Introducing The Missions & Opportunities for Wider Engagement with Horizon Europe

Dr Phil Holliday, UKRO

16 June 2021

phil.holliday@ukro.ac.uk

- Missions

- EIC Pathfinder Open and Challenges

- Co-funded European Partnerships

Concept of Mission-Orientation in EU R&I

Be **bold and inspirational** to create strong impact and visibility

Find solutions to some of the major challenges faced by European citizens
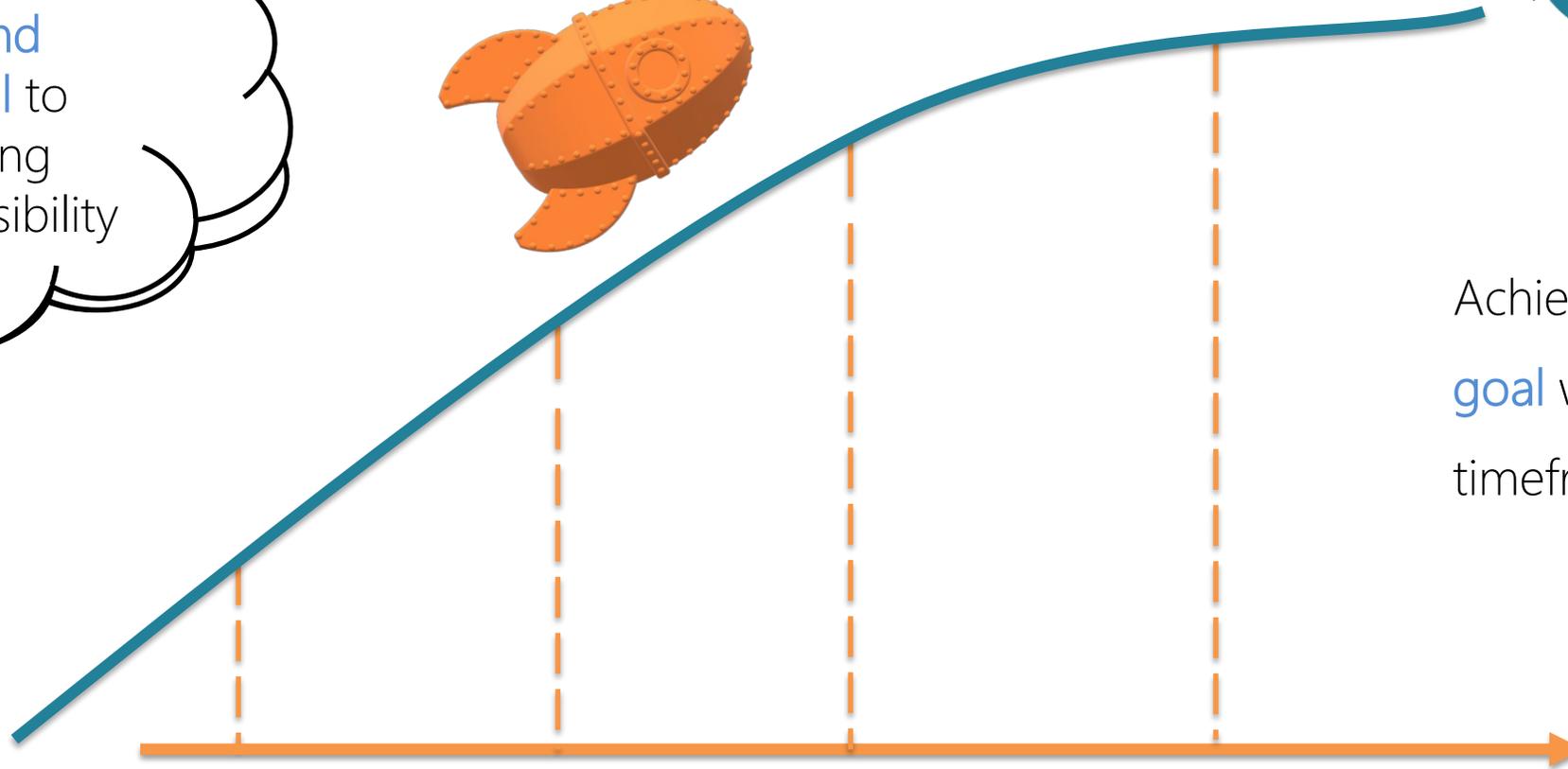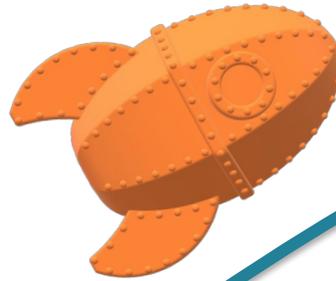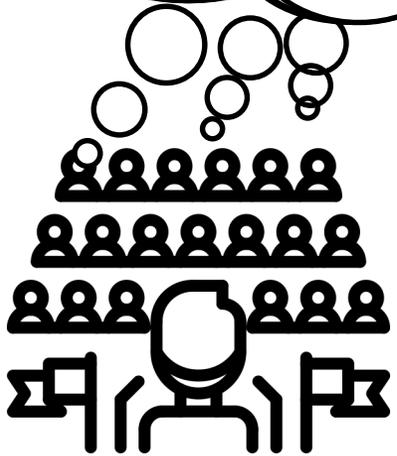
Achieve a **measurable goal** within a set timeframe
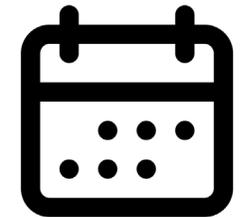
What does this mean for researchers?

- Improved EU R&I links with societies and citizens needs. Missions should mobilise everyone.

- Missions will bring together and fund portfolios of research projects across disciples and sectors.

- Portfolios will achieve measurable goals jointly that would not be possible through individual actions.

- Will be programmed within Pillar 2 Clusters and Pillar 3 Innovative Europe, with input from Pillar 1
  - Funding will take off slowly in 2021 with CSAs
  - During the first three years of Horizon Europe, a maximum of 10% of Pillar 2's annual budget will be dedicated to Missions.

Missions not confirmed yet.

Adaptation to climate change, including societal transformation

Healthy oceans, seas, coastal and inland waters

Mission areas

Cancer

Click here for full descriptions

Climate-neutral and smart cities

Soil health and food

Find out which experts are on each 'mission board'

Mission Governance: Boards and Assemblies

Connie Hedegaard
Adaptation to Climate Change including Societal Transformation

Pascal Lamy
Healthy Oceans, Seas, Coastal and inland Waters

Walter Ricciardi
Cancer

Hanna Gronkiewicz-Waltz
Climate-Neutral and Smart Cities

Cees Veerman
Soil health and Food

Board Membership:

- Top-level independent experts (15 individuals)

- Mixture of high level profiles from research and academia, industry, innovation and business, policy, public sector, citizens associations, public engagement and science education, international agencies, civil society

Role - advise the European Commission on:

- Identification of missions, with input from stakeholders and citizens;

- Content of work programmes;

- Characteristics of project portfolios for missions;

- Framework conditions which help achieve the objectives of the mission.

Assemblies

Top-level experts (max 30 per mission area) to support the work of the Mission Boards.

HE Missions website

Pillar 3 – Innovative Europe – European Innovation Council (EIC)

- Provides a coherent and connected system of innovation funding that supports projects with market potential

- Principally targeted at Small- and Medium-sized Enterprises (SMEs) and industry

- EIC will serve as a 'one-stop shop' for European innovators

- Channel funding through three main schemes

| Pathfinder	Transition	Accelerator
• Based on the FET Open • Support international consortia working on establishing future and emerging breakthrough technologies through collaborative research and innovation projects	• For 2021, only open to ERC Proof of Concept grantees and EIC Pathfinder grantees • Matures a novel technology and develops a business case to bring it to market	• Based on the SME Instrument • Will bridge the financing gap between late stages of innovation activities and market take-up, to effectively deploy breakthrough market-creating innovation and scale up companies where the market does not provide viable financing

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Focus of EIC Pathfinder
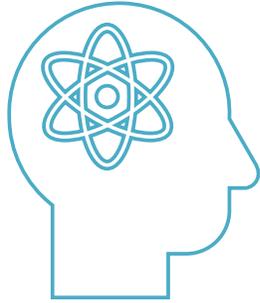
Turn excellent science into breakthrough technology

Prepare industry for leadership in future technologies
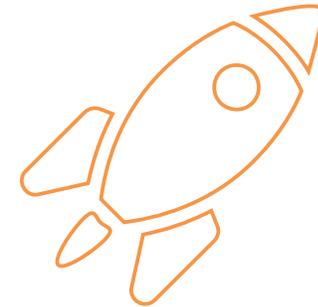
Support competitiveness by providing radically new tech ideas

EIC Pathfinder Open

- No predefined thematic priorities, open to proposals in any field of science, technology or application.

- Explore foundations for radically new future technologies, high-risk & high-impact interdisciplinary research that underpins technological breakthroughs.

- Pathfinder goes beyond what is already known. Visionary thinking can open up promising avenues towards powerful new technologies.

- Applicants are typically visionary scientists, entrepreneurial researchers and, research organisations, start-ups, high-tech SMEs and industrial stakeholders interested in technological research and innovation.

- Supports early stage development of such future technologies (e.g. various activities at low Technology Readiness Levels 1-4).

EIC Pathfinder Challenges

- Aim to build on new, cutting-edge directions in science and technology to disrupt a field and a market

- Create new opportunities by realising innovative technological solutions grounded in high-risk/high-gain R&D

- **EIC Programme Managers** oversee a specific EIC Pathfinder Challenge and actively steer the portfolio towards the goals of each Challenge

- Projects in a Challenge are expected to participate in portfolio activities and remain flexible in the light of developments.

EIC Pathfinder Challenges – Topics for 2021

Awareness inside:
- For projects to develop new concepts of awareness that are applicable to systems other than human.

Tools to measure & stimulate activity in brain tissue:
- For projects to develop novel neurotechnologies to diagnose or treat brain, spinal cord or peripheral nerve-related disorders and which can be rapidly accepted by clinicians and patients.
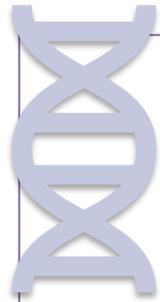
Emerging Technologies in Cell & Gene Therapy:
- For breakthrough projects that propose novel concept-based technological solutions or technological platforms far beyond the current state-of-the-art.

Novel routes to green hydrogen production:
- For projects to develop novel processes and technologies to produce Green H_2, at different scales (from small to large) and with higher flexibility.

Engineered living material:
- For projects to develop new technologies and platforms for the controlled and made-on-demand production of engineered living materials with multiple functionalities, shapes and scales.

EIC Pathfinder Challenges – deadline

- Call opens 15 June 2021

- Call deadline for submitting your proposal

  - 27 October 2021 at 17h00 Brussels local time.

- Submit your proposal via the European Funding & Tender Opportunities Portal

- You will be informed about the outcome of the evaluation 5 months after call deadline (indicative), and your grant agreement will be signed by 8 months after call deadline (indicative).

Three New Types of European Partnerships

- Based on MoUs / contractual arrangements

- Implemented independently by Horizon Europe and partners

- Can include financial or in-kind contributions

- Based on a joint programme agreed by partners

- Commitment of partners for financial and in-kind contributions and integration of activities

- Horizon Europe also makes a financial contribution

- Based on long-term dimension and need for high integration, partnerships

- Regulation will be set-up and supported by Horizon Europe – central management

- Only when the objective cannot be met elsewhere within Horizon Europe including other European Partnerships

| Co-programmed | Co-funded | Institutional |

Co-programmed European Partnerships

- European Partnership for the European Open Science Cloud
- European Partnership for Artificial Intelligence
- European Partnership for Photonics (light-based technologies)
- European Partnership for Clean Steel – Low Carbon Steelmaking
- European Partnership Made in Europe
- European Partnership Processes4Planet
- European Partnership for People-centric Sustainable Built Environment (Built4People)
- European Partnership towards Zero-emission Road Transport (2Zero)
- European Partnership for Connected, Cooperative and Automated Mobility
- European Partnership for Batteries: Towards a competitive European industrial battery value chain
- European Partnership for Zero Emission Waterborne Transport

Co-funded European Partnerships

- Partnerships of research funders and other public authorities

- Follow on from ERANET Co-funds and European Joint Programme Cofunds in H2020

- Work on the basis of a Grant Agreement

- Receive EC contribution

Planned co-funded partnerships

Risk Assessment of Chemicals

Fostering a European Research Area for Health Research (ERA for Health)

Transformation of Health Care Systems

Personalised Medicine

Rare Diseases

One Health / Antimicrobial Resistance (AMR)

Driving Urban Transitions to a Sustainable Future

Clean Energy Transition

Accelerating Farming Systems Transition: Agroecology living labs and research infrastructures

Animal Health and Welfare

Agriculture of Data

Rescuing Biodiversity to Safeguard Life on Earth

Climate Neutral, Sustainable and Productive Blue Economy

Safe and Sustainable Food Systems for People, Planet and Climate

Water4all: Water security for the planet

Innovative SMEs

Details on all partnerships are included in the Strategic Plan (Cluster specific chapters)

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How is a Co-funded European Partnership formed?

Call for proposals in the Work Programme

Consortium of funders/public authorities applies

Consortium agrees objectives, KPIs, outputs

Agrees financial contribution

Agrees integration of activities
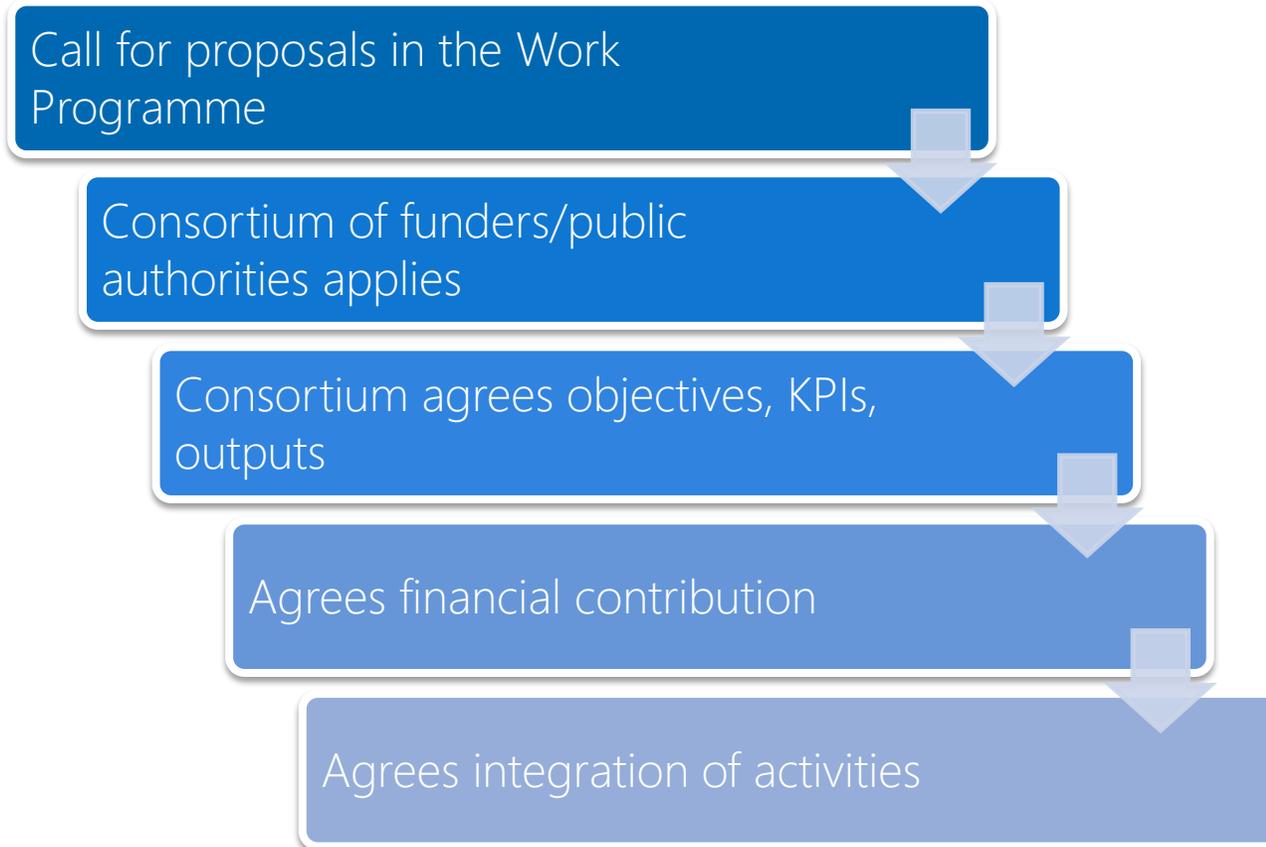
Can include international partners, ACs participate like MS

Applying for funding

- Co-funds launch calls for proposals on [ERA-LEARN](#) website

European R&I Days 2021 – 23-24 June

https://ec.europa.eu/research-and-innovation/en/events/upcoming-events/research-innovation-days

Any Questions?