EU funding for innovation

Stephane Ouaki
Head of Unit – Innovation and SMEs
DG Research and Innovation
European Commission
What’s holding back European innovation

- Lack of **breakthrough and disruptive innovations** that create new markets
- **Financing gap** between R&D grants and private investment for scaling up innovative start-ups
- Many national & local ecosystems, but **fragmented at European level**
Who will lead the next wave of breakthrough and disruptive innovation?

Past: electricity, car, antibiotics, sea container, Synthetic chemicals, barcode, telecomms, PC

Current: airplane, semi-conductors, GPS, smartphone, internet, digital platforms, the cloud, blockchain, internet of things

Future: social media, artificial intelligence, 3-D printing, autonomous vehicles, liquid biopsies, CRISPR-cas, quantum computing, new batteries, graphene

EU and US lead
US lead (and Asia, EU)
Who leads?

Examples taken from WIPO, MIT, WEF, OECD, etc.
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.
Die Unwucht der Plattform-Ökonomie
Die 60 wertvollsten Plattformen der Welt (Mrd. Dollar (Börsenwert; jüngste Finanzierung / Stand 31. Dezember 2017))

USA
(Anteil: 64% (2015: 67%))

USA: Apple (868), Alphabet (730), Facebook (513), Amazon (564), Yelp (88), Pinterest (12), Uber (48), Netflix (83), Snap (18), Slack (5), Twitter (18), Salesforce (74), WeWork (21), Airbnb (31), Priceline (85), Intuit (40), Square (13), Stripe (9), Dropbox (10)

Europa
(Anteil: 3% (2015: 3%))

Europa: SAP (137), Zalando (11), Yandex (11), Delivery Hero (6), Scout24 (4), Spotify (16), Auto1 Group (2,8), BGL Group (2), The Hut Group (3)

Asien
(Anteil: 31% (2015: 28%))

Asien: Tencent (493), Alibaba (442), Samsung (367), JD.com (59), Baidu (81), Rakuten (13), Olx (36), Didi Chuxing (58), Didi Chuxing (58), Naver (77), Kakao (72), Line (69)

Afrika
(Anteil: 2% (2015: 2%))

Afrika: Naspers (120)

Quelle: netzoeconom.de / Idee: Peter Evans
The European Innovation Council

One stop shop for breakthrough & disruptive innovators

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

Highest potential innovators selected on basis of ideas and team

Agile funding from idea to investment

Pathfinder grants for advanced research on emerging technologies

Accelerator funding for innovative start-ups

(<€2.5 million grant, <€15 million equity)

Crowding in private investment (VC, Invest EU)

Building ecosystems and communities

Access to mentoring and advisory services and to knowledge partners (e.g. EIT)

Expert Programme Managers to engage with projects and communities

Prizes for breakthrough technologies
EMPOWERING EUROPEAN INNOVATORS

The EIC story

“Europe does not yet have a world class scheme to support the very best innovations in the way that the European Research Council is the global reference for supporting excellent science. So I would like us to take stock of the various schemes to support innovation and SMEs under Horizon 2020, to look at best practice internationally, and to design a new European Innovation Council.”

Designed together with leading innovators

Accelerating breakthrough innovation report, January 2018

Nicklas Bergman
Martin Bruncko
Paddy Cosgrave
Gráinne Dwyer
Hermann Hauser

Marjolein Helder
Taavet Hinrikus
Ingmar Hoerr
Bindi Karia
Jana Kolar

Carlos Oliveira
Jim Hagemann Snabe
Kinga Stanislawska
Constantijn van Oranje
Roxanne Varza

Research and Innovation
Supported by EU leaders

“We will only succeed if we are the ones creating, developing and producing new technologies. That is why we need: a strong EU commitment to disruptive innovation within the framework of the European Innovation Council (EIC). The goal is to support very high risk deep tech projects at the European level”

A Franco-German Manifesto for a European industrial policy fit for the 21st Century, February 2019
Tested under Horizon 2020, fully incorporated in Horizon Europe

Total estimated budget, M€
First phase launched in 2018

- Bringing together relevant Horizon 2020 schemes in one place (*SME instrument*, *Fast Track to Innovation*, *FET Open*, *Prizes*)
- Introduction of open support for Start-ups and SMEs (no predefined themes)
- Introduction of interviews with experienced innovators to select SMEs for funding
- Launch of major prizes for breakthrough innovations, e.g., low cost space launcher (€10 million prize); artificial photosynthesis (€5 million prize)

⇒ 6000 applications received by start-ups or SMEs (*for SME phase 2 grants*)
⇒ Majority combining different fields: digital, energy, manufacturing, health, etc.
⇒ 520 interviewed & 250 awarded funding (*budget €450 million*)
⇒ Fast process (*grant awarded in under 4 months*)
⇒ Total budget in 2018 of €780 million *for all EIC pilot actions*
Second phase launched in 2019

- Increased budget of €2.2 billion (€1.0bn in 2019; €1.2bn in 2020)
- Introduction of pilot accelerator with option to apply for blended finance (combined grant and equity)
- Introduction of pilot pathfinder, with 6 strategic emerging technologies targeted (human-centric AI, novel medical devices, zero-emission energy generation, etc)
- New EIC Advisory Board to bring in leading innovators for ongoing design & implementation
- First EIC programme managers recruited to actively engage with pathfinder projects
Full EIC under Horizon Europe (2021-27)

✓ Proposed budget of €10 billion
✓ Dedicated governance with EIC President and Advisory board
✓ More flexible rules for funding (ability to stop or reorient, links to Invest EU) with increased role for expert programme managers
✓ Full accelerator funding with both grant and blended finance
✓ Full pathfinder scheme for grants in advanced research and transition activities
✓ Fast track access for Horizon grant holders (incl. European Research Council) and certified national schemes
✓ Creation of EIC Forum with Member States innovation agencies