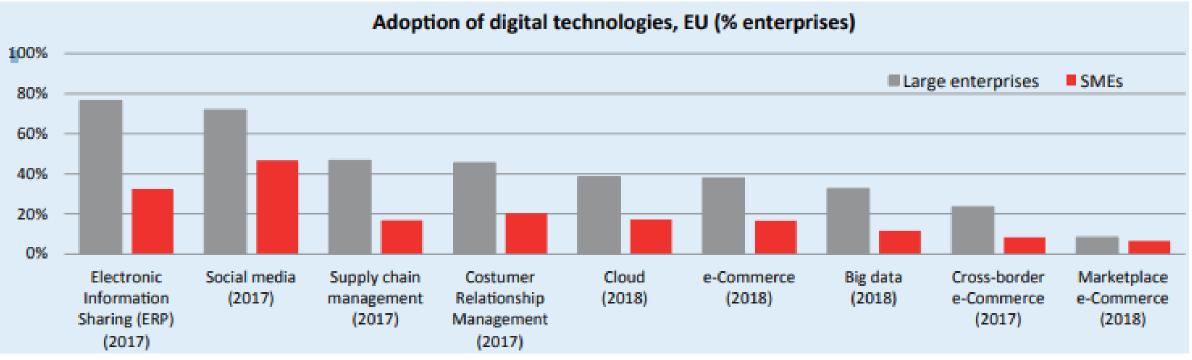
Verso Horizon Europe

L'evoluzione della dimensione **digital** nel prossimo programma quadro

Roma, 13 febbraio 2020



Why digital in the next MFF?



Desi Report 2019 – Integration of Digital Technology (source: Eurostat)



DIGITAL IN THE NEXT MFF: OVERVIEW

Digital in Horizon Europe R&D&I

- 1. Digital under "global challenges"
- Digital and industry cluster
- Digital in other clusters health, mobility, energy, environment,..
- 2. Open Innovation
- 3. Research Infra under Open Science

Digital Europe Capacities & roll

out

- 1. High Performance Computing (HPC)
- 2. Artificial Intelligence (AI)
- 3. Cybersecurity
- 4. Advanced digital skills
- 5. Digital transformation and interoperability

Connecting Europe Facility - Digital Connectivity

•5G roll out
•BB 4EU, Connecting communities
•Synergies with Transport /Energy

Creative Europe <u>MEDIA</u>

Invest EU Research, innovation & digitisation

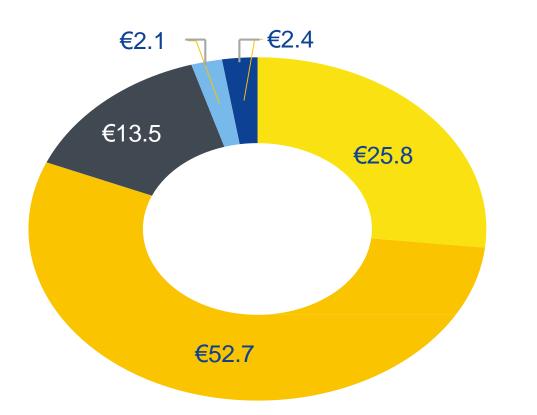
European <u>Regional Development</u> Fund/ Cohesion Fund

Horizon Europe is the Commission proposal for a € 100 billion research and innovation funding programme for seven years (2021-2027)





Budget: €100 billion* (2021-2027)



* This envelope includes EUR 3.5 billion allocated under the InvestEU Fund.

€ billion In current prices

Open Science

- Global Challenges & Ind. Competitiveness
- Open Innovation
- Strengthening ERA
- Euratom



Horizon 2020 – € 77bn

Excellent Science	24.4	Industrial Leadership 17			Societal Challenges	29.7
ERC - European	13.1	adership in & Industrial ologies Dologies	ICT		Health	7.5
Research Council	13.1			AgriFood	3.9	
FET - Future and	2.7	T – Le Techr NMBP	Space	13.6	Energy	5.9
Emerging Technologies	2.7			Transport	6.3	
MSCA - Marie Skłodowska-Curie	6.1	Ena			Climate	3.1
Actions	0.1	Access to Risk Finance		2.8		
Research		Innovation in SMEs		0.6	SC6	1.3
Infrastructures	2.5				Security	1.7

SwafS - Science with and for Society	0.5
Spreading Excellence and Widening Participation	0.8
EIT - European Institute of Innovation and Technology	2.7
JRC - Joint Research Center	1.9



Horizon Europe – € 94.1bn

Open Science	25.8	Glo	Global Challenges and Industrial Competitiveness		Open Innovation	13.5			
ERC - European Research Council	16.6		Health	7.7	EIC – European Innovation Council				
MSCA - Marie		ERS	Secure and Inclusive Societies	2.8	Ellipseuties	10.5			
Skłodowska-Curie Actions	6.8	USTE	Digital and Industry	15	EU Innovation Ecosystems				
Descende la faceta a terretoria	2.4	2.4	2.4	2.4	CLI	Climate, Energy, Mobility	15	EIT - European Institute of Innovation and	3
Research Infrastructures	2.4		Food and Natural Resources	10	Technology	5			
			Joint Research Centre	2.2					

Strengthening the European Research Area	2.1
Sharing Excellence	1.7
Reforming and Enhancing the European R&I Ecosystem	0.4



Digital in Horizon Europe

European leadership on Digital:

- Competitive key digital technologies
- Develop and retain edge know-how
- Increase digital supply choice
- Develop strategic "value-chains"
- Digital transformation: early uptake at pan-European level
- Addressing Global Development Goals (Health, Climate, ...)

Impact:

- Societal benefits through digital transformation
- Competitiveness of European Industry across sectors
- European and Global policy priorities: jobs, health, climate

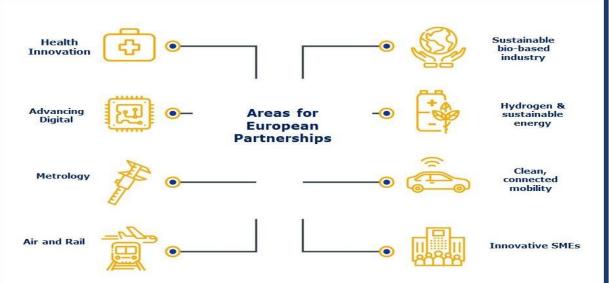


Clusters in 'Global Challenges and European Industrial Competitiveness'

Clusters	Areas of intervention			
Health	 Health throughout the life course Non-communicable and rare diseases Tools, technologies and digital solutions for health and care, including personalised medicine 	 Environmental and social health determinants Infectious diseases, including poverty-related and neglected disease Health care systems 		
Culture, creativity and inclusive society	Democracy and GovernanceSocial and economic transformations	Culture, cultural heritage and creativity		
Civil security for society	Disaster-resilient societiesProtection and Security	Cybersecurity		
Digital, Industry and space	 Manufacturing technologies Advanced materials Next generation internet Circular industries Space, including Earth Observation Emerging enabling technologies 	 Key digital technologies, including quantum technologies Artificial Intelligence and robotics Advanced computing and Big Data Low-carbon and clean industry Emerging enabling technologies 		
Climate, Energy and Mobility	 Climate science and solutions Energy systems and grids Communities and cities Industrial competitiveness in transport Smart mobility 	 Energy supply Buildings and industrial facilities in energy transition Clean, safe and accessible transport and mobility Energy storage 		
Food, bioeconomy, natural resources, agriculture and environment	 Environmental observation Agriculture, forestry and rural areas Circular systems Food systems 	 Biodiversity and natural resources Seas, oceans and inland waters Bio-based innovation systems in the EU Bioeconomy 		



Partnerships



New process to select partnerships for next MFF.

Strong involvement of Member States and industrial stakeholders, leading to more strategic alignment supporting public-private investment for European competitiveness.

Selection of partnerships by end 2019/early 2020.

Proposals for "digital-centric" partnerships on:

- Key Digital Technologies
- High-Performance Computing
- Smart Networks and Services
- AI, data and robotics
- Photonics
- Cybersecurity



Missions

Climate-neutral and smart cities Soil health and food

A mission is a portfolio of actions intended to achieve a bold and inspirational as well as measurable goal within a set timeframe, with impact for science and technology, society and citizens that goes beyond individual actions

Mission Chairs and Boards and Mission Chairs nominated, to propose concrete missions to be supported in the next- MFF. Concept and mission proposals by end 2019/early 2020.

Strong Digital Component in all areas in particular:

- Health/Cancer
- Climate-Neutral and Smart-Cities
- Adaptation to Climate change including societal transformation



Digital Europe programme – what?

Reinforcing digital capacities. Ensuring their best use.

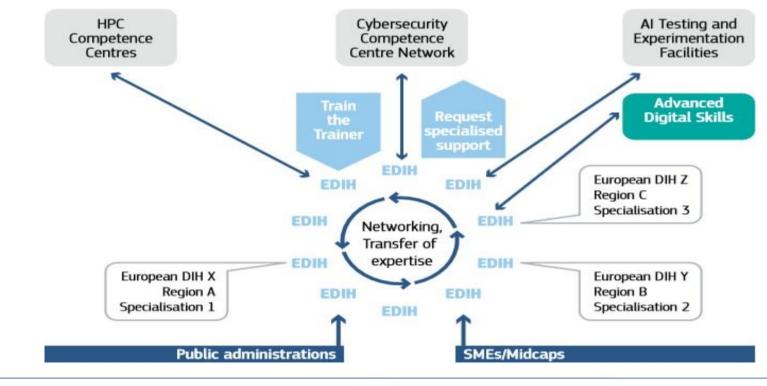


#EUBudget #DigitalEurope



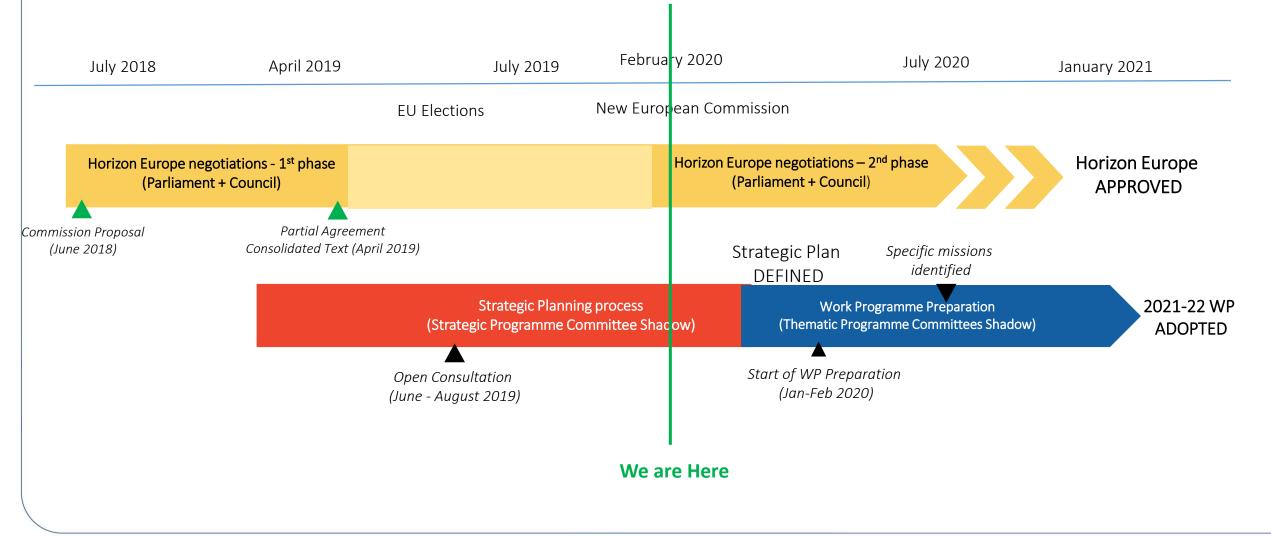
Accelerating the best use of technologies European Digital Innovation Hubs

- Set up of the initial network (first year)
- First network enlargement (second year)





The evolution





Idealist Services



Partner match/search





Brokerage events



www.ideal-ist.eu

Toolbox for proposers





Personalised weekly notification



Tree

Pre-proposal check & Full proposal

review

APRE Agenzia per la Promozione della Ricerca Europea

Verso Horizon Europe (da settembre 2017)



Unico sito web in Italia dedicato a FP9. Contiene raccolta di notizie,

informazioni e document su Horizon Europe



Lista eventi Verso Horizon Europe

7/11/18 HE/Generale (Incontro con DG Paquet) – Roma

26/11/19 **HE/Partenariati** – Torino

4/12/18 HE/ERC – Milano

31/1/19 HE/Deep Tech — Bruxelles

12/3/19 **HE/Missioni** – Ferrara

2/3/19 HE/MSCA – Padova

28/6/19 **HE/EIC** – Milano

24/10/19 Commission Workshop on HE implementation – Roma (co-organizzato MIUR)

30/10/19 HE/Sinergie fondi diretti- Firenze

4/3/20 HE/Cluster – Roma

16/4/20 Ricerca fondamentale e innovazione - Pisa

Previsto prima metà 2020 HE/Sinergie fondi strutturali – Napoli/Catania (tbc)





Thank you for your attention!

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