

**Draft**  
**Humans and AI in impact assessment: demarcation statement**

**Collaboratively prepared by participants in “What Science and Whose Art?”  
Theme Forum session at IAIA25, Bologna**

**Preamble**

Most jurisdictions around the world practice impact assessment (IA) in accordance with basic principles, although detailed procedures vary according to legislation. IA critically examines potential consequences of proposals, to enable informed decision-making. It provides a framework for identifying and characterising potential impacts and for providing guidance about ways of avoiding, mitigating or managing adverse impacts.

We have over fifty years of practical experience to help us judge how best to respond to relevant changes in the operating context of IA, including the recent rapid rise and evolution of artificial intelligence (AI). It is timely for us to set out the respective roles of human practitioners and AI in the ongoing implementation of sound IA, based on common process stages.

**Screening** is the process of determining what level (if any) of assessment should apply to a proposal.

The **human impact assessor role** in screening is to select appropriate tools to consult and conclude on the level of significance.

The **AI role** in screening should be to augment human capacity by crunching data where that would increase efficiency but without the need for human wisdom.

**Scoping** is the process of defining the range of potential impact topics to be investigated through an impact assessment.

The **human impact assessor role** in scoping is to instruct AI and to make judgement calls on AI outputs.

The **AI role** in scoping can best add value by researching and summarising existing data to help identify potential valued components.

**Stakeholder engagement** is the process of engaging with stakeholders during the course of an impact assessment, including provision for two way feedback.

The **human impact assessor role** in stakeholder engagement is to conduct the engagement, with appropriate help from AI.

The **AI role** in stakeholder engagement can best add value by collating, summarising and (with caution) simplifying feedback.

**Project refinement and consideration of alternatives** is the process of developing a proposal from an initial concept through iterative refinements, having regard to inputs from engagement and from technical studies.

The **human impact assessor role** in project refinement and consideration of alternatives is to bring wisdom and discernment to determine what would be the best alternative, having evaluated evidence including AI outputs.

The **AI role** in project refinement and consideration of alternatives should be to propose, screen and refine different alternatives, bringing ideas and time savings. There must be caution in considering “previous learning” and the potential to guide towards an alternative or alternatives that are not appropriate because of lack of project context.

**Technical investigation - biophysical aspects** is the investigation and characterisation of aspects of the environment which could be affected, which can be measured quantitatively or described from objective findings of field studies (eg noise, water quality, biodiversity)

The **human impact assessor role** in technical investigations – biophysical aspects is to evaluate and judge outputs from AI and other data inputs.

The **AI role** in technical investigations – biophysical aspects should be to assist in tedious analysis work of large volumes of data and as a tool to expand baseline sourcing.

**Technical investigation - socio-economic aspects** is the investigation and characterisation of aspects of the social and economic environment which could be affected, which can be characterised by gathering or interpreting demographic, economic or social data including that gathered through targeted engagement with community members and organisations.

The **human impact assessor role** in technical investigations – socio-economic aspects is to validate and to ensure application of emotional intelligence and ethics. In particular, human IA practitioners should introduce new paradigms, identify gaps, seek new services and define criteria to assess data applicability.

The **AI role** in technical investigations – socio-economic aspects should be to facilitate the process by providing information and analysis. In particular, AI can help by ingesting and processing expansive, complex, verified datasets to extract information and annotating the correlation between technical data and socio-economic and health outcomes.

**EIS report writing** is the preparation of an integrated statement presenting the proposal and its impacts for the information and comments of stakeholders and for the consideration of decision-makers.

The **human impact assessor role** in EIS report writing is to write original material, review validity and accuracy of AIL-generated summaries, see gaps in logic, test

conclusions for sense, ensure, including through direction of AI, that relevant mitigations have been applied and apply final polish.

The **AI role** in EIS report writing should be to assemble a well-referenced first draft, drawing from baseline and specialist studies.

**EIS exhibition and access** comprises the mechanisms by which the EIS is publicised and made available for public review.

The **human impact assessor role** in EIS exhibition and access is to ensure clarity, empathy and accountability by explaining plans, listening to and addressing concerns, supporting offline access and validating AI outputs for accuracy.

The **AI role** in EIS exhibition and access should be to support accessibility by powering chatbots, translations and smart searches and by answering questions from the EIS. AI can rapidly identify audiences, produce explanatory materials, and design and distribute content in clear (and multiple) languages.

**Public participation** comprises the formal procedures by which the public can make submissions or be heard in relation to a proposal subject to impact assessment.

The **human impact assessor role** in public participation is to maintain an overview of the information going out to the public, and to ensure its quality. Humans must continue to conduct and lead public participation processes.

The **AI role** in public participation should be to assist a community to extract pertinent information relative to a proposal. AI can also support preparation of surveys and synthesising [collating?] data collected from the community. [AI could efficiently manage logistics of public participation, including registration of submissions and correspondence with submitters.]

**Informing decision-makers (assessment)** is the ultimate step at which a reviewer or assessor with legislative responsibility for doing so formulates a final assessment for the consideration of the proponent and decision-makers.

The **human impact assessor role** in informing decision-makers is to ask AI the correct questions, apply judgement and validate the final assessment advice.

The **AI role** in informing decision-makers should be to save time and resources by conducting broad spectrum analysis, gathering data from validated sources and reviewing compliance and consistency with laws, policies and other wider considerations.