



Technical Assistance for Turkey in Horizon 2020 Phase-II EuropeAid/139098/IH/SER/TR

Turkey in Horizon 2020 II

Introduction to EIE Work Program under Horizon Europe

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Focused Group Training 16 on Horizon Europe EIE Work Programme: EUROPEAN INNOVATION ECOSYSTEMS: CONNECT- SCALEUP

24-25 Feb 2022











About Christopher

- Professor at Maastricht University, Netherlands
 - "Application of emerging technologies"
 - Institute of Data Science https://www.maastrichtuniversity.nl/ids
- Senior Scientist, TNO, Netherlands
 - Big research laboratory see https://www.tno.nl/en/
- Much experience in EC grants, since 1990, currently responsible for over €3M of EC funding
- For more: https://www.linkedin.com/in/cabrewster/
 - https://scholar.google.com/citations?user=0MvzoD8AAAAJ&hl=en



- https://h2020eureka. eu/
- https://ploutosh2020.eu/
- https://ditect.eu/
- https://blockis.eu/











Experience

- Research projects in FP6, FP7, Horizon 2020 and Horizon Europe, particularly in regards to
 - Concept
 - Network
 - Scientific vision
- Academic publications over 70 papers, articles, etc.
- **Consulting** especially on behalf of TNO for SME/start-ups, in ICT and agriculture and food.











How we do things ...

Different levels of experiences and English language skills (if something is not clear, please ask)

Interaction

Ask questions, make comments, share experiences

Practical workshop, not an ex cathedra lecture











Topics for this session

- EIE WP what is it all about?
- Identifying key documents/policies/networks
- Key expectations
- Key focus points











Horizon Europe overall – 2021-2027

SPECIFIC PROGRAMME: EUROPEAN DEFENCE FUND

Exclusive focus on defence research & development

Research actions

Development actions

SPECIFIC PROGRAMME IMPLEMENTING HORIZON EUROPE & EIT*

Exclusive focus on civil applications



European Research Council

Marie Skłodowska-Curie

Research Infrastructures



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**



European Innovation Council

European innovation ecosystems

European Institute of Innovation & Technology*

WIDENING PARTICIPATION AND STRENGTHENING THE EUROPEAN RESEARCH AREA

Widening participation & spreading excellence

Reforming & Enhancing the European R&I system



Total funding is €95 Billion over 7 years









Practical guides – Starting Points

Useful starting point

Available on EC websites

https://ec.europa.eu/info/research-andinnovation/funding/fundingopportunities/funding-programmes-and-opencalls/horizon-europe/european-innovationecosystems en

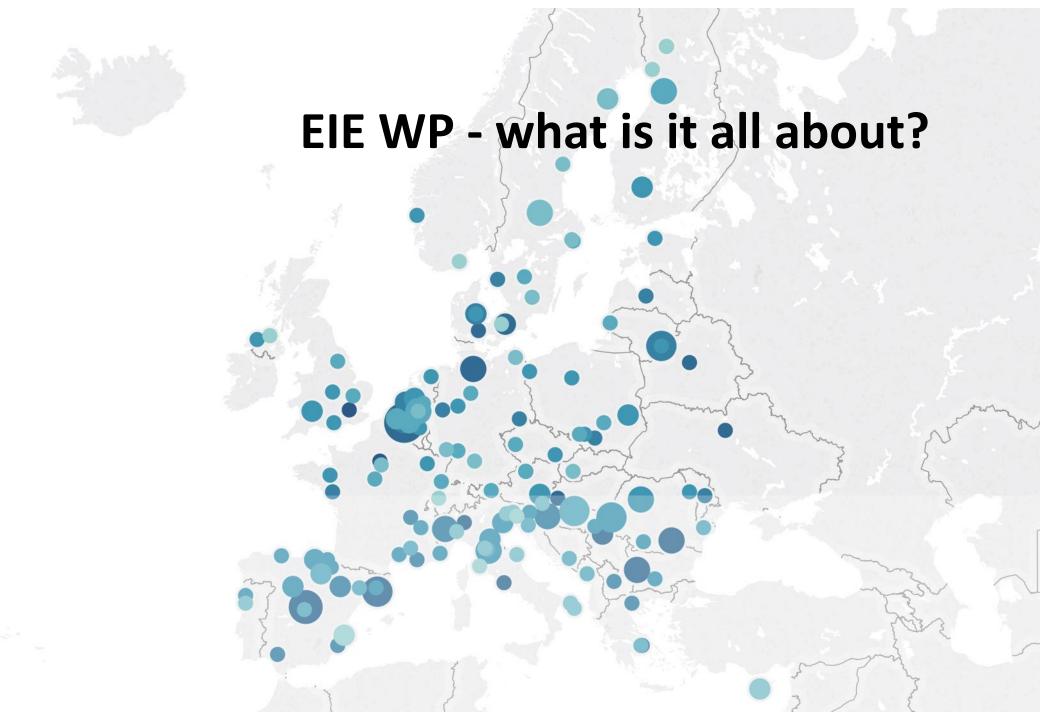
https://ec.europa.eu/info/fundingtenders/opportunities/portal/screen/how-toparticipate/referencedocuments;programCode=HORIZON















Societal Challenges faced globally



Population

+15% by 2050

Food

+35% by 2050



Slusters

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



+2° by 2050



Energy

+50% by 2050



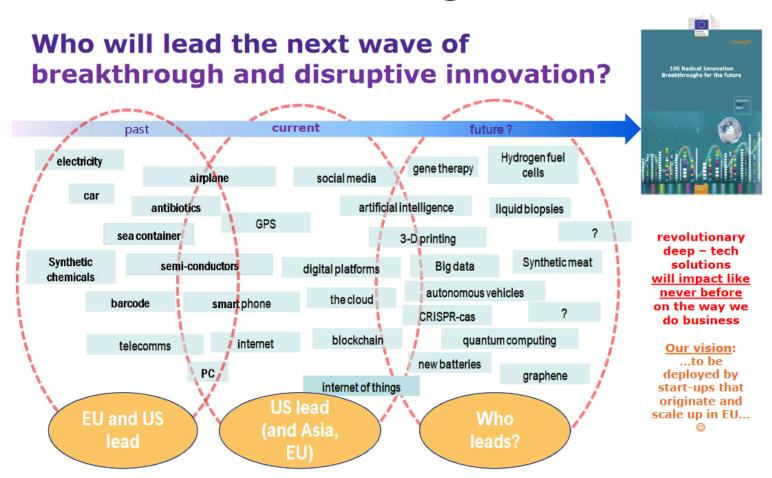








What the future brings?



Examples taken from WIPO, MIT, WEF, OECD, etc.







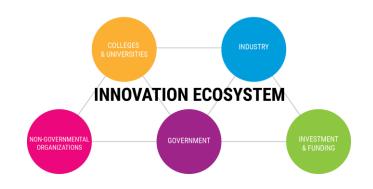


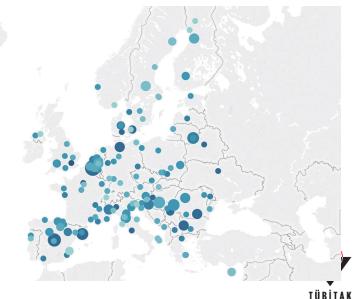


What is an Innovation Ecosystem?

- An innovation ecosystem includes universities, government, corporations, startup accelerators, venture capitalists, private investors, foundations, entrepreneurs, mentors, and the media.
- Local, regional, national and supranational agencies should play a role.
- Create value in the larger ecosystem by transforming new ideas into reality through access and financial investment











"It takes a village to raise a child, and it takes an ecosystem to scale an innovation."







Incubators and Accelerators



Angel Investors



Government



Venture Capitalists



Private Equity Firms

Ideation

Defining and analyzing the development problem and generating potential solutions through horizon scanning of existing and new ideas

Research & Development

Further developing specific innovations that have potential to address the problem

3 Proof of Concept

When the intellectual concept behind an innovation is **field-tested** to gain an early, 'real-world' assessment of its potential

Transition to Scale

When innovations that have demonstrated small-scale success develop their model and attract partners to help fill gaps in their capacity to scale

Scaling

The process of replicating and/or adapting an innovation across large geographies and populations for transformational

A Sustainable

The wide-scale adoption or operation of an innovation at the desired level of scale / exponential growth, sustained by an ecosystem of actors



Friends and Family



Civil Society Organisations



Development Agencies



Professionals (Human Capital)



Startups & Enterprises



Market Facilitators and Intermediaries



Private Companies



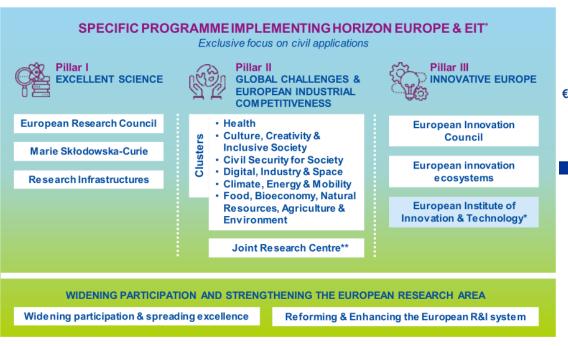








Where is EIE positioned within HE?



European Innovation Council

 Support to innovations with breakthrough and market creating potential

European innovation ecosystems

 Connecting with regional and national innovation actors

€ 10.5 billion, incl. up to € 500 million for ecosystems

European Institute of Innovation and Technology (EIT)

 Bringing key actors (research, education and business) together around a common goal for nurturing innovation

€ 3 billion

Pillar 3 – Open Innovation:

stimulating marketcreating breakthroughs and ecosystems conducive to innovation











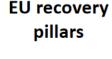
Why Innovation Ecosystems?

New challenges!

- Boost productivity, jobs, growth, social welfare
- Global societal challenges: complex; not solved in isolation,
- **EU strategic goals of new Commission:**

Post-COVID19 recovery Green, Digital, Resilient Europe Circular Economy, energy, health, Artificial Intelligence, New Industrial and SMEs Strategy

- **New actors come in!** (startups! Investors, Civil Society)
- Focus on radical & disruptive innovation!















Innovation Ecosystems: definition & areas of intervention

EC Official Definition: [Horizon Europe proposal (Article 2.30)]

"Innovation ecosystem" means an ecosystem that **brings together at EU level actors or entities** whose functional goal is to **enable technology development and innovation**. They encompass **relations** between:

- material resources (such as funds, equipment and facilities)
- **institutional entities** (such as higher education institutions and support services, RTOs, companies, venture capitalists and financial intermediaries) and
- national, regional and local **policy-making** and **funding entities**.

Areas of intervention: [Horizon Europe legislation (Annex 1.3.b)]

Activities will include in particular **connecting**, where relevant in cooperation with the **EIT**, with national and regional innovation actors and supporting the implementation of **joint cross-border innovation programmes** by Member States, Regions and associated countries, from the **exchange of practice and knowledge on innovation regulation to the enhancement of soft skills for innovation to research and innovation actions, including open or user-led innovation, to boost the effectiveness of the European innovation ecosystem. This should be implemented <u>in synergy</u> inter alia with the ERDF support** for innovation eco-systems **and interregional partnerships around smart specialisation topics**.











Main destinations (i.e. themes)

Three main destinations

1. CONNECT SCALEUP INNOVSMES

The work programme contains actions under three (3) destinations: CONNECT, SCALEUP and INNOVSMES.

Focus on building interconnected, inclusive innovation ecosystems across Europe by drawing on the existing strengths of national, regional and local ecosystems

Focus on reinforcing network connectivity within and between innovation ecosystems for sustainable business growth with high societal value

Support the
European Partnership
on Innovative SMEs,
which will help
innovative SMEs to
increase their
research and
innovation (R&I)
capacity and
productivity and
successfully embed in
global value chains
and new markets.







Identifying key documents/policies/networks





Work Programme itself



EN

Horizon Europe

Work Programme 2021-2022

10. European Innovation Ecosystems (EIE)

(European Commission Decision C(2021)4200 of 15 June 2021)

Horizon Europe - Work Programme 2021-2022 European Innovation Ecosystems (EIE)

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Introduction					
Destination: CONNECT - Interconnected Innovation Ecosystems					
Call - Interconnected Innovation Ecosystems (2021)					
Conditions for the Call					
HORIZON-EIE-2021-CONNECT-01-01: Preparatory action for setting up joint					
programmes among innovation ecosystems actors					
HORIZON-EIE-2021-CONNECT-01-02: Building capabilities in innovation procu	rement				
Call - Interconnected Innovation Ecosystems (2022.1)					
Conditions for the Call	1				
HORIZON-EIE-2022-CONNECT-01-01: Towards more inclusive networks and in in European innovation ecosystems					
HORIZON-EIE-2022-CONNECT-01-02: Integration of social innovation actors in innovation ecosystems.					
Call - Interconnected Innovation Ecosystems (2022.2)					
Conditions for the Call	2				
HORIZON-EIE-2022-CONNECT-02-01: Implementing co-funded action plans for	ſ				
interconnection of innovation ecosystems	2				
HORIZON-EIE-2022-CONNECT-02-02: Stimulating innovation procurement	2				
Destination: SCALEUP - Elevating the scalability potential of Europ					
business	2				
Call - Elevating the scalability potential of European business (2021)	3				
Conditions for the Call					
HORIZON-EIE-2021-SCALEUP-01-01: Expanding Acceleration Ecosystems					
HORIZON-EIE-2021-SCALEUP-01-02: Scaling up deep tech ecosystems					
HORIZON-EIE-2021-SCALEUP-01-03: Women TechEU					
Call - Elevating the scalability potential of European business (2022.1)					
Conditions for the Call					
HORIZON-EIE-2022-SCALEUP-01-01: Expanding Entrepreneurial Ecosystems					
Call - Elevating the scalability potential of European business (2022.2)	4				
Conditions for the Call HOPIZON FIE 2022 SCALFIED 02 01: Expanding Investments Ecosystems					

Horizon Europe - Work Programme 2021-2022 European Innovation Ecosystems (EIE)

Call - Partnership on Innovative SMEs	
Conditions for the Call	47
HORIZON-EIE-2021-INNOVSMES-01-01: European Partnership on Innovative SMEs	. 48
Other actions not subject to calls for proposals	. 53
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Mapping and scoping of frugal and reverse innovation	54
Innovative practices in legislation around emerging tech	54
5. EIC FORUM support	
6. Commission expert group on EIC FORUM	56
7. Use of individual experts on assisting with the monitoring of actions (2022)	
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9. Establishment of an indicator system and defining relevant data collection methods	57
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https://ec.europa.eu/info/fundingtenders/opportunities/docs/2021-2027/horizon/wp-call/2021-2022/wp-10-european-innovationecosystems horizon-2021-2022 en.pdf













Horizon Europe Strategic Plan 2021-2024

Guide to the political priorities of the Commission with a focus on "a climate-neutral and green Europe, fit for the digital age, where the economy works for the people"

Co-design process resulted in **four** key strategic orientations, supported by 15 impact areas

https://ec.europa.eu/info/sites/default/files/research and_innovation/funding/documents/ec_rtd_horizo n-europe-strategic-plan-2021-24.pdf













Key strategic orientations of HE 21-24

1

Promoting an open strategic autonomy by leading the development of key digital, enabling and emerging technologies, sectors and value chains

to accelerate and steer the digital and green transitions through human-centred technologies and innovations;

2

Restoring Europe's ecosystems and biodiversity, and managing sustainably natural resources

to ensure food security and a clean and healthy environment;

3

Making Europe the first digitally enabled circular, climate-neutral and sustainable economy

through the transformation of its mobility, energy, construction and production systems;

4

Creating a more resilient, inclusive and democratic European society,

prepared and responsive to threats and disasters, addressing inequalities and providing high-quality health care, and empowering all citizens to act in the green and digital transitions.











Regional innovation scoreboard

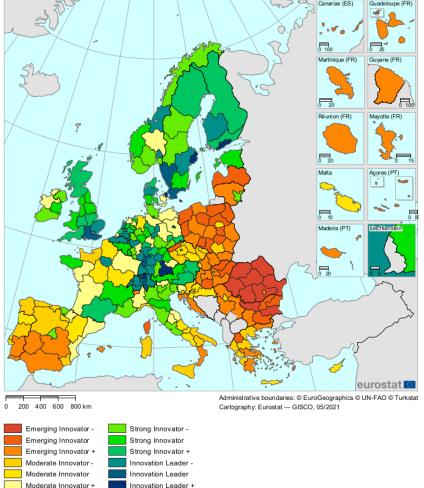
Regional extension of the European innovation scoreboard (EIS), assesses the innovation performance of European regions on a limited number of indicators.

The new edition of the scoreboard shows that innovation performance has increased for 225 regions out of the total of 240 regions over the period since 2014

https://ec.europa.eu/info/research-andinnovation/statistics/performanceindicators/regional-innovation-scoreboard_en

MINISTRY OF INDUSTRY AND TECHNOLOGY











The importance of Networks

- You know this! In everyday life and in business
- For businesses the relevant network includes other entrepreneurs and people working in customer and supplier companies, business services providers, finance professionals. WITHIN YOUR COUNTRY AND BEYOND
- Key resource for stating out and scaling up.
- Many kinds of networks (workplace, market, professional, cultural etc.)
 ..here the focus is on international networks













Who can help? Clusters!

55 % of internationally active SMEs agree to at least one of the following four statements

WITH SUPPORT

they internationalised earlier than they would have done otherwise.

WITHOUT SUPPORT

they would not have internationalised at

WITH SUPPORT

in additional internationalisation activities.

WITHOUT SUPPORT

they would not gain insight into opportunities in foreign markets.

Networks expand the capacity of individual SMEs to internationalise.

SMEs hosted in clusters and business networks can benefit from contacts, business connections and formal and informal knowledge flowing within a cluster and a business network, as well as from customised services provided by cluster and network organisations.











Enterprise Europe Network

EEN helps businesses innovate and grow on an international scale. It is the world's largest support network for small and medium-sized enterprises (SMEs) with international ambitions. Active in more than 60 countries worldwide. Brings together 3,000 experts from more than 600 member organisations.

Member organisations include:

- Technology poles
- Innovation support organisations
- Universities and research institutes
- Regional development organisations
- Chambers of commerce and industry











European Cluster Collaboration Platform



Make efficient use of networking instruments. Search/find potential partners and opportunities.



Develop collaboration trans-nationally (within Europe) and internationally (beyond Europe).



Support the emergence of new value chains through cross-sectorial cooperation.



Access the latest information on cluster development, improve their performance, increase competitiveness.

An online hub for cluster stakeholders (cluster organisations, policymakers and other related stakeholders from the cluster ecosystem) and the reference onestop-shop for stakeholders in third countries aiming to set up partnerships with European counterparts.



















EIE pipeline

Interconnected & inclusive innovation ecosystems

• Pulling in new, less

well-represented actors and territories

Areas of intervention

Reinforcing network connectivity

 To accelerate sustainable business growth with high societal value

> Contribution to all 4 key strategic HE orientations

Eurostars 3

• Supports the European Partnership for **Innovative SMEs**

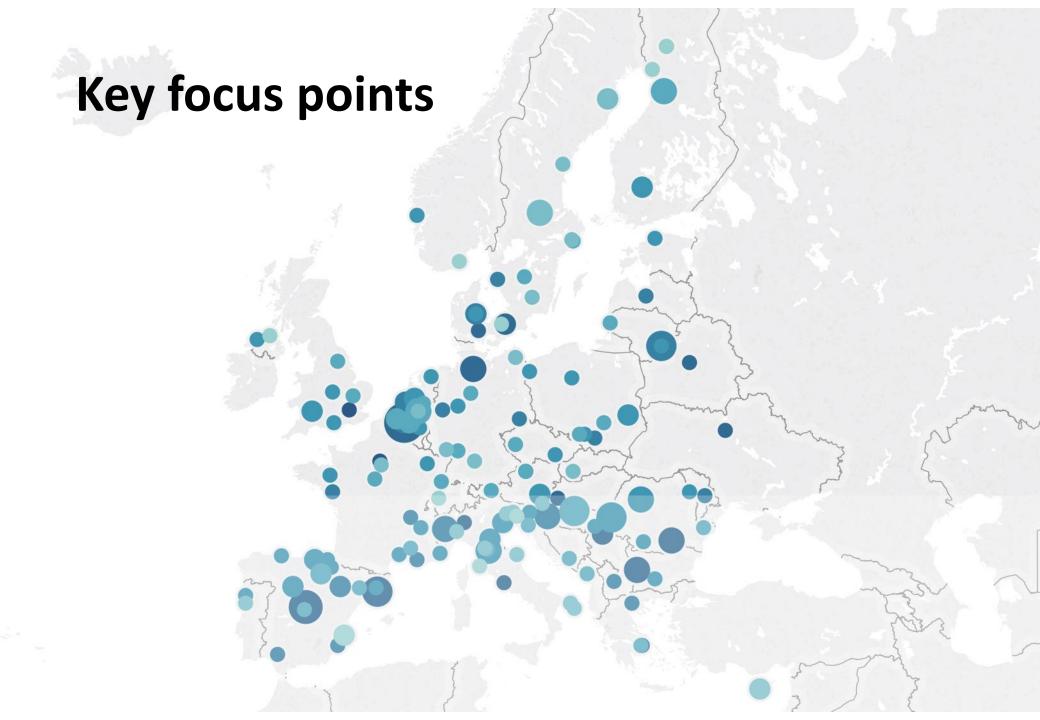




ERDF

 Complements the ERDF support for innovation ecosystems and interregional partnerships around smart specialisation topics









Where to aim your binoculars?

Diverse actors, institutions and places

Bottom-up, international collaborations of SMEs is a must

A systemic approach that is inclusive and collaborative

Network connectivity contributes to sustainable business growth

Funding marketled, cross-border, R&I collaborative projects











Coffee / tea time











