



**LEAPS** League of European  
Accelerator-based  
Photon Sources

# LEAPS Strategy 2023

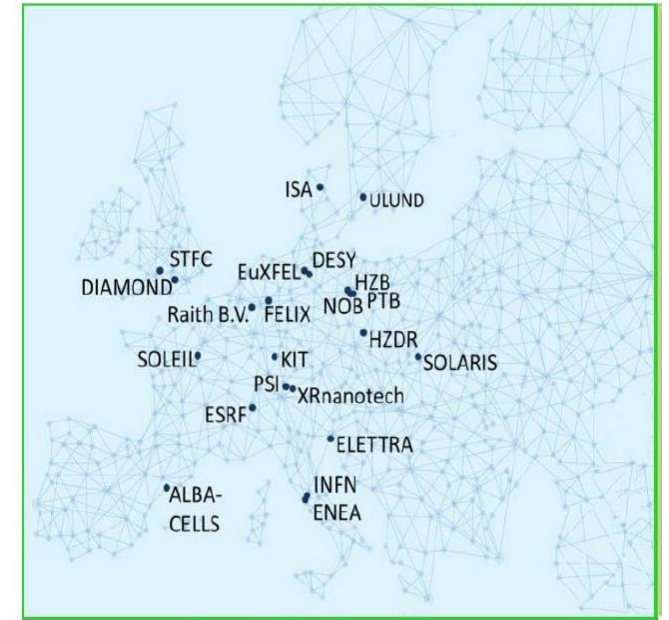
Rafael Abela (LEAPS CB Chair/PSI)

LEAPS Plenary Meeting 2022

27 October 2022

## LEAPS-INNOV Overall Objectives

- **Pilot actions** towards the implementation of the **LEAPS Technology Roadmap**
- **Explore open innovation strategies** for partnership with industry in development of cutting-edge technologies, including targeted actions to
  - improve cooperation with industry as collaborators in high-technology development at an early stage
  - better enable European industry to supply products and technologies to the LEAPS community, photon facilities worldwide and the general market
- Enhance industrial use of photon sources, in particular SMEs
- **Pilot activities to engage users from academia and industry** of large European research initiatives in the co-creation of innovative scientific instruments, particularly having relevance towards solving global challenges.



Beneficiaries





## European Research Infrastructures – Pathway to Improved Resilience through Remote and Digital Access

*A. Thies*      *DESY*

eRImote Workshop II

Remote Operations

24 & 25 October 2022



Funded by  
the European Union



## Current activities and Outcomes – Remote access landscape analysis

- Review on available practices concerning various remote access service categories
- Information gathering in workshops & expert groups
- Data analysis and set up of eRImote Information Platform

### Workshop I: Training

- Virtual
- 21 & 22 September 2022

### Workshop III: Governance

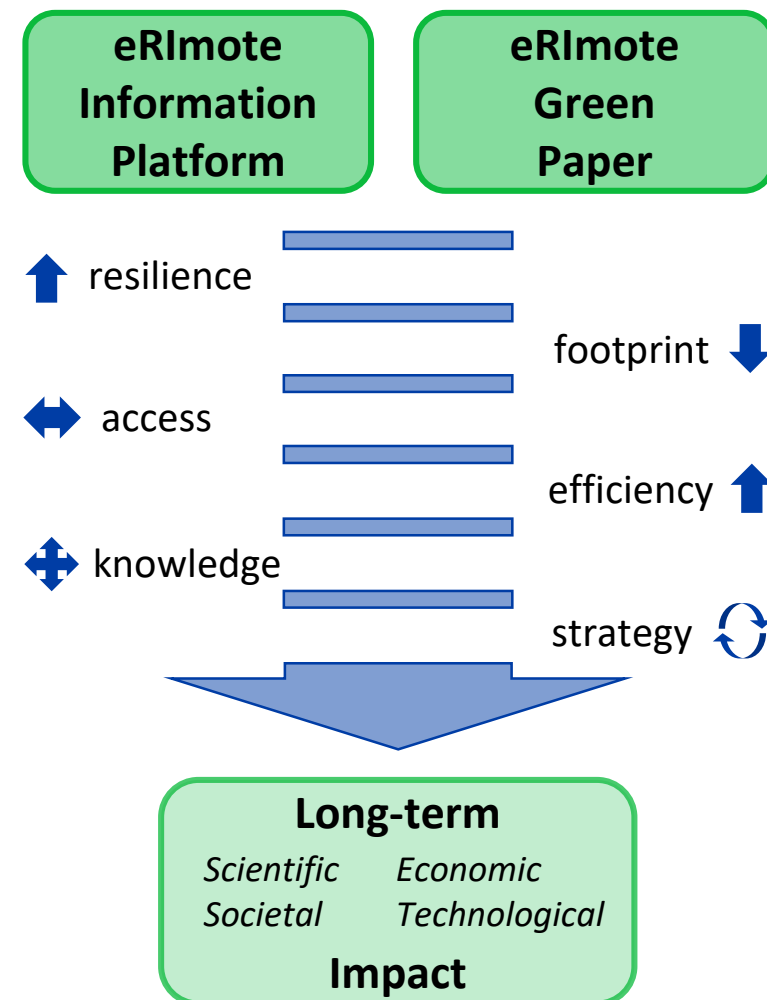
- In-person
- Spring 2023

### Workshop II: Remote operations

- Virtual
- 24 & 25 October 2022

### Expert Groups I-V on various topics

- Tbc





# ReMade@ARI

## RECYCLABLE MATERIALS DEVELOPMENT @ANALYTICAL RESEARCH INFRASTRUCTURES

### *Facts & Figures*

- 01 Sept. 2022 - 31 Aug. 2026
- 44 Beneficiaries plus 3 Associated Partners
- Coordination HZDR
- Project volume 13.7 MEUR
- Web site: [remade-project.eu/](https://remade-project.eu/)

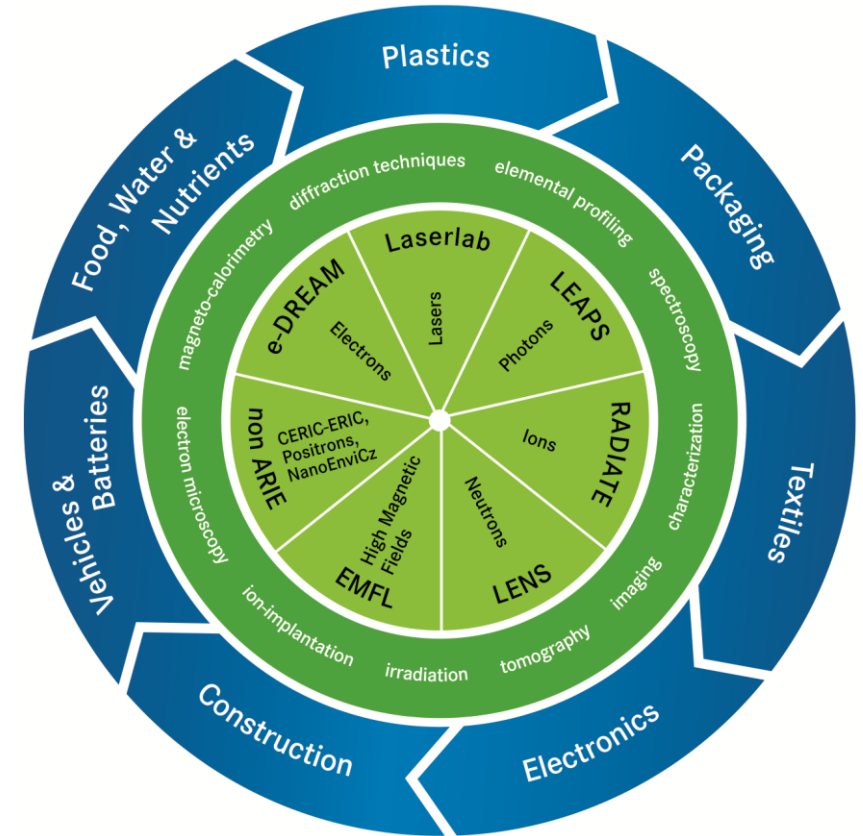


and

University of Bonn  
(Socio-economic impact)  
Danish Technological Institute  
(Bridging to industry)

## Our offer

- 50,000 hours of **TNA** to > 50 world-leading analytical facilities
- **Expert assistance** for experiment planning, materials characterisation, and data analysis
- Coordinating across networks to combine complementary techniques
- **Access schemes tailor-made to SME and industry needs**
- **Grants to provide industry with technical expertise. Single entry point for access to all partner RIs**



**Target areas**  
**of the European Union's Circular Economy Action Plan**

Electronics and ICT; Batteries and Vehicles; Packaging; Plastics; Textiles; Construction and Buildings; Food, Water and Nutrients.

## LEAPS preparing for HE Workprogram 2023/24

- HE INFRA-SERV-2023-01-01: **RI services for innovative applications of nanoscience and nanotechnology**  
Coordination: DESY
- HE INFRA-EOSC-2023-01-01: **Science cluster approach to ensure the uptake of EOSC by RI and research communities**  
LEAPS participation via one facility (WG3)
- HE-INFRA-SERV-2023-01-03: **RI services advancing frontier knowledge**  
proposal with ESUO and LEAPS participation

## Links to European Partnerships

- Analysis of the goals of the European Partnerships
  - Selection of those with the biggest common interest
  - Starting the communication
- 
- **Involvement of LEAPS-INNOV WP9**
    - **Contacting Scientist**
    - **Preparing a strategy**
    - **Workshops**
- Joint Proposal**



## Further Steps

Preparation for the call Infra-2024- TECH-01-01

Digital Leaps Initiative:      Support to the three pilot projects  
Extension of the Phase 1

Legal Entity                      Work in progress to establish it during 2023

LEAPS Biannual Conference: LEAPS MEETS LIFE SCIENCE

Topical Issue In EPJ : Facility status and strategy : Some contributions still open (!)



# LEAPS

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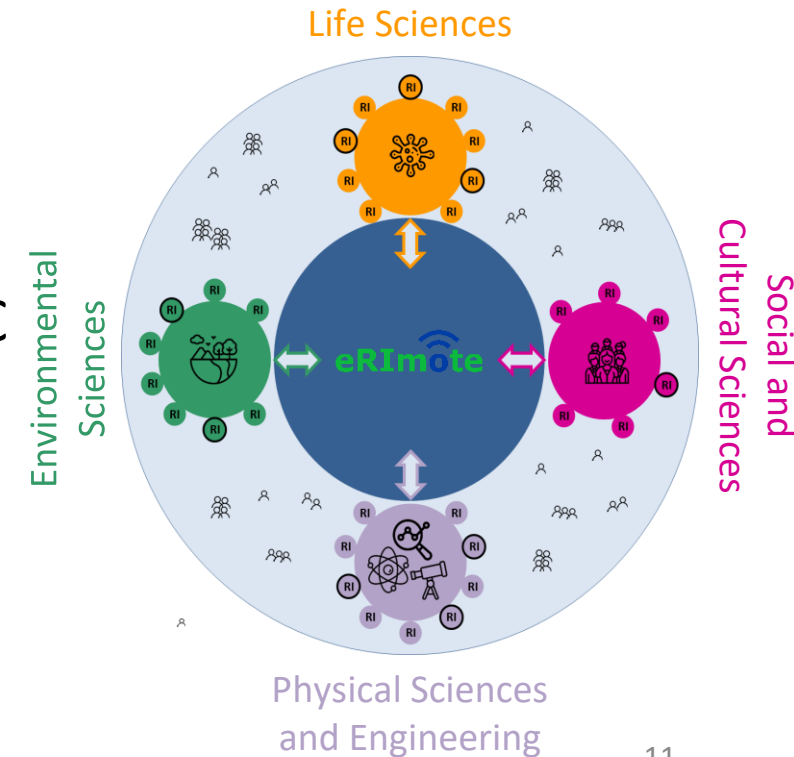
*"The strength of LEAPS lies in its staff and users, hailing from all European countries, beyond those which host the facilities. Member States and facilities should optimize the funding instruments under Horizon Europe for the benefit of researchers and innovators across all Europe"*



# eRImote Data Sheet



- **Project number:** 101057557
- **Beneficiaries/Partners:** 8 Beneficiaries from 4 ESFRI RI domains  
2 Affiliated Entities / 2 Associated Partners
- **Coordinator:** DESY and Instruct-ERIC
- **EC grant amount:** 1,429,877.00 €
- **Additional funding:** CH: 25,708.33 €/UK: 70,119.50 €
- **Project duration:** 30 months
- **Start date:** 1 June 2022
- **End date:** 30 November 2024





## Knowledge & Support Hub



- Support choice of techniques
- Support experiments
- Support data analysis
- Follow-up with expertise



Smart Science Cluster  
18 Junior scientists

## Project Implementation



Network	Main host	Specialisation
LEAPS	ESRF	X-ray diffraction
LEAPS	ESRF	X-ray tomography
LEAPS	DESY	X-ray imaging
LEAPS	MAX IV	SAXS/WAXS
LEAPS	PSI	In-situ / operando
RADIATE	HZDR	Ion implantation
RADIATE	IMEC	Elemental profiling
RADIATE	UAM	PIXE/PIGE, microbeams
eDREAM	FZJ	Imaging
eDREAM	ICN2	Diffraction
eDREAM	CNR-IOM	FIB
LENS	ILL	Neutron techniques
LENS	ISIS	Neutron techniques
LENS	PSI	Neutron techniques
LaserLab	Coimbra Laser Lab	Photo chemistry
LaserLab	HiLASE	Laser micro/nanoprocessing
EMFL	HZDR	Magnetocaloric measurements
pELBE	HZDR	Positron annihilation lifetime spectroscopy



# Links to European Partnerships

## PILLAR II - Global challenges & European industrial competitiveness

## PILLAR III - Innovative Europe

Cluster 1: Health	Cluster 4: Digital, industry and space	Cluster 5: Climate, energy and mobility	Cluster 6: Food, bioeconomy, natural resources, agriculture and environment	EIT: The European Institute of Innovation and Technology	European innovation ecosystems
Innovative Health Initiative	Key Digital Technologies	Clean Hydrogen	Circular Bio-based Europe	EIT InnoEnergy	Innovative SMEs
Global Health EDCTP3	Smart Networks and Services	Clean Aviation	Biodiversa+	Climate-KIC	
Transformation of Health Care Systems	High Performance Computing	Single European Sky ATM Research 3	Blue Economy	EIT Digital	
Risk Assessment of Chemicals	European Metrology (Art. 185)	Europe's Rail	Water4All	EIT Food	
ERA for Health	AI-Data-Robotics	Connected, Cooperative and Automated Mobility	Animal Health and Welfare	EIT Health	
Rare Diseases	Photonics	Batteries	Accelerating Farming Systems Transitions	EIT Raw materials	
One-Health Antimicrobial Resistance	Made in Europe	Zero-emission Waterborne Transport	Agriculture of data	EIT Manufacturing	
Personalised Medicine	Clean Steel – Low-Carbon Steelmaking	Zero-emission Road Transport	Safe and Sustainable Food Systems	EIT Urban Mobility	
Pandemic Preparedness	Processes4Planet	Built4People		Cultural and Creative Sectors and Industries	
	Globally Competitive Space Systems	Clean Energy Transition			
		Driving Urban Transitions			
				<b>CROSS-PILLARS II and III</b>	
				European Open Science Cloud	

■ Institutionalised partnerships (Art 185/7, EIT KICs)

■ Co-programmed

■ Co-funded

□ Not covered in the BMR 2022 due to a later start date