



EMPOWERING EUROPEAN INNOVATORS

ERIC Forum Annual Meeting

26 January 2021

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EIC Taskforce

Research and
Innovation



What's holding back European innovation

Innovation **performance**

- **Strong research performance not translated** into innovation
- **Lack of breakthrough/ disruptive innovations** that create new markets

Innovation **funding**

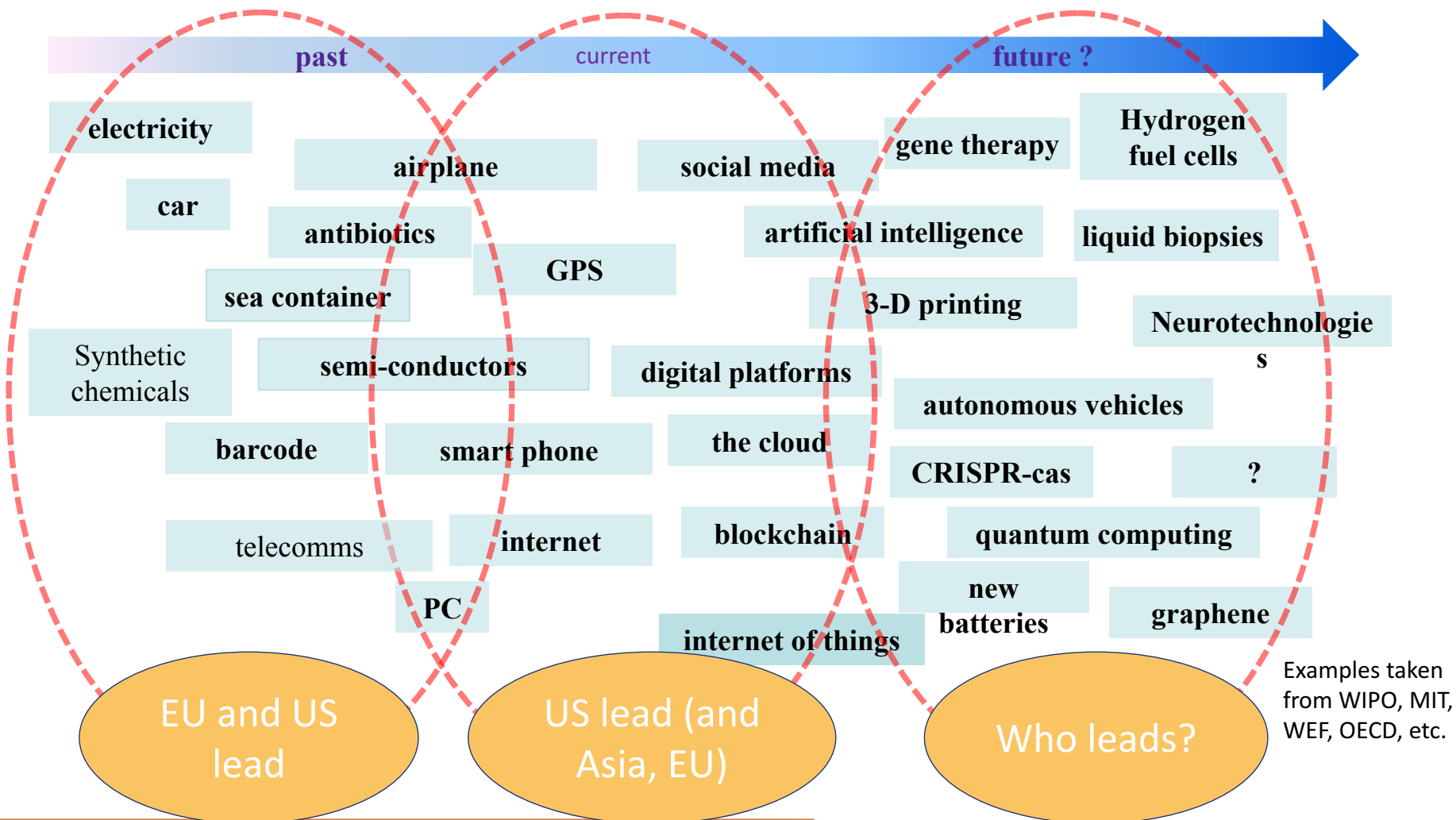
Financing gaps (“valleys of death”) in

- **knowledge transfer** from proof of concept to business plan
- **scaling up** for high-risk innovative start-ups

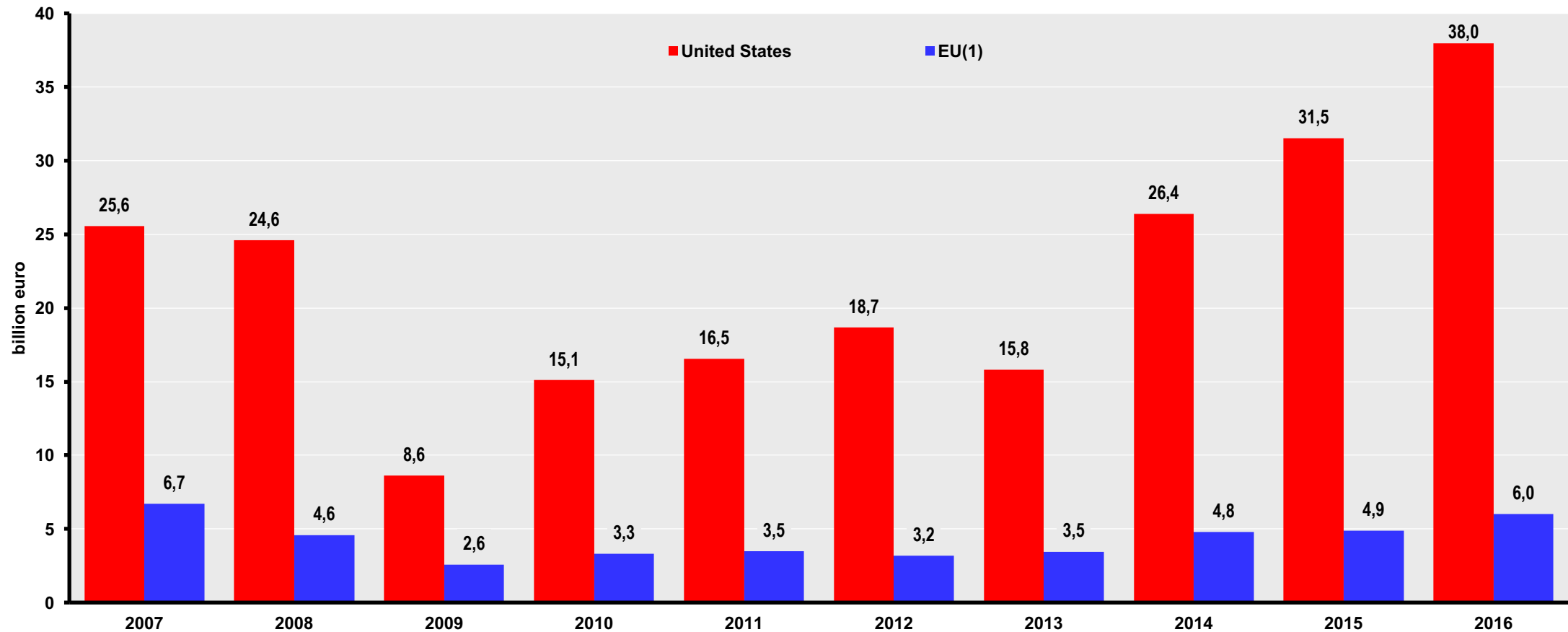
Innovation **ecosystem**

- Many national & local ecosystems, but **fragmented at European level**
- Some **regions with weak ecosystems**

Who will lead the next wave of breakthrough and disruptive innovation?



Financing gap: venture capital US vs EU



Venture capital raised. Data: Invest Europe, NVCA / Pitchbook. (1) EU does not include HR, CY, MT, SI, SK.

THE EUROPEAN INNOVATION COUNCIL (EIC) SO FAR...

The European Innovation Council

One stop shop for breakthrough, deep-tech, market-creating innovators

Open to all innovators, in any field*, at any time

Complemented by **targeted funding** on **strategic technologies** and innovations

Targeting high-risk/high-impact innovators selected through Europe wide competition

Agile funding from idea to investment

Pathfinder for advanced research on emerging technologies

Transition from proof of concept/lab to business plan/commercial setting

Accelerator to scale up innovations by start-ups & SMEs (<€2.5 million grant, <€15 million equity)

Building ecosystems and communities

Access to **business acceleration services** (coaches, mentors); to corporates & investors; to ecosystem & knowledge partners

EIC Programme Managers to develop visions for breakthroughs, manage portfolios, and connect to ecosystems

Crowding in other investors (VC, corporate VC, etc)

* Except innovations intended primarily for military purposes

The EIC pilot phase (2018-20) under Horizon 2020 is now close to be completed

- ✓ **Pilot phase budget of €3.5 billion (2018-20)**, €1.55 billion in 2020
- ✓ **Very high demand:** ~ 12000 applications from SMEs/ startups in 2020 with request for over €38 billion support
- ✓ **Highly competitive:** 2-3% success rate for funding (but also >3.900 “Seals of Excellence” to facilitate applicants access to other funding)
- ✓ **Introduction of “blended finance” (grant + equity) and establishment of EIC Fund** to manage direct equity investments (pipeline of 159 companies over the pilot phase)
- ✓ On 6 January 2021, a **first batch of 42 European startups and SMES** had completed the due diligence process and each received its first equity “tranche” from the EIC Fund, for a total of € 178 million;
- ✓ **Special support for COVID relevant innovations:** 36 Startups/SMEs awarded funding of over €160m in May; **for ‘Green Deal’ innovations:** 64 startups/ SMEs awarded funding of over €300m in July; and **for women innovators:** at least 25% of start-ups/ SMEs invited to interview to have female CEO
- ✓ **First EIC programme managers** in post: Iordanis Arzimanoglou (health & biotech), Enric Claverol (medtech & devices), Francesco Matteuci (materials for energy& environment); Antonio (Marco) Pantaleo (energy systems)
- ✓ Expanded **Business Acceleration Services** (multi-corporate days, procurer’s days, visits to innovation hubs, overseas trade fairs, etc.)

Performance of EIC pilot Pathfinder Portfolio (including FET Open & Proactive)

		Applications					
		Health	Digital	Energy & Environment	Food & Agriculture	Manufacturing/ Infrastructure	Sum
Technologies	Biotech & bioengineering	95	3	3	5	4	110
	Engineering	0	6	3	0	11	20
	Data	7	23	2	0	1	33
	Materials	23	69	41	2	38	173
	Sum	125	101	49	7	54	336

- 2662 Peer-Reviewed Scientific Publications, 72% in high profile journals
- 590 innovations, 451 addressing new and emerging markets

Performance of EIC pilot Accelerator Portfolio

Over 5700 startups & SMEs supported since 2014 (including previous SME instrument)



17 IPOs

(95% on European stock exchanges)



€5,3 billion
Follow up investment



43 companies
valued over €100m
("centaurs")



37 acquisitions



Main thematic of innovations funded:
30% in **Green Deal**
30% in **Digital**
30% in **Health**

WHAT WILL THE EIC LOOK LIKE IN HORIZON EUROPE?

“Full EIC” under Horizon Europe (2021-27)

Key elements from Horizon Europe legal base (common understanding)

- ✓ **EIC legally established**
- ✓ **Dedicated budget** and **separate Work Programme**. Mainly **bottom-up**, but also **targeted funding** for strategic technologies/challenges
- ✓ **Independent governance with EIC Board & President** to set strategy, advise on work programme, oversee implementation
- ✓ **Creation of “one stop shop” for implementation (agency + EIC Fund)**
- ✓ **Improved funding instruments** (Pathfinder, Transition, Accelerator) & **Business Acceleration Services**, learning from pilot
- ✓ **More flexible rules for selection and funding** (selection by portfolio, ability to stop or reorient, links to Invest EU)
- ✓ Increased role for **EIC Programme Managers** to develop visions for breakthroughs and manage portfolios of projects
- ✓ **Fast track access** for Horizon grant holders (incl. European Research Council) and certified national schemes (“PlugIn”)
- ✓ **EIC Forum** with innovation ecosystem actors



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**Roberto
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academic,
former RISE
group



Martin Villig
Co-founder of
Bolt (formerly
Taxify)



Yousef Yousef
CEO of LG Sonic

EIC Advisory Board vision statement (27 April 2020)

1. *EIC to pioneer a European approach to global innovation challenges:*

- ✓ **Unique** in combining advanced technological research (DARPA like) with innovation accelerator
- ✓ **Hallmark of excellence** for innovators (like ERC for researchers)
- ✓ **Overcome system biases**, e.g. in terms of high risk, gender, regions

2. *EIC to crowd in private investors:*

- ✓ **Filling market gaps** for financing high risk/ high impact ideas
- ✓ **3-5 euro** for every euro allocated by EIC
- ✓ Generating **impacts from other EU and national programmes**

3. *EIC as funder & investor of choice for visionary ideas*

- ✓ Targeting **deep-tech, interdisciplinarity, high risk** to achieve high impact
- ✓ **Simple, fast applications** focusing on the innovator
- ✓ High class **mentoring and advice**, as well as funding

Building Key Partnerships for the EIC

With the European Research Council

- Joint working group between ERC Scientific Council and EIC Board
- EIC as innovation equivalent of ERC
- EIC as follow up support for ERC proof of concepts

With the European Institute of Innovation and Technology (EIT)

- Memorandum of Understanding signed between EIT Governing Board and EIC Board
- Letter of Intent signed between EIC and first wave of EIT KICs
- Pilot actions for EIT KICs to test out collaboration mechanisms (supporting startups to access EIC funding, Shared access to networks and services, Co-investments in startups)

With the Structural Funds

- Improved “Seal of Excellence”: exempt from State Aid, direct award of Structural Fund support, sharing of information on applicants (with consent)

RELEVANCE FOR EUROPEAN RESEARCH INFRASTRUCTURE CONSORTIA (ERICs)?

Some basic principles

- ✓ Research Infrastructures and Technology Infrastructures are a **crucial component of innovation eco-systems**, providing unique services and scientific instruments
- ✓ The basic science discoveries made by RI communities have led to **major industrial breakthroughs** and social transformation
- ✓ The immediate applications of state-of-the-art RI research in areas like **sensors, superconductivity or supercomputer modeling** will be required to accelerate the pace of change and adapt to new realities
- ✓ The potential of more fundamental research in areas like **physics, astronomy and energy** (ITER) cannot be ignored
- ✓ **“Deep tech” nature** of Research Infrastructures and Technology Infrastructures particularly relevant for the EIC

The ATTRACT experience

- ✓ ATTRACT, a consortium of six EIROforum infrastructures, led by CERN, set up to explore the innovation potential of RIs by launching their own call for proposals for **disruptive innovation in *detection and imaging technologies***
- ✓ An effective mechanism to **detect and scale up deep tech?**
- ✓ **€20 million budget** provided by the Horizon 2020 research infrastructures (RIs) programme
- ✓ **170 ideas** were selected, each one being granted €100,000. Projects are ongoing.
- ✓ A follow-up call launched in 2020 to **scale up the most promising 5-7 ideas**
- ✓ Provide continuing support to ATTRACT or extend the model to other deep tech ecosystems under European Innovation Ecosystems?

An important role to play for Research Infrastructures, in particular ERICs, in synergy with the EIC (*for discussion*)

Why?

- ✓ Involvement of RIs and TIs **already in EIC Pilot** (especially in FET/ pilot Pathfinder)
- ✓ **EIC will be major part of Horizon Europe** (Innovation equivalent of ERC, alongside innovation ecosystems and EIT)
- ✓ **EIC focus on “deep tech”** especially relevant for many ERICs
- ✓ Together with EIC in the field of disruptive innovation, ERICs to help cover the **continuum of needs** from fundamental knowledge creation to technology deployment
- ✓ Together with EIC, ERICs to support the implementation of **European technology leadership**

How?

- ✓ Find ways so that EIC supported companies/ projects **can access innovation infrastructures** (testing facilities, etc.)
- ✓ ERICs as **partners in EIC Pathfinder** to generate new results
- ✓ ERICs teams to use **EIC Transition to turn results into spin-outs/ commercial opportunities**
- ✓ ERICs **spin-outs as applicants to EIC Accelerator** for development and scaleup
- ✓ Role of **EIC Programme Managers** to interact with RIs within their thematic portfolios



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