European Funding Opportunitiesfor UK Businesses





Housekeeping



All participants will be muted for the duration of the webinar.



A chat function is available and will be monitored.



The session is **recorded**. **Slides** and **recording** will be uploaded after the event.



Please use the Q&A function to submit questions. Up voting is available





Agenda

1 Welcome and UK Participation in Horizon Europe

Moderator – Dr. Phil Holliday

2 MSCA

Anne Nierobisch, MSCA NCP Prof. Dr. Erich Griesmayer, Founder and CEO of CIVIDEC Instrumentation.

3 ERC

Dr. Phil Holliday, ERC NCP Dr. Cat Mora, Director of Research Operations, PhaseCraft.

4 Research Infrastructures

Dr. Alice Chadwick, Research Infrastructures NCP

5 Questions and Answers

Moderator – Dr. Phil Holliday







Horizon Europe participation

On 24 December 2020, the negotiations on the UK-EU Trade and Cooperation Agreement concluded

The <u>announcement</u> confirmed the UKs' intention to associate **to Horizon Europe**

This includes full participation in the programme (with the exception of the EIC Accelerator Fund)

UK entities can participate in/coordinate projects and receive funding from Horizon Europe

European Commission's Q&A confirms UK eligibility

UKRO website provides latest information on UK participation







Funding in case of delay

"We welcome the Government's decision to provide funding to those who have successfully applied to Horizon Europe and will be finalising the processes needed to distribute the funds in the coming weeks.

"We are also working with the Government to prepare for all possible outcomes to ensure the UK's thriving research and innovation sector has the support it needs to continue collaborating and delivering world-class R&D.

"In the meantime we encourage researchers and innovators across the UK to continue to apply to open Horizon Europe calls."

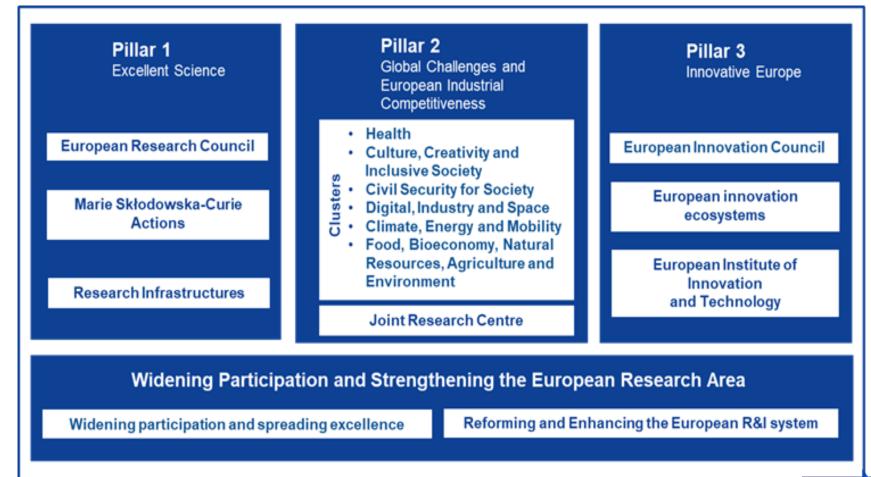
- UKRI International Champion Professor Christopher Smith

UKRI Guidance on Horizon Europe Guarantee



Guarantee Fund for successful Horizon Europe UK applicants to the first calls

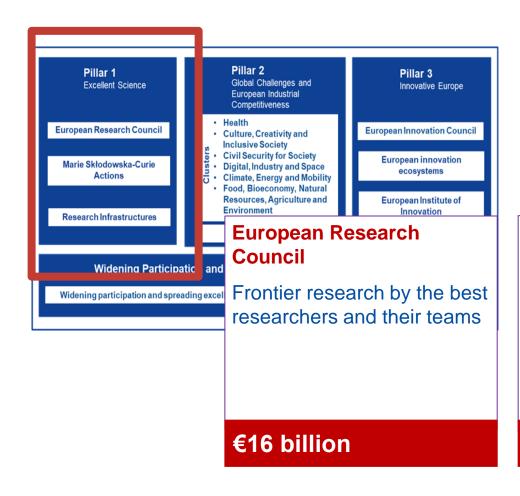
Horizon Europe – EU's €95.5 Billion Flagship programme for research and innovation







Horizon Europe – EU's €95.5 Billion Flagship programme for research and innovation



Marie Skłodowska Curie Actions

Equipping researchers with new knowledge and skills through mobility and training

€6.6 billion

Research Infrastructures

Integrated and interconnected world-class research infrastructures

€2.4 billion





€53.5bn (excluding **Associated Country** contributions)



Pillar II **GLOBAL CHALLENGES & EUROPEAN INDUSTRIAL** COMPETITIVENESS

- Health
- · Culture, Creativity & Inclusive Society
- Civil Security for Society
- Digital, Industry & Space
- · Climate, Energy & Mobility
- Food, Bioeconomy, Natural Resources, Agriculture & Environment

Joint Research Centre** (€2bn)

Total funding excludes UK and other **Associated Country contributions**

Health (€8.3 bn)

- 1. Staying healthy in a rapidly changing society
- Living and working in a health-promoting environment
- 3. Tackling diseases and reducing disease burden
- Ensuring access to innovative, sustainable & high quality health care
- 5. Unlocking the full potential of new tools, technologies and digital solutions for a healthy society
- 6. Maintaining an innovative, sustainable and globally competitive health industry

Culture, Creativity and Inclusive Society (€2.3 bn)

- 1. Innovative research on democracy and governance
- 2. Innovative research on European cultural heritage and the cultural and creative industries
- 3. Innovative research on social and economic transformations

Civil Security for Society (€1.6 bn)

- Better protect the EU and its citizens against crime and terrorism
- Effective management of EU external borders
- Resilient infrastructure
- Increased cybersecurity
- A disaster resilient society for Europe
- 6. Strengthened security research & innovation
- Horizon Europe Collaborative Funding Overview Webinar
- Cluster webinars

Digital AI, data & computing / photonics & electronics

/ smart networks & connectivity / robotics / quantum / digital economy

Industry Circular industries / resource & energy efficiency / digital & agile manufacturing / sustainability by design / smart, multi-functional materials (incl. graphene, nano & bio) / advanced materials for energy storage (incl. hydrogen & electrification)

Space Satellite technology / access to space / space data / space science / space robotics

Climate Climate sciences & responses / a competitive & sustainable European battery value chain / emerging breakthrough technologies & climate solutions / citizens & stakeholder engagement / communities & cities

Energy Global leadership in renewable energy / energy systems, grids & storage / carbon capture, utilisation & storage / cross-cutting issues / highly energy-efficient & climate neutral EU building stock / industrial facilities in the energy transition / hydrogen partnership

Mobility Zero-emission road transport / aviation / enabling climate neutral, clean, smart & competitive waterborne transport / impact of transport on environment & human health / connected, cooperative & automated mobility (CCAM) / safety & resilience - per mode & across all modes / multimodal & sustainable transport systems for passengers & goods

Food, Bioeconomy, Natural Resources, Agriculture and Environment (€9.0bn)

- Biodiversity & ecosystem services
- Fair, healthy & env.-friendly food systems from primary production to consumption
- Circular economy & bioeconomy sectors
- Clean environment & zero pollution
- Land, oceans & water for climate action
- Resilient, inclusive, healthy & green rural, coastal & urban communities
- 7. Innovative governance, env. observations & digital solutions in support of the Green Deal



Tristan Fancourt Health (Academia)



Jo Frost Health (Industry)



Anni Laihanen Culture, Creative & Inclusive Society





Craig Sharp Zale Digital & **Johnson** Security Industry



Abishek Ramesh Industry & Materials



Catherine Holt Space + Natural Resources



Nicolas Wallet Climate





Conall **McGinley** Energy



Louise **Mothersole** Mobility



Agritech

Helen **Sweeney** Food &



Paul Bello Biotechnology

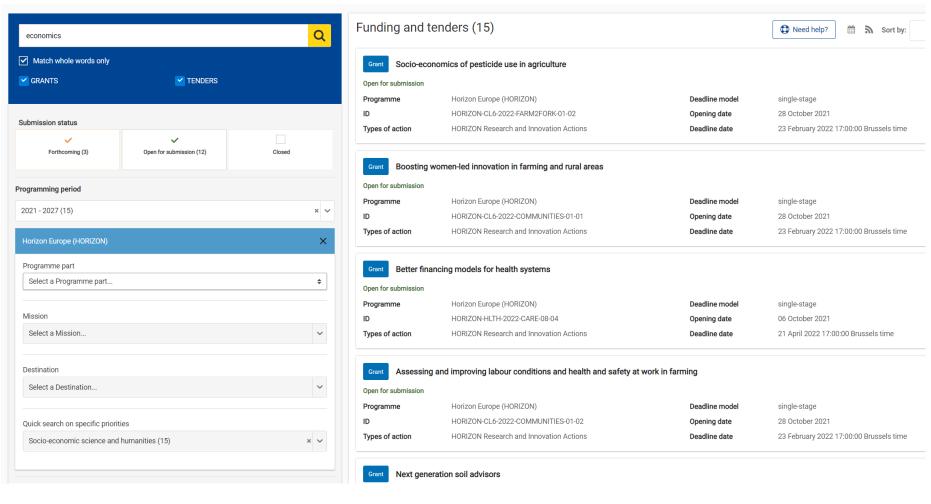
NCPs for Europe and the rest of the world

(€15.4 bn)

(€15.1 bn)



Finding a relevant Horizon Europe call



All Horizon Europe calls are opened on the <u>Funding and</u> Tenders Portal (FTOP).

Anyone can access but many features including submissions need an EC Portal account – these are easy to set up.

FTOP can be used to navigate for calls using the search function or the specific priorities (e.g. Governance). Make sure you are looking at Horizon Europe.

Once calls open a proposal must be submitted on this platform. All guidance documents for calls are included with the topic entry.

An alternative for browsing calls is to use the document version of the Work Programmes, which are available on the FTOP Library.



What is a National Contact Point?

UK NCP network: team of sector specific public servants whose role it is to provide free support to UK participants in Horizon Europe

International NCP network: support in Europe and the rest of the world

Services can include:

- Informing, awareness raising for Horizon Europe and other EU programmes
- Assisting, advising and training to improve the quality of Horizon Europe proposals
- Signposting and cooperation direct to relevant support and work with each other to support consortium development

Sign up for the NCP newsletters: <u>eufunding.ukri.org/subscribe</u>

Today's NCPs



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Dr. Phil Holliday ERC NCP, UKRO erc-uk@ukro.ac.uk



Dr. Alice Chadwick
Research Infrastructures, STFC
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Today's Industry Speakers



Prof. Dr. Erich Griesmayer Founder and CEO of CIVIDEC Instrumentation.





Dr. Cat Mora,
Director of Research Operations,
PhaseCraft.







Anne Nierobisch UKRO European Advisor MSCA NCP

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14 June 2022

Marie Skłodowska-Curie Actions:

Host enthusiastic and excellent researchers for innovative research

Marie Skłodowska-Curie Actions (MSCA)

- EU funding schemes focused on 'Training Through Research'
- Fund excellent research in all research disciplines in a bottom-up manner
- Open to researchers of all nationalities, all research disciplines, at all career stages
- Open to all organisations. Participation of non-academic sector strongly encouraged, especially industry and SMEs
- Emphasis on international, inter-sectoral and interdisciplinary
 cooperation









Which MSCA Funding Schemes?

MSCA Postdoctoral Fellowships – hosting or collaborating with a Postdoctoral Fellow and academia

Work with a Postdoctoral Fellow on an research project?

MSCA Doctoral Networks – Training the next generation of researchers through collaborative projects

- Work on a collaborative research project in an international and interdisciplinary consortium?
 (The research projects is implemented through individual PhD projects.)
- Contribute to setting up a long-term training programme for PhD students?

MSCA Staff Exchange – collaborative R&I activities through staff secondments

• Second staff members or researchers in an international, intersectoral and interdisciplinary consortium working collaboratively on a research project?

MSCA COFUND– recruiting at least three researchers for a research project (monobeneficiary action)

- Lead on recruiting and supervising three PhD students or three Postdoctoral Fellows to work on a research project?
- Contribute to hosting or training researchers under this action?

Resources

- MSCA How to Apply page all guidance documents for all schemes in one place
- MSCA Work Programme 2021-2022 MSCA schemes for 2021 and 2022
- Contact us in case of questions or if you need more information: mariecurie-uk@ukro.ac.uk

2022 MSCA Doctoral Networks (DN) OPEN closes 15/11/2022

- 2022 MSCA DN Call Webpage
- UKRO's series of information webinars on the 2022 MSCA DN Call

2022 MSCA Postdoctoral Fellowship (PF) OPEN

Closes 14/09/2022

- 2022 MSCA PF Call Webpage
- UKRO's <u>series of</u> <u>information webinars</u> on the 2022 PF Call

2022 MSCA Staff Exchange (SE) FORTHCOMING

To open on 06/10/2022

- 2022 SE Call Webpage
- UKRO will hold a series of information webinars call closer to the date.
- UKRO's <u>series of</u> <u>webinars</u> on the 2021 SE Call

2022 MSCA COFUND FORTHCOMING To open on 11/10/2022

- 2022 MSCA COFUND Call Webpage
- UKRO will hold a series of information webinars call closer to the date.
- UKRO's <u>series of</u> <u>information webinars</u> on the 2021 COFUND Call



Prof. Dr. Erich Griesmayer

- Founder and CEO of CIVIDEC Instrumentation
- Associate Professor at the Vienna University of Technology
- CIVIDEC specializes in the development and production of radiation diagnostic systems
- CIVIDEC Instrumentation is acting world-wide in industry and research.











Why engage in academic – industry collaborations? It opens the door to innovation

Investing in innovation can be high risk for companies, but it can also **reap high rewards**. Not enough businesses are taking up the low-risk opportunity to boost their innovation

- · Gain access to cutting-edge research and skills
- Catalyse innovation and growth within your company
- · Develop and screen new talent for hire
- Cost-effective research
- Need to collaborate to solve major global challenges





Work with the best minds in Europe

Artificial Intelligence predicting protein structures to help better understand how the nuclear pore complex, an assembly of 30 different proteins, controls access to the cell nucleus. This could lead to the development of **new medications** for a wide range of health disorders

Project ComplexAssembly, PI Martin Beck

networks and

Anomalies in sounds produced by the human body (heartbeats, breathing, the voice) are indicators of disease. Capturing the sounds of the body via optimising audio technologies in smartphones allows for **early diagnosis of various diseases**, such as dry coughs and shortness of breath for COVID-19.

Project EAR, PI Cecilia Mascolo

Improving the **robustness of communication networks** and significantly increase network safety. Developed a **verification tool** capable of finding bugs and automatically fixing P4 programmes running in routers without human intervention.

Projects **CORNET** and **SafeNet**, PI Costin Raiciu

How should you work with ERC grantees?



As the Host Institution of an ERC project:

• IBM Research GmbH, an industrial research laboratory in Rüschlikon, Switzerland, hosting Dr Leo Gross. Dr Gross works on atomic force microscopy to identify molecular structures for applications in synthetic chemistry, pharmacy, life sciences and environmental sciences

Greatest amount of involvement and input into the research





As an active partner in an ERC project:

• **openDemocracy** works with the University of Bath on the impact on labour relations of unconditional cash transfers



Work with ERC grantee to commercialise a finding from the project:

 The University of Liverpool has a proof of concept grant to deliver a database of molecular semiconductors that offer high charge mobility and time-saving software capable of foreseeing the charge mobility of synthesised molecular materials.

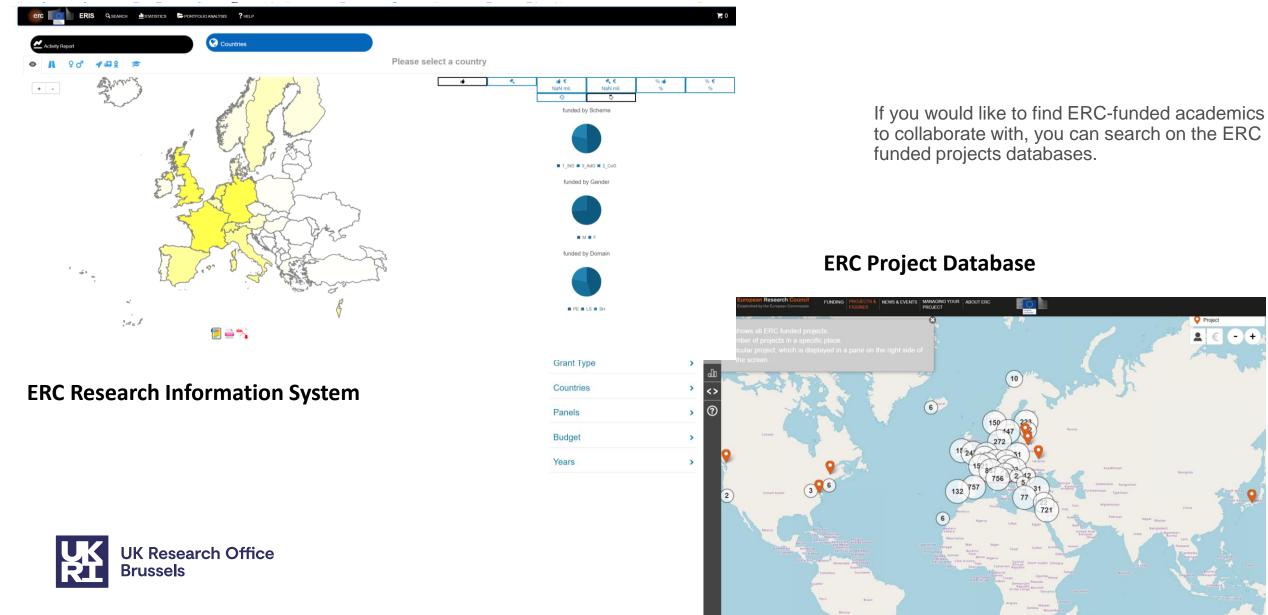


Provide a paid-for service to an ERC project:

• TES Pharma, a research-based biopharmaceutical company based in Italy, is a third party on an ERC project to **develop molecular therapies** for acute myeloid leukaemia.

Least amount of involvement and input into the research

How do I find these ERC grantees?



Useful links

- ERC Website
 - including the easy-to-use <u>Project Database</u> and the more in depth <u>ERC Information System</u>
- Innovate UK Blog <u>How businesses can connect with the brightest minds in Europe</u>
- Innovate UK Blog <u>ERC ecosystem turns ideas into business opportunities</u>

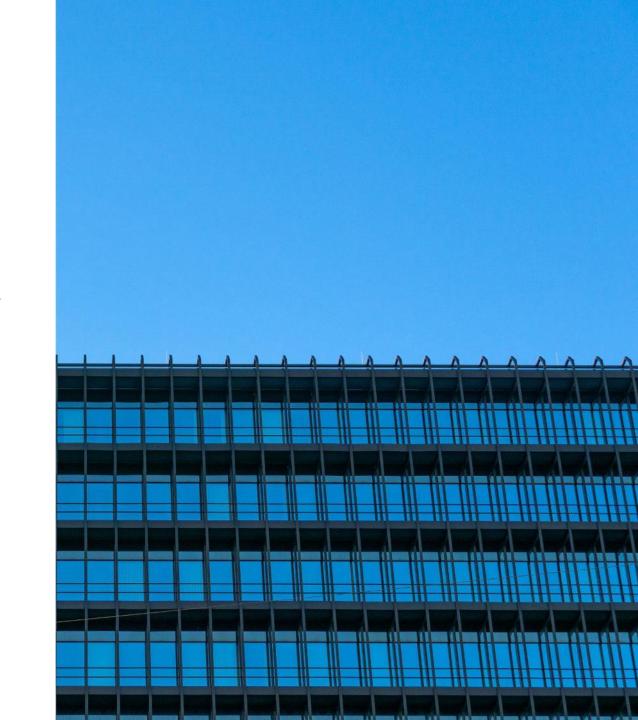
Contact us:

NCP for the European Research Council

Phil Holliday Sean Rowlands

erc-uk@ukro.ac.uk







Case study:

Dr Cat Mora, Director of Research Operations, Phasecraft

ERC 2018 Consolidator Grant QAFA - Quantum Algorithms from Foundations to Applications

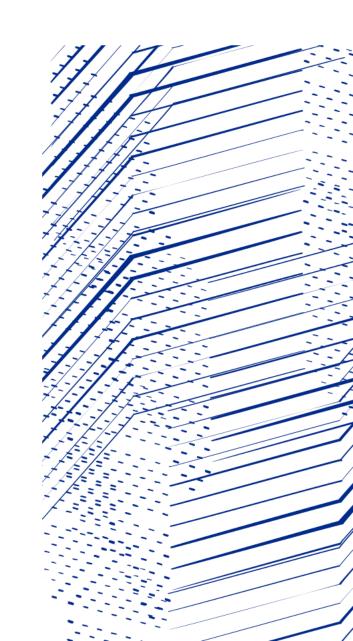








Business/Industry and Research Infrastructure



Horizon Europe: Research Infrastructures

Research Infrastructures: facilities providing resources and services for the research communities and industry to conduct research and foster innovation (single site, distributed, virtual).

Providing access to external users, could be:

- knowledge related (archives, data infrastructures)
- major scientific equipment (telescopes, research vessels)
- ICT infrastructures (computing systems, communication networks)

Research Infrastructures contribute to:

- 1. Extend the frontiers of knowledge
- 2. Exchange and transmit knowledge
- 3. Train the next generation of top researchers
- 4. Support industrial innovation

Within Pillar 1: Excellent Science, alongside ERC and MSCA, with €2.4bn funding



Opportunities for industry with RI

- Taking part in a funded project as a partner in a consortia
- Trans National Access to services provided by RIs, open to SMEs
- Projects supporting collaboration between RIs and industry

Funded projects

- Development of e-infrastructure for supporting EOSC Exchange software and tools relating to collection of datasets, data sharing, storage, management, analysis, reuse
 - HORIZON-INFRA-2024-EOSC-01-05

Funded projects

- R&D for the next generation of scientific instrumentation, tools, methods, solutions for RI upgrade
 - HORIZON-INFRA-2024-TECH-01-01

Funded projects

- AR/VR empowered digital twins for modelling complex phenomena in new RI application areas
 - HORIZON-INFRA-2024-TECH-01-04
 - RIs conducting experiments in AR/VR
 - New application areas healthcare, safety and security, physically limited areas



Project aiming to connect infrastructures to enable researchers to access services across the biodiversity data lifecycle

UK partner: ELIXIR/EMBL-EBI





··· The BiCIKL partners































Biodiversity Information Standards



Partner 1: PENSOFT



- SME
- Science publisher & technology provider
- Publisher of ca. 35 biodiversity journals & hundreds of book titles
- Inventor of XML publishing for biodiversity (based on Plazi's TaxPub standard)
- Partner in the Biodiversity Literature Repository (BLR) (together with Plazi)
- Inventor of large-scale conversions of biodiversity data into RDF / LOD
- Creator of the OpenBiodiv Biodiversity Knowledge Graph
 & OpenBiodiv-O ontology



- Based in Bulgaria, Brussels & Moscow, 40 employees
- Participants in ca. 30 EU projects
- pensoft.net I arphahub.com



Partner 1: PENSOFT objectives as partner in BiCIKL

- Project coordination
- Development of a new open source ARPHA-XML authoring tool focusing on semantics of biodiversity data
- Integration of XML-based publishing workflows with data sources the participating RIs
- Access to biodiversity Linked Open Data for through the OpenBiodiv Knowledge Graph





Trans-National Access

- Trans-National Access to infrastructure services
- Provided to selected researchers or teams from industry
- Improve service provision to research/industry community
- In person/remote
- Apply for access via calls, applications are peer-reviewed

ESFRI Roadmap 2021 | www.esfri.eu

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Research Infrastructures and SMEs

- INFRASERV Trans National Access
 - A key aim: "Fertilisation and a wider sharing of knowledge and technologies across disciplines and between academia and industry and businesses"
 - Example INFRASERV projects: canSERV and AgroServ (starting autumn 2022) which enable TNA to services for cancer research and for a sustainable agroecological transition for researchers in academia and industry
- INFRAIA was a Horizon2020 call, jointly aimed at providing opportunities for industrial as well as academic users, in collaboration with EEN (Enterprise Europe Network)
 - The aim is to "bring together, integrate on European scale, and open up key national and regional research infrastructures to all European researchers, from both academia and industry, ensuring their optimal use and ioint development"
 - Example INFRAIA project: **iNEXT-Discovery** (https://inext-discovery.eu) which enables **transnational access to structural biology infrastructure** for researchers in academia and industry
- Instruct-ERIC also applied to the recent INFRATECH call alongside a UK SME as an associated partner









Collaboration between research infrastructures and Industry

- Growing communication and partnership between research infrastructures and industry
- Developing routes for commercial partners to access research infrastructure and advance their own work
- ENRIITC (European Network of Research **Infrastructures and Industry for Collaboration**)
- 11 Partners establishing a network of Industrial Liaison and Contact Officers to improve the RI-industry cooperation and boost the innovation ecosystem in Europe.



• Find out more about ENRIITC: https://enriitc.eu/







Thank you

RINCPUK@stfc.ac.uk



Sign up for the NCP newsletters: <u>eufunding.ukri.org/subscribe</u>