# EU High-Level Expert Group A.I.


- 52 members from all over Europe
- **Mission Statement:** “The High-Level Expert Group on Artificial Intelligence (AI HLEG) will have as a general objective to support the implementation of the European strategy on Artificial Intelligence. This will include the elaboration of recommendations on future-related policy development and on ethical, legal and societal issues related to AI, including socio-economic challenges."
  - Advise the Commission on next steps addressing AI-related mid to long-term challenges and opportunities through recommendations
  - Propose ethics guidelines
  - Support the Commission on further engagement and outreach mechanisms to interact with a broader set of stakeholders in the context of the AI Alliance, share information and gather their input on the group's and the Commission's work
- **Two main deliverables:**
  - "**Ethics guideines** for trustworthy AI” + “A **Definition of of AI**: Main capabilities and Disciplines“ (revised version published in March 2019)
  - „**Policy and Investment** Recommendations for AI“ (Work in Progress, planned publication May 2019)

Deliverable 1: "**Ethics guidelines** for trustworthy AI" + "A **Definition of of AI**: Main capabilities and Disciplines"


- **Definition of A.I**.:
  - "Artificial intelligence (AI) systems are software (and possibly also hardware) systems designed by humans that, gi… complex goal, act in the physical or digital dimension by perceiving their environment through data acquisition, interpreting the collected structured or unstructured data, reasoning on the knowledge, or processing the information, derived from this data and deciding the best action(s) to take to achieve the given goal. AI systems can either use symbolic rules or learn a numeric model, and they can also adapt their behaviour by analysing how the environment is affected by their previous actions.
    As a scientific discipline, AI includes several approaches and techniques, such as machine learning (of which deep learning and reinforcement learning are specific examples), machine reasoning (which includes planning, scheduling, knowledge representation and reasoning, search, and optimization), and robotics (which includes control, perception, sensors and actuators, as well as the integration of all other techniques into cyber-physical systems)."
- **Trustworthy AI** has three components (Each component is necessary but not sufficient to achieve trustworthy AI. Ideally, all three components work in harmony and overlap in their operation. Where tensions arise, we should endeavour to align them.):
  - (1) it should be Lawful, ensuring respect of all applicable laws and regulations
  - (2) it should be Ethical,ensuring adherence to ethical principles and values and
  - (3) it should be Robust, both from a technical and social perspective since to ensure that, even with good intentions, AI systems do not cause any unintentional harm.
- Ethics guidelines: Trustworthy AI assessment list

Deliverable 2: "Policy and Investment Recommendations for AI"


- Using AI to build an impact in Europe
  - Transforming Europe's Business landscape
  - Catalyzing Europe's Public Sector
  - Attaining World-Class Research Capabilities
  - Accomplishing Citizen's Benefits and Engagements
- Leveraging Europe's enablers of AI
  - Attracting Funding and Investments in AI
  - Enabling AI with Data and Physical Infrastructure
  - Generating appropriate Skills and Education for AI
  - Ensuring an appropriate policy and regulatory framework