



# Artificial Intelligence for Europe

**& links to  
standardisation**

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## Communication of 25 April 2018 : AI FOR GOOD AND FOR ALL



Large economic and societal benefits  
BUT Fierce international competition



Financing: R&I & deploy + Data



Evolution of the labour landscape & skills gaps



Acceptance/Ethical issues  
Inclusivity: AI available/Usable for All  
Trust & Data  
Legal framework & liability



→ Standardisation and interoperability Challenges

# AI Communication & Standards



” *Testing of and experimenting with AI products and services is crucial to make them market ready, ensure compliance with **safety standards**.*

” *The EU **safety** framework [...] has led to the development of a **solid body of standards** in the area of **AI-enabled devices** that is continuously being **adapted** in line with technological progress.*

” *The further development and **promotion** of such **safety standards** and **support** in **EU and international standardisation organisations** will help enable European businesses to benefit from a **competitive** advantage, and increase **consumer trust**.*

” *Standards should also cover **interoperability**, which is crucial for offering **consumers greater choices** and ensuring **fair competition**.*



## CALL FOR EXPRESSION OF INTEREST

### **deadline 05/04 – this Friday!**

*“Study on standards landscaping and gap analysis on the safety of autonomous robots controlled by AI”*

<https://ec.europa.eu/digital-single-market/news-redirect/647468>

- Landscape analysis of existing standards
- Overview of application areas where new safety standards would be needed
- Special focus on health, domestic, industrial and field robots
- Duration of the study: 1 year / 60k€

Interested? Send an email to [CNECT-SMART-2018-0053@ec.europa.eu](mailto:CNECT-SMART-2018-0053@ec.europa.eu)

Nb: in case of a joint tender, all partners must be identified in your expression of interest and will be admissible only as declared in the expression of interest.





# High-Level Expert Group on AI

## → Draft ethics guidelines for trustworthy AI



- Working Document for stakeholders' consultation published on 18 Dec.
- Next Week: Publication of updated document

### I. Respecting Fundamental Rights and Values, Ethical Principles

### II. Realising Trustworthy AI

1. Requirements of Trustworthy AI
2. Methods to achieve Trustworthy AI: Technical and Non-Technical (including standardisation and certification)

### III. Assessing Trustworthy AI

→ IMPACT ON STANDARDS

→ NB: the high level expert group proposes a definition of AI

# The European AI Alliance



Joint reflection on  
the future of AI in  
Europe

Full mobilisation  
of all stakeholders  
needed: industry,  
academia, civil  
society

Supported by  
high-level expert  
group on AI and  
an online platform

Goal: Making it the world-wide  
reference platform for thinking and  
reflection on AI



## MONITORING: AI WATCH

[https://ec.europa.eu/knowledge4policy/ai-watch/about\\_en](https://ec.europa.eu/knowledge4policy/ai-watch/about_en)

Monitoring the uptake of AI across the economy and the impact on the labour market

Monitoring Policy initiatives in Member States

Monitor technology and capacity:

- Benchmarking the technical capabilities
- Showcasing current capabilities
- AI index

→ providing a realistic understanding of where the technology stands

→ Needs commonly agreed terminology/vocabulary



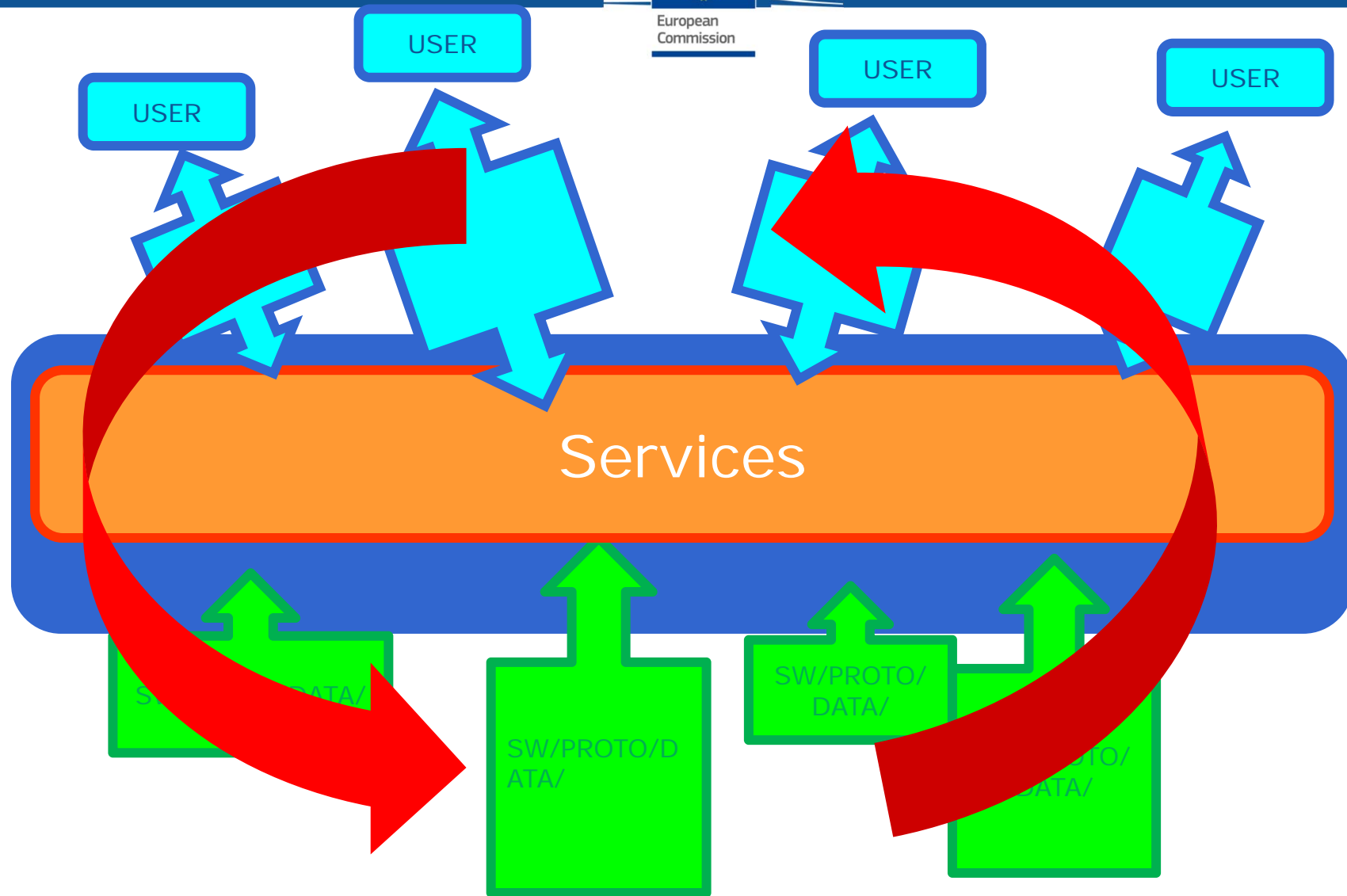
# Work Programme 2018-20

## EUROPEAN AI-ON-DEMAND PLATFORM

- Central access point:
  - integrating tools and resources
  - offering solutions and support to all users of AI to integrate such technology into application, products and services

<https://www.ai4eu.eu/>



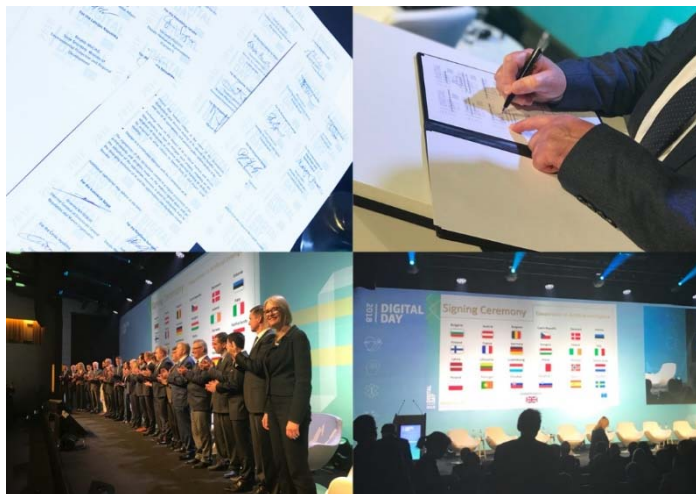




## THE PLATFORM = CENTRAL POINT

- Develop a **European AI ecosystem**
  - knowledge, algorithms, tools and resources available and making it a compelling solution for users, especially from non-tech sectors.
- **Build on and link to existing** relevant initiatives
  - platforms, data repositories, cloud computing, HPC, etc.
- Facilitate the **interaction** with existing **data portals**, and **resources** → **support interoperability**
- **Connect** and cooperate with other relevant activities of this **work programme**
  - DIHs, pilots, etc.

# COORDINATED PLAN on AI



## Joining forces EC with MS

All Member States  
& Norway + Switzerland  
signed a Declaration of cooperation on  
Artificial Intelligence.

7 December  
2018:  
Coordinated  
plan on AI  
published

Member States agreed to work together on:

- ensuring Europe's competitiveness in the research and deployment of AI
- dealing with social, economic, ethical and legal questions

# Coordinated Plan on AI & Standards



” *Standardisation will also be essential for the development of AI in the Digital Single Market, helping notably to ensure **interoperability***

” *data [...] made **interoperable** [...] data formats that are open, FAIR, machine readable, **standardised** and documented, both in the interaction between public and private sectors, within sectors and across sectors*

” *The Public Sector Information (PSI) directive [...] reuse of such data by businesses [...] facilitating aggregation [...] **interoperable data and meta-data formats** as well as the deployment of **standardised Application Programming Interfaces (APIs)** based on the European Interoperability Framework (EIF)*

” *[...] promote the **accessibility, interoperability and re-usability** of **data** in the sectors of high relevance for AI, such as health, environment, mobility, security, migration and a sustainable and circular bioeconomy and food system.*



# Coordinated Plan on AI & Standards



” facilitate access to, connectivity, **interoperability** and aggregation of public data [...] Application Programming Interfaces (APIs) for accessing data of dynamic nature. [...] **support the definition and application of data and metadata standards** in close cooperation with relevant stakeholders (e.g. European standardisation bodies). The Commission is planning to make available up to **EUR 100 million** from Horizon 2020 (H2020) and Connecting Europe Facility (CEF).

” The Commission will also support building rare disease registries. [...] **interoperability** [...] support clinical research and decision making.

” **Member States** are encouraged to connect existing and planned national **investments in platforms with EU** level activities in order to **ensure scale up and interoperability**.  
[...] creation of a **common European Data Space** that makes data easily available **for re-use** to innovators, businesses and public sector for up to **EUR 1 billion** through the Digital Europe Programme

” The joint development of **international standards** will facilitate **AI deployment and acceptance**.

# ADDITIONAL EC INITIATIVES



- Rolling Plan on ICT Standardisation: identifies ICT standardisation activities in support of EU policies.
  - **Big Data (top priority)**
  - **Robotics**
  - **Artificial Intelligence**
  - <http://safearoundrobots.com/>

- **Supporting European Experts contribution to International ICT Standardisation Activities**

<https://www.standict.eu/>

- *ICT **STANDARDS** AND ONGOING WORK AT INTERNATIONAL LEVEL IN THE AI FIELD - A LANDSCAPE ANALYSIS*

StandICT.eu

- **COVR – cobot safety certification**

Help companies (technically and financially) to analyze, test and validate the safety

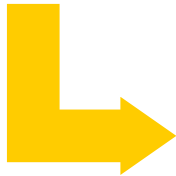
**COV=R**

# Concrete standardisation activities in AI



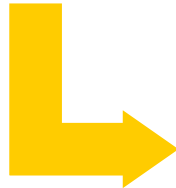
## Identification of standardization needs

- Funded projects / Studies on needs for standards
- Rolling plan for ICT standardisation
- Policies & Ethics guidelines
- PPPs – SPARC/BDVA



## Development of European and international standards

- Funded projects
- PPPs SPARC & BDVA

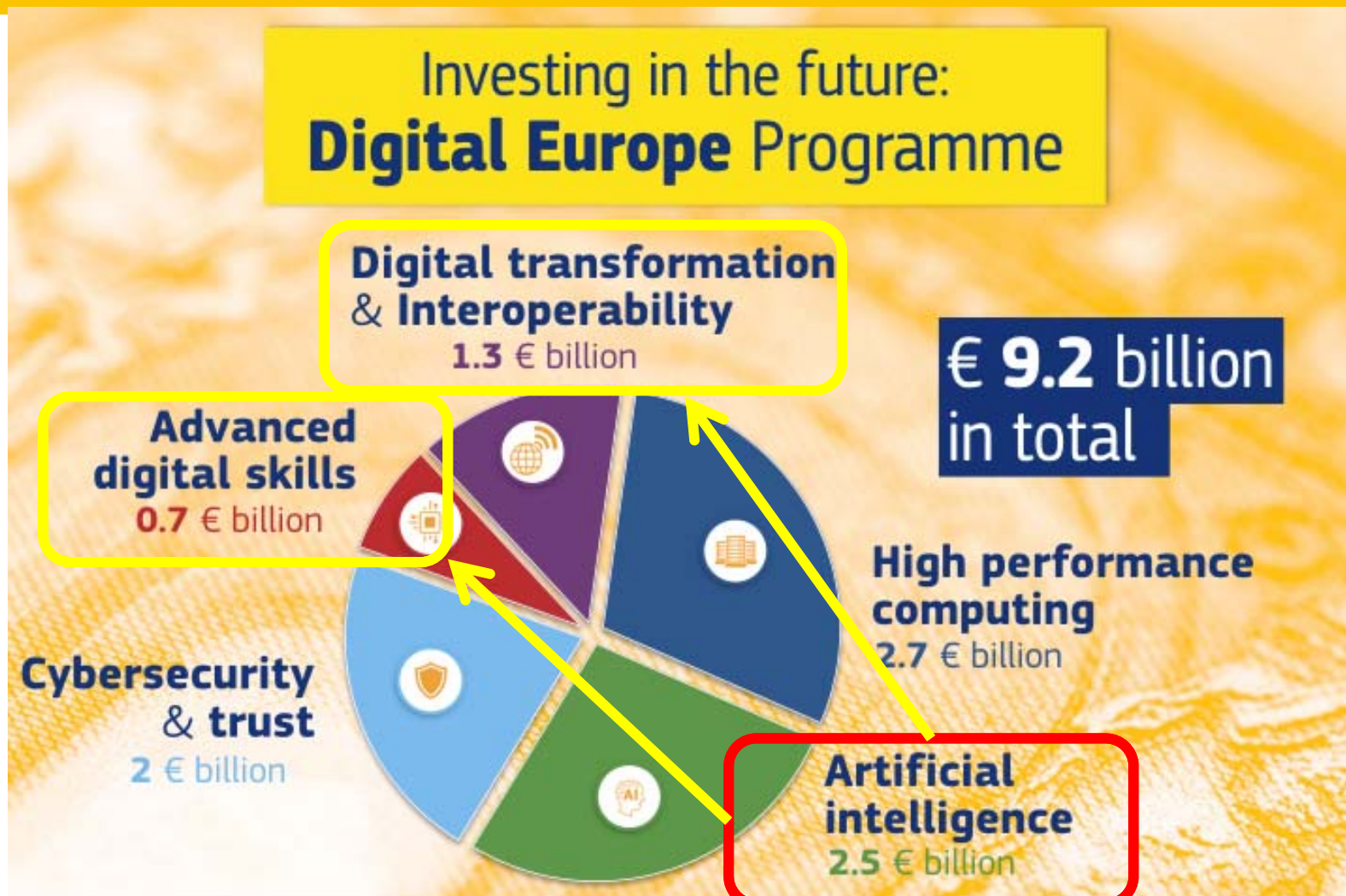


## Promotion of wide-spread use of standards

- Funded projects
- AI Alliance
- Policies (Int'l)
- HLEG



# DIGITAL EUROPE PROGRAMME: CAPACITY BUILDING AND DEPLOYMENT



#EUBudget  
#DigitalEurope



European  
Commission

n  
sion





**Thank you**

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