

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

# Horizon Europe: From Strategic Plan to Work Programmes

Horizon Europe Infodays 2022

**Odysseas Spyroglou, KE2** 

Erzurum, Samsun, Gaziantep, Kayseri, İzmir, Ankara



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# What we will cover



## From Policy to Action: Understand the process



- From EU priorities to Work
   Programme
- Strategic Plan 2021-2024
- Work Programmes 2021-22
- Key Strategic Orientations
- New approaches for impact









## EU Goals & Values



From an economic to political union

- Peace & Wellbeing
- Freedom, Security and Justice
- Sustainable Development, balanced economic growth, price stability, market economy, full employment, social progress, environmental protection
- Social inclusion
- Scientific & Technological progress
- Economic, social territorial cohesion
- Cultural & linguistic diversity



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## From an economic to political union



#### Key Areas of EU Action

- Single Market, customs, competition, trade
- Employment & social Affairs
- Economic, social, territorial cohesion
- Transport
- Consumer Protection
- Energy
- Public Health
- And more...



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### **Policy Instruments**

- EU Legislation:
  - Regulations
  - Directives
  - Decisions
  - Recommendations
- EU Standards

Funding Programmes







## How it works?

### The process of getting a grant











## **Commission Priorities**



Where EC is going to focus the next 4 years.



European Green Deal

First Climate-neutral continent, resource efficient economy

• Europe fit for Digital Age

Empower people with new generation of Technology

### Economy that works for People

Attractive investment environment, quality jobs

#### Stronger Europe in the World

Champion multilateralism and rules-based order

- Promoting European way of Life
   Protection of rule of law, justice, core values
- New push for European Democracy
  Bigger say to European citizens, protect
  democracy

### Recovery Plan for EuropeL: Next Gen EU











## Funding needs a budget

Understanding EU Multiannual Financial Framework 2021 - 2027

#### MFF 2021-2027 total allocations per heading

	MFF	NEXT GENERATION EU	TOTAL
1. Single Market, Innovation and Digital	132.8	10.6	143.4
2. Cohesion, Resilience and Values	377.8	721.9	1 099.7
3. Natural Resources and Environment	356.4	17.5	373.9
4. Migration and Border Management	22.7	-	22.7
5. Security and Defence	13.2	-	13.2
6. Neighbourhood and the World	98.4	-	98.4
7. European Public Administration	73.1	-	73.1
TOTAL MFF	1 074.3	750.0	1 824.3

- Next Generation EU
   for post COVID19
   recovery
- >50% targeted to R&I, digitisation, climate health, recovery, resilience
- 30% of budget for Climate Change





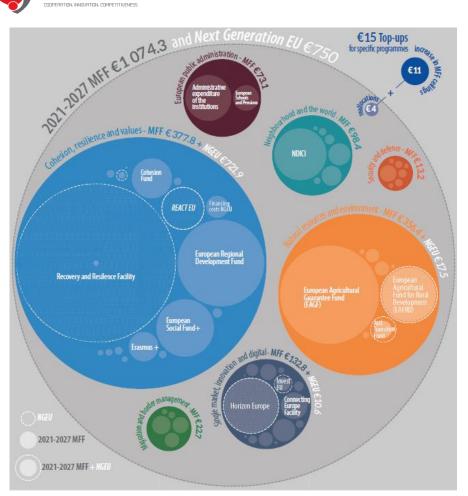
All amounts in EUR billion.

Source: European Commission.









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## Budget & Programmes

How EU Programmes are structured

1. Single Market, innovation and digital

Horizon Europe | Invest EU Digital Europe | Space programme Connecting Europe

- 2. Cohesion, resilience and values Cohesion Policy funds (ERDF, ESF, CF) rescEU – Civil Protection Health Programme | EU4Health | Interreg Erasmus+ | Creative Europe | European Urban Initiative
- 3. Natural Resources and Environment CAP | Just Transition | EAFRD | EMFF | LIFE
- 4. Migration and Border control Asylum and Migration Fund
- 5. Security and Defense European Defense Fund | Internal Security Fund
- 6. Neighbourhood and the world Neighbourhood Instrument Development & International Cooperation Humanitarian Aid Instrument
- 7. Public Administration

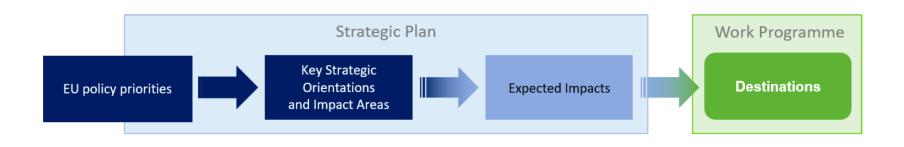




## Horizon Priorities for 2021-24



From EU priorities to Work Programme Destinations



6	4	32	3	6	34
Priorities of EU	Key Strategic Orientations	Expected Impacts	Pillars	Clusters	Destinations









## Structure of Horizon Europe



How Horizon Europe is organised











## H2020 vs. Horizon Europe



What are the main changes in structure?

	Excellent Science	Industrial Leadership	Societal Challenges
	European Research Council Future Emerging Tech MCSA Research Infrastructures	ICT // Nano, New-materials // Biotechnology // Space // Access to Risk // SME Innovation	Health // Food // Energy // Transport // Climate // Inclusive Societies // Security
rope	Excellent Science	Global Challenges & European Industrial Competitiveness	Innovative Europe
rizon eui	European Research Council MCSA Research Infrastructures	Health // Cluture, Creativity // Civil Security // Digital Insustry & Space // Climate,	European Innovation Council European Innovation Ecosystems European Inst. Of Innovation &



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Energy // Food, Agri

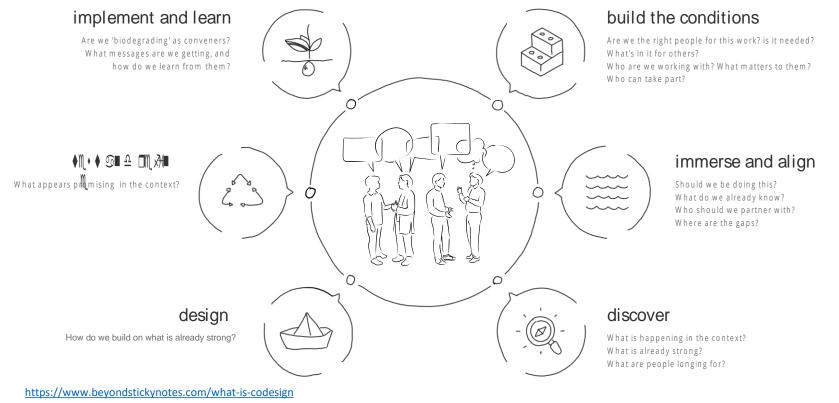


Tech





## A participatory Design process worth examining





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na Birliði ve Türkive Cumhuriveti tara





# Co-Design of Strategic Plan

The participatory design process of EC

- Enlarge ownership of the programme
  - Optimize effect of HE investments



## 8000 Responses

In Horizon Europe survey, (28 June - 4 October 2019)



## Physical (2019) & Online (2020, 2021)

Bringing together policymakers, researchers, entrepreneurs & public











## HE Key Strategic Orientations

Mirroring political priorities of the EU



## A // Digital Transformation

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 Restoring Europe's ecosystems and biodiversity, and managing sustainably natural resources to ensure food security and a clean and healthy environment

### B // Environmental Protection

### C // Sustainable Development

Making Europe the first digitally enabled circular, climate-neutral and sustainable economy through the transformation of its mobility, energy, construction and production systems 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

### D // Resilience & Inclusivness

Titles outside the boxes are arbitrary, perception of the speaker.





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Open Strategic Autonomy with Key Digital, Enabling & Emerging Tech, Sectors & Value Chain

**Open Strategic Autonomy (OSA):** EU's desire to chart own course in global stage. Leadership. Openness, global engagement. Defending interests. Taking initiative.

- A competitive and secure data-economy
- Industrial leadership in key and emerging technologies that work for people
- Secure and cybersecure digital technology
- High quality digital services for all



1/ Health	2/ Culture	3/ Security	4/ Digital	5/ Climate
Health	Culture, Creativity and Inclusive Society	Civil security for society	Digital, Industry and Space	Climate, Energy and Mobility
Personalised health, disease prevention, diagnosis, treatment, well- being.	Cultural Heritage, arts, creative sectors & Industries, museaums, inclusive tourism	Cyber-security, privacy, protection of personal data, fundamental rights	Digital Transformation, Supply chain, Telecoms, 5G, Al, manufacture, Space, EO	Cleaner energy, mobility, green transition of value chains













Restoring Europe's Ecosystems and Biodiversity, Managing Sustainably Natural Resources

- Enhancing ecosystems and biodiversity on land and in waters
- Clean and healthy air, water and soil
- Sustainable food systems from farm to fork on land and sea

1/ Health	4/ Digital	5/ Climate	6/ Food
Health	Digital, Industry and Space	Climate, Energy and Mobility	Food, Bioeconomy, Natural Resources, Agriculture and Environment
Impacts of environmental degradation, occupational, lifestyle risk, malnutrition, diets	Applications for agriculture, fisheries, forestry, environmental monitoring, navigation, Earth Observation	Cleaner, healthier environment, better mobility, energy generation, air quality	Restoring degraded ecosystems, biodiversity, disaster risks, sustainable agriculture, seafood production













Making Europe first Digitally enabled circular, climate-neutral, sustainable economy

- Climate change mitigation and adaptation
- Affordable and clean energy
- Smart and sustainable transport
- Circular and clean economy



1/ Health	4/ Digital	5/ Climate	6/ Food
Health	Digital, Industry and Space	Climate, Energy and Mobility	Food, Bioeconomy, Natural Resources, Agriculture and Environment
Cleaner, greener, more circular, sustainable health. Prepare health system for climate change threats.	Climate neutral, zero pulluting, energy efficient industries by 2050. Secure, sustainable supply of raw materials. Smart mobility, atmospheric monitoring, EO.	Climate neutrality, zero pollution for energy, transport. Energy storage, smart industry, safer mobility.	Protection of primary production systems. Circular, zero-carbon industry. Eco footpring, blue economy, non-toxic materials.













Resilient, Inclusive and Democratic European society

- A resilient EU prepared for emerging threats
- A secure, open and democratic EU society
- Good health and high-quality accessible healthcare
- Inclusive growth and new job opportunities



1/ Health	2/ Culture	3/ Security	4/ Digital	5/ Climate	6/ Food
Health	Culture, Creativity and Inclusive Society	Civil security for society	Digital, Industry and Space	Climate, Energy and Mobility	Food, Bioeconomy, Natural Resources, Agriculture and Environment
Comminicable & non- communicable diseases. Fair access to high quality health care. Early threat detection, public emergencies.	Social, economic, gender, cultural inequalities. Inclusion, non- discrimination social protection, empowerment. Migrants, cultural heritage protection.	Free movement, integrity of Schengen Area. Civil Security. Border management, Disaster Risk, Maritime Security, Migration-Asylum.	Access to technologies and skills. Copernicus, Galileo/EGNOS emergency, security.	New way to involve & engage citizens in low-carbon transition. Sustainable economy.	Innovative governance models. Sustainability and resilience Enhanced, shared view of knoeledge.











# New approaches for impact

Best Target R&I investments to maximize impact

- **European Partnerships:** initiatives of EU Private and/or Public for joint R&I activities. Co-Funder or Co-Programmed. *Examples:* 
  - EP for AI, Data and Robotics
  - EP for Water4all: water security for the planet
  - EP for European Open Science Cloud
- **EH Missions: new concept.** Address global challenges, ambitious, inspirational, achievable goals.
  - Cancer
  - Adaptation to Climate Change
  - Ocean Seas and Waters
  - Climate Neutral and Smart Cities
  - Soil Health and Food



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# International Cooperation

EU Funding Management Modes

Aligning global efforts and investments, science diplomacy, synergies with EU external policy.

- Collaborative Research & Innovation Initiatives: projects w/ 3<sup>rd</sup> party countries, regions
- International Mobility & Cooperation in Frontier Research: support to brain circulation, internationalisation of EU companies (Pillar I, III)
- EU in Multilateral Alliances: climate change, sustainable food, biodiversity.
- Policy Dialogues w/ 3<sup>rd</sup> countries, regions: reinforcing strategic level of cooperation R&I, Open Science, ethics, safety & quality.









## 8 Horizontal Topics

This project is co-finance by the European Union and the Republic of Turky Bu proje Annas Birkly ve Turkya Cumhuryet transfords France edimetedir

EU Funding Management Modes



<sup>2</sup> Regulation (EU) 2020/852 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088

- Relevant to all
   programme components
- Identified in Strategic Plan
- Should be addressed appropriately









## An integrated approach



## Cross Cutting key specific Issues

Social Sciences and the Humanities (SSH)	Social Science & Humanities (SSH)	<ul> <li>Integration of SSH in all clusters</li> <li>Key component of R&amp;I</li> <li>Specific topics flagged</li> <li>Assessment of Societal Impact (when necessary)</li> </ul>
Dissemination and Exploitation (D&E)	Dissemination & Exploitation (D&E)	<ul> <li>Enhance R&amp;I results dissemination, use, value increase</li> <li>Integrate results into EU higher education &amp; training</li> <li>New tools: Results Platform, IP Booster, Synergies</li> <li>Design of project to "beyond its end"</li> <li>Uptake of assets, private investment, IP management</li> </ul>
Key Enabling Technologies (KET)	Key Enabling Technologies (KET)	<ul> <li>Advanced Manufacturing // Advanced Materials // Life-science tech // micro-nano electronics &amp; photonics // AI // Security &amp; connectivity</li> <li>Across Clusters &amp; Pillars</li> </ul>
Social innovation	Social Innovation (SI)	<ul> <li>Advances in science &amp; Tech / creative use of existing tech</li> <li>Combine new tech capabilities w/ organisational, social practices</li> <li>HE supports SI across all 4 strategic Orientatations</li> </ul>







# Gender Equality & Inclusiveness

Cross Cutting key specific Issues



- Gender equality and inclusiveness
- Eliminate gender inequality
- Addressing unconscious bias, systemic barriers
- Integration of gender dimension
- Part of EC's Gender Equality
   Strategy 2020-25



TURKEYin DRIZON 2020





# Ethics and Integrity

Cross Cutting key specific Issues





- European Code of Conduct for Research Integrity
- Ethics Principles & legislation
- Ethical dimension of new technologies (AI, Environment)
- HE to develop training, educational material, Operating procedures
- Ethics & Privacy by design





TURKEY



open data

open access

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**OPEN** 

SCIENCE

The Open Traits Network: Using Open Science principles to accelerate traitbased science across the Tree of Life. DOI:10.32942/osf.jo/kac45

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Image by Caterina Penone,

## **Open Science**

This project is co-financed by the European Unicon and the Republic of Turkey Bu proje Avrupa Binily on Turkey Curnhuryet transfords finance edimeteds

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= <sup>A</sup> Open science practices

A scientific process based on open cooperative work & knowledge diffusing tools

open source

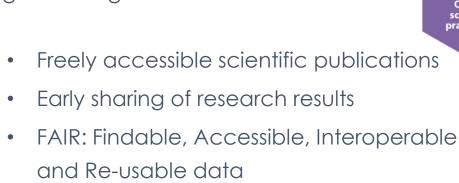
open peer

review

5

open

methodology



- Reproducible results
- Societal engagement & responsibility
- European Open Science Cloud (EOSC)
- Rewards & Incentives for researchers
- Research Management Plan



open educational

resources







## EU Taxonomy Cross Cutting key specific Issues



Taxonomy

- 1. Climate change mitigation
- 2. Climate change adaptation
- 3. The sustainable use and protection of water and marine resources
- 4. The transition to a circular economy
- 5. Pollution prevention and control
- 6. The protection and restoration of biodiversity and ecosystems







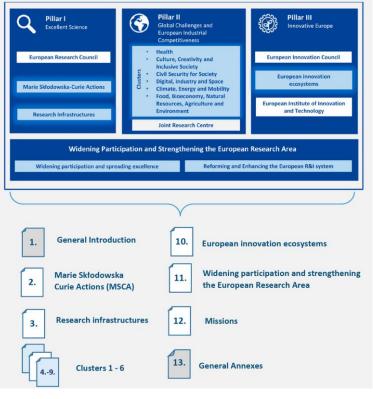


## Horizon Europe Work Programmes

## How an HE Work Programme is structured

# Work Programme 2021-22

- General Intro
- MSCA
- RI
- 6 Clusters
- EIC
- WIDENING



### Documents :

- Strategic Plan 2021-24
- Work Programme 21-22
- Proposal Template
- Model Grant Agreement (MGA)













### Study the Policies

- Strategic Plan 2021-24
- Strategic Plan Analysis
- General Intro of WP
  2021-22



### Identify your call

- Scan the WP to find a relevant call to your interests
- Study carefully the call text
- Study General Annex of WP

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### Start building

- Study the new
   Proposal Template
- Prepare your concept
- Build your consortium
- Legal Documents (MGA, CA)











## **Wrap it up** From Strategic Plan to Work Programmes

- EU Goals, Values & Policies
- How from Policies we get to Calls
- Commission Priorities 2019-24
- HE Strategic Plan 2021-2024
- Co-Design process
- 4 HE Strategic Orientations
- New approach to Impact
- 8 Horizontal topics
- Work Programmes 2021-22



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## Q&A Time to ask your questions!













## Teşekkür ederim!

# Thank you!



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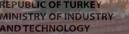




## Contact: Office Address Turkey in Horizon 2020 Project And Sokak 8/12 Akasya Apt. 06680 Çankaya/Ankara 06520 Çankaya/Ankara,Turkey Tel: +90 312 467 61 40 http://www.turkeyinh2020.eu/ info@TurkeyinH2020.eu

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