GUIDING QUESTIONS FOR SELF-ASSESSMENT ON USE OF ARTIFICIAL INTELLIGENCE IN RESEARCH*

*Based on the ethics issues checklist used in the EU ethics self-assessment (EU Grants 2021, 42-44)

Artificial Intelligence/Generative Artificial Intelligence ethics issues checklist

Please note: In completing this section, please consult the DCU REC Guidance on the ethical use of AI in research available here. This document establishes a set of high-level ethics guidelines for trustworthy AI and encompasses a set of prerequisites that should be adopted during the development, deployment, and/or use of AI-based solutions in research projects.

Please answer the five 'yes'/'no' questions below, and provide the relevant information where a 'yes' answer is indicated:

| ARTIFICIAL INTELLIGENCE | YES | / NO | INFORMATION TO BE PROVIDED |
|---|-----|------|--|
| Does this activity involve the development, deployment and/or use of Artificial Intelligence-based systems? | | | Explanation as to how the participants and/or end-users will be informed about: their interaction with an AI system/technology (if relevant); the abilities, limitations, risks and benefits of the proposed AI system/technique; the manner in which decisions are taken and the logic behind them (if relevant). Details on the measures taken to avoid bias in input data and algorithm design; Explanation as to how the respect for fundamental human rights and freedoms (e.g. human autonomy, privacy and data protection) will be ensured; Detailed explanation of the potential ethics risks and the risk mitigation measures. |

| 2. Could the AI based system/technique potentially stigmatise or discriminate against people (e.g. based on sex, race, ethnic or social origin, age, genetic features, disability, sexual orientation, language, religion or belief, membership to a political group, or membership to a national minority)? | | 1) Detailed explanation of the measures set in place to avoid potential bias, discrimination and stigmatisation. |
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| 3. Does the AI system/technique interact, replace or influence human decision-making processes (e.g. issues affecting human life, health, well-being or human rights, or economic, social or political decisions)? | | 1) Detailed explanation of how humans will maintain meaningful control over the most important aspects of the decision-making process; 2) Explanation of how the presence/role of the AI will be made clear and explicit to the affected individuals. |
| 4. Does the AI system/technique have the potential to lead to negative social (e.g. on democracy, media, labour market, freedoms, educational choices, mass surveillance) and/or environmental impacts either through intended applications or plausible alternative uses? | | 1) Justification of the need for developing/using this particular technology; 2) Assessment of the ethics risks and detailed description of the measures set in place to mitigate the potential negative impacts during the research, development, deployment and post-deployment phase. |
| 5. Does the AI system to be developed/used in the project raise any other ethical issues not covered by the questions above (e.g. subliminal, covert or deceptive AI, AI that is used to stimulate addictive behaviours, life-like humanoid robots etc.)? | | Detailed explanation of how the potential ethics issues will be addressed and measures set in place to mitigate against ethics risks. |