the European Commission: the Green Deal. So the topic selected is about decarbonising industry and it will mainly focus in scaling-up breakthrough and market and innovation support to the enhancement of the European ecosystem.*

The workshop also helped creating a common understanding on how OITBs can make industries' life easier. End-users' talks where industrial stakeholders provided feedback on how the OITB are delivering their services and boosting innovation also helped us learning about the expectations of users towards an OITB. First and second generation OITBs presented their portfolio of services and added value to customers. We invite you to watch the workshop recording here.

One of the goals of this workshop was to promote a continuous exchange between the OITBs. As next action, the FlexFunction2Sustain jointly with the Safe-N-Medtech OITB propose the following approach:

1. Organising follow-up workshops (interim sessions) focusing in specific themes:
    a) How to minimize liability risks (quality, other liability risk, reserve);
    b) IPR management strategies;
    c) Open call synchronize
    d) How can we improve the general information flow between OITB
2. Organise a subsequent OITB Workshop. For this activity we would propose a rotation between the OITBs for workshop organizing:
    - Safe-N-Medtech, which supported FlexFunction2Sustain in organising this first workshop, will organise the follow workshop with the support of another OITB;
    - The date will be set soon, but it is planned to happen in November 2021;
    - Suggested topics for the closed session: discuss outcomes of the interim sessions; OITB and quality management systems;
    - The open session will include customers' talks (possibly SMEs coming from the open calls), pitch session prioritising 3rd generation OITBs and other relevant thematic focus.

Suggestions and expressions of interest to take part in any of the interim sessions should be sent to:
events@flexfunction2sustain.eu

WORKSHOP AGENDA

Virtual Session

Open Session
May 4th 2021, 14:00 – 17:30

"Open Innovation Test Beds as a Service to the Industry"

Satellite event from **EuroNanoForum 2021**

Open Session

TARGET AUDIENCE | OITBs, Industry, Industry Associations, other projects likely to integrate results to OITB service portfolio and the European Commission)

May 4th 2021 | 14:00 – 17:30	
15' **14:00 – 14:15**	**Opening Session** • **Peter Dröll** | *European Commission DG RTD, Head of Prosperity Directorate*
10' **14:15 – 14:25**	**What Is an OITB and How Does It Make Industries' Life Easier?** • **Rudolf Fryček** | *AMIRES, CEO*
50' **14:25 - 15:15**	**Expectations of Users Towards an OITB** **Moderator:** • **John Fahlteich** | *Fraunhofer FEP, Research Group Leader* **Speakers:** • **Marlos Silva** | *SONAE, Director R&D and Incentives* • **Quentin Pankhurst** | *RCL - Resonant Circuits Ltd., Business Director* • **Johannes Maui Jepsen** | *Stryker, Project Engineer R&D* • **Joana Paiva** | *iLof, CTO* • **Florian Schmitt** | *i3 Membrane, CTO* **Time for Q&A**
15:15 – 15:25	***10 min break***

55' **15:25 – 16:20**	**Open Innovation Test Beds as a Service to the Industry (Part I)** **Moderator:** • **Marina Dias** | *INL, Business and Strategic Relations* **Speakers:** • **Angel del Pozo** | *Biokeralty, Deputy Manager of Programs Strategy* **OITB:** Safe-N-Medtech - Safety testing in the life cycle ofnanotechnology- enabled medical technologies for health • **Ulrich Froriep** | *Fraunhofer ITEM, High-Performance Center Translational Biomedical Engineering* **OITB:** MDOT - Medical Device Obligations Taskforce • **Andrea Haiek** | *CIDETEC, Responsible of GMP unit* **OITB:** TBMED - A testing bed for the development of high-risk medicaldevices • **Carlos del Castillo** | *ECCS – The European Convention for Constructional Steelwork, Project Manager* **OITB:** NewSkin - Innovation Eco-system to Accelerate the Industrial Uptake of Advanced Surface Nano-Technologies • **John Fahlteich** | *Fraunhofer FEP, Research Group Leader* **OITB:** FlexFunction2Sustain - Open Innovation Ecosystem for Sustainable Nano-functionalized Flexible Plastic and Paper Surfaces and Membranes • **Martin Smolka** | *Joanneum Research, Researcher and Project Coordinator* **OITB:** NextGenMicroFluidics - Next generation test bed for upscaling of microfluidic devices based on nano-enabled surfaces and membranes **Time for Q&A**
16:20 – 16:25	***5 min break***
55' **16:25 – 17:20**	**Open Innovation Test Beds as a Service to the Industry (Part II)** **Moderator:** • **Marina Dias** | *INL, Business and Strategic Relations* **Speakers:** • **Sandrine Lebigre** | *IPC, Head of R&D Program - High Added ValueProducts* **OITB:** OASIS - Open Access Single entry point for scale-up of Innovative Smart lightweight composite materials and components • **Zachary J. Davis** | *Danish Technological Institute, Team Manager* **OITB:** LEE-BED - Innovation test bed for development and production of nanomaterials for lightweight embedded electronics

	• **Luca Magagnin** | *Politecnico di Milano, Full Professor* **OITB:** LightMe - An Open Innovation Ecosystem for upscaling production processes of lightweight metal alloys composites • **Eduard Piqueras** | *EURECAT Technology Center, EU Programmes* **OITB:** FormPlanet - Sheet metal forming testing hub • **Philippe Azais** | *CEA, Deputy head of CEA programme, Energy Storage Solutions and Flexibilities* **OITB:** TEESMAT - Open Innovation Test Bed for Electrochemical Energy Storage Materials • **Franz Pirker** | *AC2T research, Business Development Manager* **OITB:** i-TRIBOMAT - Intelligent Open Test Bed for Materials Tribological Characterisation Services **Time for Q&A**
10' **17:20 – 17:30**	**Final Notes** • **John Fahlteich** | *Fraunhofer FEP, Research Group Leader*
17:30	**End of Meeting**