National AI strategies in Europe: Where are we now and what's next?

Webinar: 22 June 2021

How is Europe shaping excellence and trust in AI?

Cécile HUET, PhD
Deputy Head of Unit Robotics & Artificial Intelligence Innovation and Excellence
EC – DG CONNECT

STATE OF IMPLEMENTATION OF AI POLICIES IN EU COUNTRIES: MAIN DIRECTIONS AND TRENDS IN AI STRATEGIES?

Table 1. Overview of national AI strategies in the EU Member States and Norway

Country	Status	Date
Austria	In progress	
Belgium	In progress	
Bulgaria	Published	Dec. 2020
Croatia	In progress	
Cyprus	Published Last update	Jan. 2020 Jun. 2020
Czech Republic	Published	May 2019
Denmark	Published	Mar. 2019
Estonia	Published	Jul. 2019
Finland	Published Last update	Oct. 2017 Nov. 2020
France	Published	Mar. 2018
Germany	Published Last update	Nov. 2018 Dec. 2020
Greece	In progress	
Hungary	Published	Sept. 2020
Ireland	In progress	
Italy	In progress	
Latvia	Published	Feb. 2020
Lithuania	Published	Mar. 2019
Luxembourg	Published	May 2019
Malta	Published	Oct. 2019
Netherlands	Published	Oct. 2019
Norway [AC]	Published	Jan. 2020
Poland	Published	Dec. 2020
Portugal	Published	Jun. 2019
Romania	In progress	
Slovakia	Published	Jul. 2019
Slovenia	Published	May 2021
Spain	Published	Dec. 2020
Sweden	Published	May 2018

Source: JRC – European Commission

European Commission

STATE OF IMPLEMENTATION OF AI POLICIES IN EU COUNTRIES

MAIN DIRECTIONS AND TRENDS IN NATIONAL AI STRATEGIES?

- **Data access and sharing**
- **Data storage - HPC - broadband networks**

- Maps of AI players
- **Partnerships** public - private sector, and civil society
- Development & uptake
- **Investment for AI innovators** - start-ups and SMEs

- AI at all education levels
- **Lifelong learning and upskilling**
- **Legislative frameworks for AI**
- **AI ethics oversight bodies**
- AI certificates
- **regulatory sandboxes**

- **AI in public services**
- Sectors: manufacturing, **agriculture**, **healthcare**, **transport** and energy
- **COVID-19**
- **CLIMATE CHANGE**

European Commission

FOUR KEY POLICY OBJECTIVES FOR ARTIFICIAL INTELLIGENCE IN EUROPE

SET ENABLING CONDITIONS FOR AI DEVELOPMENT AND UPTAKE IN THE EU

- Acquire, pool and share policy insights
- Tap into the potential of **data**
- Foster critical **computing capacity**

MAKE THE EU THE RIGHT PLACE; EXCELLENCE FROM LAB TO THE MARKET

- **Collaboration** with stakeholders, **Public-private Partnership** on AI, data and robotics
- **Research capacities**
- Testing and experimentation (TEFs), **uptake by SMEs** (EDIHs)
- **Funding and scaling** innovative ideas and solutions

ENSURE AI TECHNOLOGIES WORK FOR PEOPLE

- **Talent and skills**
- A policy framework to ensure **trust in AI** systems
- Promoting the EU vision on sustainable and trustworthy AI in the world

BUILD STRATEGIC LEADERSHIP IN THE SECTORS

- **Climate and environment**
- **Health**
- Strategy for Robotics in the world of AI
- **Public sector**
- Law enforcement, immigration and asylum
- **Mobility**
- **Agriculture**

Investments: Horizon Europe, Digital Europe, Recovery and Resilience Facility

an
ssion

FOUR KEY POLICY OBJECTIVES FOR ARTIFICIAL INTELLIGENCE IN EUROPE

SET ENABLING CONDITIONS FOR AI DEVELOPMENT AND UPTAKE IN THE EU

- **Data access and sharing**
- **Storage - HPC - broadband networks**

MAKE THE EU THE RIGHT PLACE; EXCELLENCE FROM LAB TO THE MARKET

- **Maps** of AI players
- **Partnerships** public - private sector, and civil society
- **Development & uptake**
- **Investment for AI innovators** - start-ups and SMEs

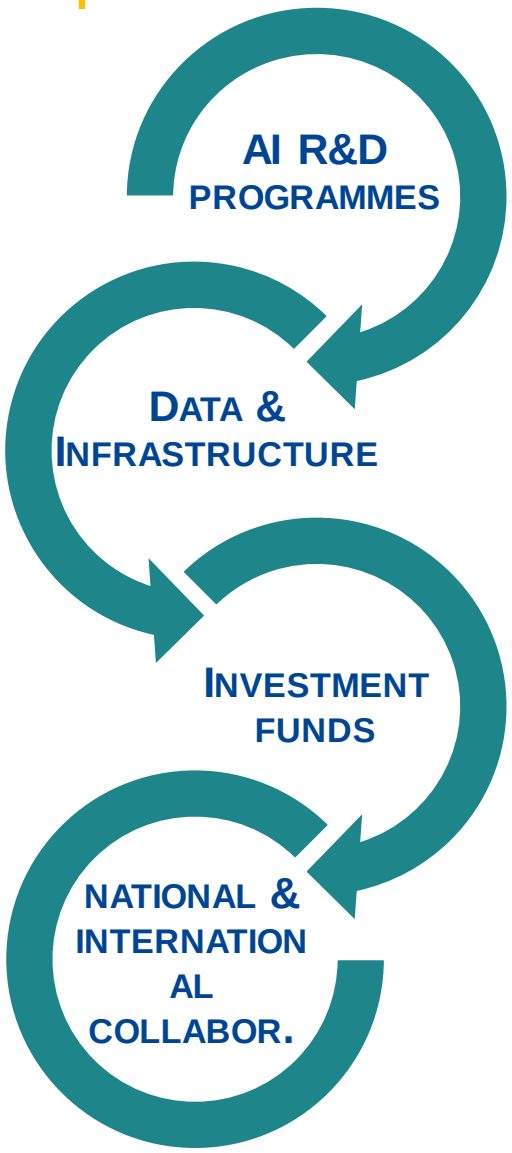
ENSURE AI TECHNOLOGIES WORK FOR PEOPLE

- AI at all **education** levels
- **Lifelong learning and upskilling**
- **Legislative frameworks for AI**
- **AI ethics oversight bodies**
- AI **certificates**
- **regulatory sandboxes**

BUILD STRATEGIC LEADERSHIP IN THE SECTORS

- **AI in public services**
- Sectors: manufacturing, **agriculture, healthcare, transport and energy**
- **COVID-19**
- **CLIMATE CHANGE**

AI to tackle societal challenges

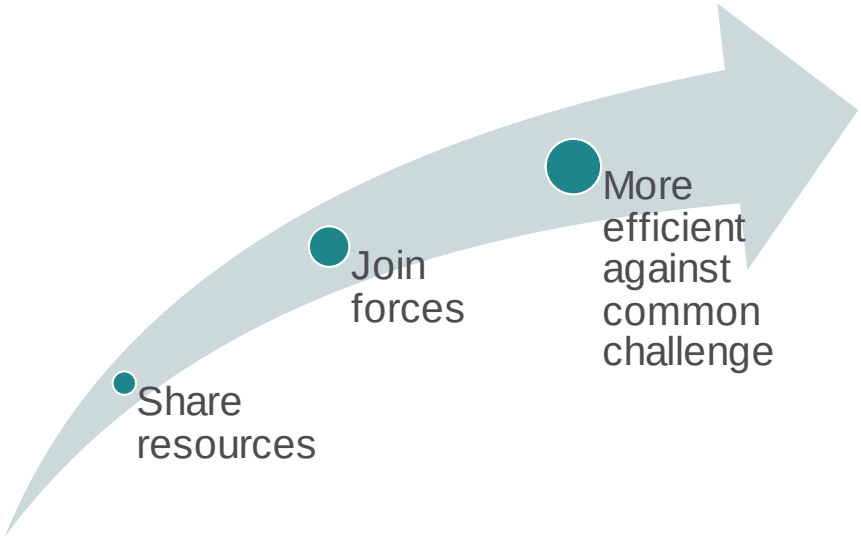


COVID-19 pandemic

diagnosis, prevention and recovery, spread, decision-support systems, …

AI to mitigate climate change

Circular economy, transport, agriculture, resource /energy optimization, waste management, ….



European Commission

OPPORTUNITIES

EU funding instrumental to JOIN FORCES - Build synergies – Build on national initiatives:

- PPP
- Enablers – pool resources
- Networks of Excellence centers / AI lighthouse / DIHs / TEFs / AI-on-Demand Platform
- Address more efficiently common societal challenges ➔ EU funding (HE / DIGITAL / RRF)

Share knowledge / exchange best Practices: Skills & Policies / deployment in key sectors / public sector

Thank you

© European Union 2020

Unless otherwise noted the reuse of this presentation is authorised under the CC BY 4.0 license. For any use or reproduction of elements that are not owned by the EU, permission may need to be sought directly from the respective right holders.

Slide xx: element concerned, source: e.g. Fotolia.com; Slide xx: element concerned, source: e.g. iStock.com

European Commission