

GOVERNMENT OF INDIA
MINISTRY OF SCIENCE AND TECHNOLOGY
DEPARTMENT OF SCIENCE AND TECHNOLOGY
RAJYA SABHA
UNSTARRED QUESTION NO. 2201
ANSWERED ON 06/08/2026

ALIGNING SCIENCE POLICY AND EMERGING TECHNOLOGIES

2201 SHRI SATNAM SINGH SANDHU:

Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

- (a) whether Government has formulated a coordinated national strategy to align science policy, funding, ethics and public communication across emerging technologies;
- (b) the mechanisms in place to ensure transparency, ethical oversight and citizen trust in scientific innovation;
- (c) the manner in which inter-ministerial coordination is being ensured across AI, healthcare, space and climate science domains; and
- (d) the details to challenges identified in achieving coherence between innovation, regulation and public accountability?

ANSWER

MINISTER OF STATE (INDEPENDENT CHARGE) FOR THE
MINISTRY OF SCIENCE AND TECHNOLOGY AND EARTH SCIENCES
(DR. JITENDRA SINGH)

(a) to (b): With the larger goal to align science policy, funding, ethics and public communication across emerging technologies, the Government has instituted multiple mechanisms to strengthen coordination among the stakeholders in the national science and technology ecosystem. The Anusandhan National Research Foundation (ANRF) has been set up as the apex body to provide coordinated strategic direction for scientific research and innovation in the country. The Sectoral Group of Secretaries (SGOS) on Technologies facilitates inter-ministerial coordination towards aligning technology initiatives with national priorities. In addition, apex advisory and oversight bodies such as the Prime Minister's Science, Technology and Innovation Advisory Council (PM-STIAC) and the Empowered Technology Group (ETG) play a pivotal role in guiding the formulation, convergence, and implementation of strategic interventions which includes oversight of technology missions, procurement strategies, and mechanisms for cross-sectoral coordination

The research and development proposals supported by the major agencies like DST, DBT, CSIR, ANRF, etc. are processed through transparent, competitive, merit-based peer review processes thereby promoting transparency, ethical oversight and citizen trust in scientific innovation. The project appraisals and monitoring are carried out independently through external Domain Expert Groups, external Monitoring Committees, and the updates on schemes/projects are shared on designated web portals. Further, as part of the coordinated approach to emerging technologies, the Government supports strategic science communication by translating complex scientific concepts into accurate, accessible, and evidence-based information for the public. Through targeted outreach, digital platforms, awareness campaigns, and stakeholder engagement, efforts have been made to enhance public understanding of

science and technology. These initiatives foster informed discourse and strengthen public trust in science and innovation, thereby complementing broader national efforts in science policy, research, and the responsible adoption of new technologies.

(c) to (d): Inter-ministerial stakeholder consultations are held regularly involving Office of the Principal Scientific Adviser (PSA) to the Government of India, NITI Aayog and other stakeholder Ministries/Departments for formulation of programmes, strategies across different domains of science and technology which aid in aligning research activities with national priorities, vision, goals and sectoral roadmaps. Various mission mode programmes at the national level are implemented on collaborative models involving multiple Ministries/Departments/Agencies demonstrating whole of the government approach. The ANRF under the Mission for Advancement in High-Impact Areas (MAHA) has launched mission-oriented programs in domains such as Artificial Intelligence for Science & Engineering (AI-SE), Medical Technologies (MAHA MedTech), and Water program bringing together stakeholders from multiple Ministries and sectors. These programs facilitate coordinated research efforts across AI, healthcare, space, climate science and other strategic areas through collaborative research consortia, shared infrastructure and industry participation.

Coordinated efforts are made at different levels to streamline the flow of data and knowledge across the stakeholders and also maintain coherence between innovation, regulation and public accountability. Further, the national policies like the National Geospatial Policy 2022 and the BioE3 Policy 2024 are designed to strengthen coherence by integrating innovation infrastructure, ethical/safety oversight and public communication from the outset.
