

**TERMS OF REFERENCE FOR THE R&D PROJECT
LITD 30 “Artificial Intelligence, Sectional Committee”**

1. Title of the Project: Study of Impacts of Artificial Intelligence on Human Psychology

Duration of the project: 3 Months

2. Background:

- a) Bureau of Indian Standards (BIS) committee, LITD 30 “Artificial Intelligence” is the committee for standardization in the area of Artificial Intelligence and Big Data.
- b) Ethical and societal concerns are one of the factors to be considered while developing and using Artificial Intelligence (AI) systems and applications. These concerns are being considered while developing standards in this area. IS/ISO/IEC TR 24368:2022 ‘Artificial intelligence — Overview of ethical and societal concerns’ is one of such standards. IS/ISO/IEC TR 24368 has mentioned ‘psychological harm’ as one of the areas where there is an increasing risk for undesirable ethical and societal outcomes and harms.
- c) Every technology tends to affect our environment. Nature and nurture are two important aspects affecting and shaping psychology of Humans. Artificial Intelligence is an important factor for the nurture aspect of psychology whose impacts on human psychology needs to be examined.
- d) R & D project is proposed to study and find out impacts of AI on human psychology. The outcome of study would be helpful in providing guidance to developers of AI systems, applications and users of such systems. This guidance would help developers and users to mitigate the unintended impacts on Human Psychology.
- e) Based on the outcome of study, either standard IS/ISO/IEC TR 24368 would be revised or a new standard would be formulated to help in addressing the impact of AI on human psychology.

3. Scope:

- a) To study existing literature and summarize the impacts of Artificial Intelligence on Human Psychology.
- b) Comparative analysis, if studies have differing opinions w.r.t a specific impact.
- c) Recommended guidance in terms of actions required from AI system/application developers and users of such systems/applications to mitigate unintended impacts of Artificial Intelligence.

4. Deliverables:

- a) Study report covering all the aspects mentioned in the scope, including response to questionnaire of discussions.

5. Research Methodology:

- a) Literature survey:
 - i. research papers, existing studies carried out in this area (100 research papers, studies).
 - ii. standards developed by any other standard development organization (SDO)
- b) Focus group discussions with following and collect feedback, information through structured questionnaire:
 - i. AI systems, AI applications developers (100 such discussions with different developers)
 - ii. Users of AI systems, AI applications (50 such discussions with different groups)

6. Requirement for the CVs:

The individuals, organizations engaged in this project should have working knowledge, experience related to Artificial Intelligence, Human Psychology and managing ethical concerns.

7. Timeline and Method of Progress Review:

Timeline starts from the day of award of R&D project

Project initiation (Month 1): The project officially begins with a detailed review of existing literature for this project.

Data Collection and Mid Term review (Month 2): focus group discussions. Draft report is submitted for mid-term review to assess progress and adjust methodologies as necessary.

Report Submission (Month 3): Final project report is submitted.

8. Support BIS will Provide:

Guidance and access to existing relevant Indian and ISO/IEC standards.

Contact Details:

Sh. Kshitij Bathla, Sc-C, LITD (litd30@bis.gov.in)