

Al High-Level Expert Group
Presentation ERRIN (11 April 2019)

DIGITALEUROPE represents more than 35,000 businesses across Europe

We are the voice of the digitalising industries



Vision - A European Union that nurtures and supports digital technology industries, and that prospers from the jobs we provide, the innovation and economic benefits we deliver and the societal challenges we address.



Mission - To foster, on behalf of our members, a business, policy and regulatory environment in Europe that best realizes our vision. We will achieve this by working as positive partners with a wide range of stakeholders.







EU Commission's AI HLEG (I)

>> Goal:

- Announced as part of broader AI and data strategy, started work in June 2018.
- Goal is to enable and support AI development in Europe, with a human-centric approach.
- This means achieving 'Trustworthy Al' seen as a competitive enabler and prerequisite for the uptake of Al.
 - => Maximize the benefits, minimize and prevent the risks.

>> Concept:

- Therefore, identify the key EU values: respect for human dignity, freedom, democracy, equality, rule of law and respect for human rights. (see also EU Charter of Fundamental Rights)
- Find a more concrete implementation of this, via deliverables of the High-Level Expert Group (AI HLEG).
- Plus, the European AI Alliance web-forum (anyone can sign up and comment).



EU Commission's AI HLEG (I)

Composition & Work Program:

- 52 experts across the spectrum: industry and trade associations, consumer and digital rights groups, technical experts, research and academia.
- Monthly meetings, with the goal of drafting two deliverables:
 - Ethics Guidelines Out now! Published on 8 April, to be reviewed for 2020.
 - Policy & Investment Recommendations Publication expected end of June 2019.

DIGITALEUROPE's Role:

- DIGITALEUROPE Director-General Cecilia Bonefeld-Dahl member of the AI High-Level Expert Group.
- Co-rapporteur specifically on the Assessment List (Guidelines) and Governance (Recommendations) chapters.





Ethics Guidelines (I)

Ethics Guidelines:

- Published on 8 April, after 9 months of intense discussions and deliberations.
- Core idea is 'trustworthy Al', based on compliance with law, alignment with Ethics principles, robust and safe.
- Guidelines have three main chapters:
 - Trustworthy AI definition (as listed above)
 - Key requirements: (with methods to realise this)
 - Assessment list
- Plus, examples of opportunities and critical concerns



Ethics Guidelines (II)

Ethics Guidelines – Key Requirements:

- Seven key requirements to ensure Trustworthy AI:
 - Human Agency and oversight; Technical robustness and safety; Privacy and data governance; Transparency; Diversity, non-discrimination and fairness; Environmental and societal well-being; Accountability
- Technical and non-technical methods to aid the implementation:
 - Work towards early stage implementation and testing ('ethics by design')
 - Look into codes of conduct, regulation, standardisation and certification, diversity in teams
- There may be tension between these different requirements (e.g. maybe ensuring diversity may affect anonymization or privacy of data?)
 - No clear 'solution', needs case by case analysis
 - Important to document and communicate these potential trade-offs



Ethics Guidelines (III)

>> Ethics Guidelines – Assessment List:

- Important piece of the puzzle:
 - How to be more concrete with the Trustworthy AI components and the key requirements?
 - Give a more pragmatic set of questions for an AI developer or deployer.
 - Not a formal 'checklist' or auditing tool, but guidance for AI users to take these questions/steps into account.
- Follows the structure of the key requirements, as well as giving guidance on the governance level. Different duties for different levels and roles within an organisation (company or public agency/government).
- For example:
 - On explainability, did you design AI system with interpretability in mind from the start? Did you analyse and update training data over time?
 - On bias, did you assess possible limitations from the composition of used data sets? Do you have mechanisms to flag potential bias or discrimination problems?

Ethics Guidelines (IV)

Ethics Guidelines – Opportunities and Critical Concerns:

- To remind audience of reasons behind the Guidelines, need to look at what the actual opportunities and risks are.
- Opportunities what we can achieve with AI if use it properly, enable its uptake in Europe and follow the Trustworthy AI principles:
 - Climate action and sustainable infrastructure (e.g. energy efficiency, intelligent transport systems)
 - Health and well-being (e.g. predictive medicine, personalized healthcare)
 - Quality education and digital transformation (e.g. upskilling workers, personalized education and trainings)
- Critical concerns areas to pay attention to, or that may prima facie be 'un-Trustworthy':
 - Individual identification and tracking without consent (e.g. involuntary facial recognition)
 - Covert AI systems (e.g. deceptive use of AI bots), large scale citizen scoring and ranking
 - Lethal Autonomous Weapon Systems
 - Longer term: possible general artificial intelligence? human-like consciousness?



Ethics Guidelines (V)

Ethics Guidelines – Piloting phase:

- Crucial element of the Guidelines: we need to test and pilot this in practice! Need to see how well the assessment list and the key requirements function in the real world – did we miss anything? Is something too vague?
- Also a way to see where things need to be more tailor-made: there are innumerable different AI applications, as it is
 a general purpose technology. In many cases, the Guidelines will not, or only partially, be relevant. (e.g. AI
 applications in industrial or B2B contexts where there is no personal data used or no impact on citizens)
- Therefore, piloting phase:
 - Formally starting this summer, until end of the year.
 - Can participate via Al Alliance, to give general comments and take part in public consultation survey.
 - Can also register interest to be part of more targeted stakeholder feedback.



AI HLEG – Policy & Investment Recommendations



Recommendations (I)

▶ Al Recommendations – Aim:

- Next deliverable for the AI HLEG to work on, now that the Ethics Guidelines are 'done' (pending the piloting phase).
- Goal is to give more concrete suggestions to the Commission and EU policy-makers on AI.
- Plan is to publish this by end of June: before the summer break and on time to inspire the newly elected EU Parliament and next Commission.
- Follows also previous Commission AI communications and Coordinated Strategy Plan with Member States.
- Structure:
 - Impact areas: analyse and measure impact of AI on these sectors
 - Enablers: what can be done (policy, investment, regulation, etc.) to boost AI uptake and development



Recommendations (II)

>> Al Recommendations - Content:

- Still early phase, priority was on the Ethics Guidelines.
- For impact areas, will look at:
 - Citizens and society
 - Private sector
 - Public sector
 - Research
- For enablers, will look at:
 - Data (personal and industrial) (e.g. access, transfer across Member States)
 - Infrastructure (e.g. connectivity, high performance computing)
 - Skills (e.g. how to retain/attract AI talent in Europe)
 - Governance (e.g. review if any areas are still fit for purpose)





AI HLEG - Conclusion

DIGITALEUROPE's role:

- Cecilia Bonefeld-Dahl (DE Director-General) is a Member of the AI HLEG, mandate is until mid-2020 (two year mandate of the AI HLEG).
- Actively involved in the Assessment List, will continue to be very involved with the Piloting Phase.
- Also working on the Governance aspect of the Recommendations: see what areas we can work on with the Commission to review, plus what tools can be used (e.g. soft/hard law, sandboxing, standardisation).
- Internally, we have working groups looking at AI and Data Policy. Also closely aligned with our vertical clusters and new members in the manufacturing, healthcare and finance sectors.
- Will be important to make sure that the Guidelines and Recommendations do not stay a 'Brussels bubble' document: partner with our national trade associations to follow up and implement across EU countries.



Al HLEG – Timeline for next steps

April 2019

June 2019

Late 2019

Early 2020

- Publication of Ethics Guidelines
- Pre-registration on Al Alliance
- Publication of Recommendations
- Selection of stakeholders
- Launch of survey

 Interim reports on feedback from stakeholders and survey Review of Guidelines
 / Assessment List



Thank you for your time!



