IEEE European Public Policy Webinar 4
Where to for EU AI policy?

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3.00 pm CET

The material contained in this presentation may reflect the opinions of its authors and not necessarily those of IEEE.
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Objective and context of the webinar
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• The objective of the webinar is to give insight to the IEEE members on the latest developments and future actions of the EU in the realm of AI policy.

• After a quick overview of developments over the past 12-18 months, we will focus on the latest output (policy and investment recommendations).

• The emphasis will be placed on aspects of relevance to IEEE’s work.

• Participants will also find out more about IEEE’s activities and initiatives on AI.
Recap: the road so far
April 2018: EC publishes AI strategy

December 2018: Draft ethics guidelines

June 2019: Policy and Investment recommendations

1 November: New Commission takes office – likely to be delayed by Parliament

2020: possible EU legislation
Background – previous deliverables

- Blueprint for EC’s work
- Be ahead and encourage uptake
- Prepare for socio-economic changes
- Led to creation of AI HLEG

AI strategy (April 2018)
Formally adopted

- Human agency and oversight
- Robustness and safety
- Privacy & data governance
- Diversity, non-discrimination and fairness
- Transparency
- Accountability
- Social and environmental well-being

Ethics guidelines (April 2019)
Formally adopted

- Transparency obligations in automatic decision-making
- Possible sector-specific action & voluntary measures
- Assessment of fundamental rights implications

DG CNECT strategy
Informal leaked document

BUT AI policy cuts across policy areas and will likely go beyond DG CNECT
Policy and investment recommendations
Policy and Investment Recommendations

- Risk-based; principles-based; precautionary principle
- Cyber: data security; AI used for protection
- Competition: Incumbency concerns
- Human in the loop
- No mass scoring; avoid gender bias
- From R&D to market
- Commercial surveillance
- Support for development according to ethics

Transparency obligations to be set in the first horizontal legislative act

Stated ambition: set the global standard for AI regulation
The way forward
European Commission to legislate – but how?

EU seeks to replicate GDPR success – set the global standard
• In-between US capital access and China’s data regime
• Find the right mix between principles-based and meaningful
• Ensure no one-size-fits-all

Unclear who will take the lead on AI regulation
• Horizontal regulation – perhaps a dedicated DG / Commissioner?
• Sector specific initiatives split between DGs?
• Who oversees the AI portfolio? Vice-President role?
• Cross-cutting issue: cyber, competition, investment; skills etc.
IEEE’s AI activities
The IEEE Global Initiative on Ethics of Autonomous and Intelligent Systems

Moving “From Principles to Practice” with standards projects, certification programs, and global consensus building to inspire the Ethically Aligned Design of autonomous and intelligent technologies

The IEEE Global Initiative’s mission is, “To ensure every stakeholder involved in the design and development of autonomous and intelligent systems is educated, trained, and empowered to prioritize ethical considerations so that these technologies are advanced for the benefit of humanity.”

- See a list of The Initiative's Executive and other Committees.
- Learn how to join the IEEE Global Initiative and stay up-to-date on our efforts.

Ethically Aligned Design, First Edition

Ethically Aligned Design, First Edition (EAD1e) is a comprehensive body of work that distills the consensus of its vast community of global creators into a set of high-level ethical principles, key issues, and practical recommendations. EAD1e is an in-depth seminal work, a one-of-a-kind treatise, intended not only to inform a broader public but also to inspire its audience and readership of academics, engineers, policy makers, and manufacturers of autonomous and intelligent systems (AIS) to...
Ethically Aligned Design

A Vision for Prioritizing Human Well-being with Autonomous and Intelligent Systems

More than one hundred pragmatic recommendations for technologists, policy makers and academics

Created by 250+ global cross-disciplinary thought leaders

- Executive Summary
- From Principles to Practice
- General Principles
- Classical Ethics in A/IS
- Well-being
- Affective Computing
- Personal Data and Individual Agency
- Methods to Guide Ethical Research and Design
- A/IS for Sustainable Development
- Embedding Values into Autonomous and Intelligent Systems
- Policy
- Law
IEEE P70xx Standards Projects

Standards focused on Ethics for Autonomous and Intelligent

IEEE P7000: Model Process for Addressing Ethical Concerns During System Design
IEEE P7001: Transparency of Autonomous Systems
IEEE P7002: Data Privacy Process
IEEE P7003: Algorithmic Bias Considerations
IEEE P7004: Child and Student Data Governance
IEEE P7005: Employer Data Governance
IEEE P7006: Personal Data AI Agent Working Group
IEEE P7008: Ethically Driven Nudging for Robotic, Intelligent and Autonomous Systems
IEEE P7009: Fail-Safe Design of Autonomous and Semi-Autonomous Systems
IEEE P7010: Wellbeing Metrics Standard for Ethical AI and Autonomous Systems
IEEE P7011: Process of Identifying and Rating the Trustworthiness of News Sources
IEEE P7012: Standard for Machines Readable Personal Privacy Terms
IEEE P7013: Inclusion and Application Standards for Automated Facial Analysis Technology
The Ethics Certification Program for Autonomous and Intelligent Systems (ECPAIS)

*Developing metrics and processes towards the implementation of a certification methodology addressing transparency, accountability and algorithmic bias*

Offer a process and define a series of marks by which organizations can seek certifications for the processes around A/IS products, systems, and services.

An industry driven and iterative process for developing certifications / marks for A/IS.

Initial outcomes are focusing on:

Criteria and process for a Certification / mark focused on Transparency in A/IS

Criteria and process for a Certification / mark focused on Accountability in A/IS

Criteria and process for a Certification / mark focused on Algorithmic Bias in A/IS
Global reach

Examples

- Consulting with and contributing to AI Positions of
  - European Commission (member of the HL expert group)
  - European Parliament
  - Council of Europe
  - OECD
- UN (via HLP DC, UNESCO, UNICEF and other UN orgs)
- National Governments
- Cities
- Industry
- Associations
- Standard Developing Organizations
thank you