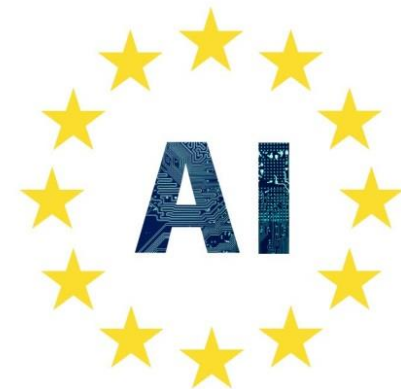




Höckner Klaus/Director



Hilfsgemeinschaft
der Blinden und Sehschwachen Österreichs



Towards Trustworthy AI

International Telecommunication Union



European Commission

About me:



Hilfsgemeinschaft
der Blinden und Sehschwachen Österreichs

- **Director of the biggest privately funded organisation for blind and visually impaired persons in Austria – 4700 full members, 2000 supporting members - 90 full time employees, 200 volunteers**
- **Member of Austrian Disability Forum, EDF, IAAP (GLC)**
- **Ambassador of Zero Projects**
- **Participant in standardisation in CEN/CENELEC/ISO**
- **Member of High Level Experts Group on Artificial Intelligence at the Commission of the EU**



Big Points – Examples

- **Pattern/image recognition, automatic audiodescription, ALT-Text**
- **Re-engineering, personalisation, customization**
- **Bionic exoskeleton**
- **Giving voice to speech-impaired persons, avatars**
- **Self driving, autonomous cars**
- **Smart cities , IoT**
- **Gesture/face recognition**

Background

EU STRATEGY ON ARTIFICIAL INTELLIGENCE

published in April 2018

Boost AI uptake

Tackle socio-economic changes

Ensure adequate ethical & legal framework



In this context: appointment of Independent High-Level Expert Group on Artificial Intelligence (AI HLEG) in June 2018

High-Level Expert Group and mandate

Chair:
Pekka Ala-Pietilä

52 members from:



Industry



Academia



Civil society

Two deliverables

- Ethics Guidelines for Artificial Intelligence
- Policy & Investment Recommendations

Interaction with European AI Alliance

- Broad multi-stakeholder platform counting over 2800 members to discuss AI policy in Europe

Ethics Guidelines for AI – Principles

4 Ethical Principles based on fundamental rights



Respect for
human
autonomy



Prevention of
harm



Fairness



Explicability

Ethics Guidelines for AI – Requirements



Human agency and oversight



Diversity, non-discrimination and fairness



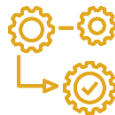
Technical Robustness and safety



Societal & environmental well-being



Privacy and data governance



Accountability



Transparency

To be continuously implemented & evaluated throughout AI system's life cycle

Ethics Guidelines for AI – Assessment List



Assessment list to operationalise the requirements

- **Practical questions** for each requirement – 131 in total
- Piloting process to collect **feedback** from all stakeholders (public & private sector)

End of piloting: 01st December 2019

Ethics Guidelines for AI – Assessment List



Points in Connection with Persons with Disabilities:

Point 1.5: **Diversity, non-discrimination and fairness**

Accessibility and universal design. Particularly in business-to-consumer domains, systems should be user-centric and designed in a way that allows all people to use AI products or services, regardless of their age, gender, abilities or characteristics. Accessibility to this technology for persons with disabilities, which are present in all societal groups, is of particular importance. AI systems should not have a one-size-fits-all approach and should consider Universal Design principles addressing the widest possible range of users, following relevant accessibility standards. This will enable equitable access and active participation of all people in existing and emerging computer-mediated human activities and with regard to assistive technologies.

Ethics Guidelines for AI – Assessment List



Points in Connection with Persons with Disabilities:

Questions in the Assessment List:

- Did you ensure that the AI system accommodates a wide range of individual preferences and abilities?
 - Did you assess whether the AI system usable by those with special needs or disabilities or those at risk of exclusion? How was this designed into the system and how is it verified?
 - Did you ensure that information about the AI system is accessible also to users of assistive technologies?
 - Did you involve or consult this community during the development phase of the AI system?

Ethics Guidelines for AI – Assessment List



Points in Connection with Persons with Disabilities:

Questions in the Assessment List:

- Did you take the impact of your AI system on the potential user audience into account?
 - Did you assess whether the team involved in building the AI system is representative of your target user audience? Is it representative of the wider population, considering also of other groups who might tangentially be impacted?
 - Did you assess whether there could be persons or groups who might be disproportionately affected by negative implications?
 - Did you get feedback from other teams or groups that represent different backgrounds and experiences?

Ethics Guidelines for AI – Assessment List



Points in Connection with Persons with Disabilities:

Questions in the Assessment List:

- Stakeholder participation:
 - Did you consider a mechanism to include the participation of different stakeholders in the AI system’s development and use?
 - Did you pave the way for the introduction of the AI system in your organisation by informing and involving impacted workers and their representatives in advance?

Policy and Investment Recommendations



„AI is context specific“ - Sectorial analysis of recommendations (sectorial recommendations) to be undertaken starting 2020.

- Healthcare
- Manufacturing and IoT
- Public Sector

End of Analysis: June 2020



Thank you

Q&A: hoeckner@hilfsgemeinschaft.at

