

Translation



The following draft Chinese policy document from 2021 lays out a basic framework for assessing ethical problems with scientific research. The policy calls for ethics reviews of research that potentially endangers human life, social stability, individual privacy, the environment, and, to lesser extent, animal welfare. A CSET translation of the final version of this document—which closely resembles this draft version—is underway.

Title

Guiding Opinions on Strengthening the Governance of Science and Technology Ethics (Draft for Feedback)

关于加强科技伦理治理的指导意见(征求意见稿)

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Source

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<https://www.most.gov.cn/tztg/202107/W020210728538739828898.docx>

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Guiding Opinions on Strengthening the Governance of Science and Technology Ethics

(Draft for Feedback)¹

Scientific and technological (S&T) ethics is the application of ethical thinking to scientific research, technology development, and other S&T activities. It is the value

¹ Translator’s note: The General Office of the Central Committee of the Chinese Communist Party (中共中央办公厅) and the General Office of the State Council (国务院办公厅) issued a final version of this document on March 21, 2022. Note, however, that the issuers of the final version downgraded it in authoritativeness from “Guiding Opinions” to merely “Opinions.” An English translation of the final *Opinions on Strengthening the Governance of Science and Technology Ethics* (关于加强科技伦理治理的意见) is available online at: <https://perma.cc/B9FS-XJ4C>.

concepts and behavioral norms that S&T activities must abide by, and an important assurance for the healthy development of S&T undertakings. The following opinions are put forward in order to further strengthen the governance of S&T ethics, effectively prevent ethical risks that S&T innovation may bring about, promote science and technology for good ends, and achieve a high level of S&T self-reliance (自立自强).

I. Overall Requirements

(1) Guiding ideology. Taking Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era as the guide, comprehensively implementing the spirit of the 19th Party Congress and the Second, Third, Fourth, and Fifth Plenums of the 19th Chinese Communist Party (CCP) Central Committee, and conscientiously putting into practice the decisions and arrangements of the CCP Central Committee and the State Council, we shall accelerate the construction of an S&T ethics system with Chinese characteristics, and improve the institutions and mechanisms of S&T ethics governance with multilateral participation and collaborative governance; adhering to the governance principles of unifying innovation promotion and risk prevention, and of combining institutional regulation and self-restraint (自我约束), we shall establish and improve a system of S&T ethics that is consistent with our national conditions and in line with international trends, and shape the cultural concept of tech for social good (科技向善), so as to make science and technology better benefit humanity, and promote the building of a community of common destiny for humanity (人类命运共同体).

(2) Basic requirements.

—Ethics first. Promoting S&T ethics requires that it permeate the whole process of scientific research, technological development, and other S&T activities, covering all fields of S&T innovation.

—Agile governance. Strengthen the early warning, tracking, and analysis of S&T ethics risks, and adjust governance methods and ethical norms dynamically in a timely manner, responding quickly and flexibly to the ethical challenges brought about by S&T innovation.

—Be firmly rooted in national conditions. Firmly rooted in the historical stage of China's S&T development and its social and cultural characteristics, and abiding by the underlying principles of S&T innovation, we shall establish and improve an S&T ethics system that conforms to China's national conditions.

—Open cooperation. Cooperative mechanisms with multilateral participation and collaborative governance shall be established to build consensus and form synergies. We shall adhere to the open development concept and actively advance global

governance of S&T ethics, contributing Chinese wisdom and Chinese solutions.

II. Clarifying S&T Ethics Principles

(1) Advance human wellbeing. S&T activities shall be conducive to promoting economic development, social progress, improving the people's livelihoods, and protecting the ecological environment, persist in people-centered (以人为中心) thinking, continuously enhance people's sense of gain, happiness, and sense of security, and promote the peaceful and sustainable development of human society.

(2) Respect the right to life. S&T activities shall respect people's right to life, and to the greatest extent possible avoid causing harm or potential threats to people's physical safety, physical health, and mental and psychological health. Human dignity and personal privacy shall be respected. Participants in S&T activities shall be guaranteed the right to know and the right to choose, so that they are fully informed and understand the risks and benefits involved, and can choose independently whether to participate or withdraw. Attention shall be paid to protecting laboratory animals.

(3) Persist in fairness and justice. S&T activities shall respect differences in religious beliefs, cultural traditions, etc., treat different social groups justly, fairly, and inclusively, and prevent discrimination and prejudice.

(4) Rationally control risks. S&T activities shall objectively assess and prudently deal with uncertainties and technology application risks, strive to avoid and prevent possible risks, avoid the misuse and prevent the abuse of S&T achievements, and avoid endangering societal security, public security, and biological and ecological security.

(5) Maintain openness and transparency. S&T activities shall establish mechanisms for the reasonable participation of stakeholders and the public, as well as mechanisms for the disclosure of S&T activities involving major and sensitive ethical issues. When announcing information on S&T activities, transparency shall be enhanced to ensure it is objective and truthful.

III. Construct a System for the Governance of S&T Ethics

(1) Improve the government's S&T ethics management system. The National Science and Technology Ethics Commission (国家科技伦理委员会) guides, coordinates, and promotes the construction of the national S&T ethics governance system, and is the highest advisory, review, regulatory, and organizational coordination body for S&T ethics. The Ministry of Science and Technology (MOST) is responsible for the day-to-day work of the Secretariat of the National Science and Technology Ethics Commission, and the member institutions of the National Science and Technology

Ethics Commission are responsible for the formulation of S&T ethics norms, review and regulation, propaganda and education, and other related work in accordance with the division of responsibilities. Local governments at all levels and relevant industrial main oversight departments (行业主管部门) are specifically responsible for the governance of S&T ethics in their respective localities and systems.

(2) Consolidate (压实) the main responsibility of innovation entities (创新主体) for S&T ethics management. Institutes of higher education, scientific research institutions, medical institutions, enterprises, and other work units (单位) shall fulfill their responsibilities as the main entities for S&T ethics management, establish regularized working mechanisms, strengthen the day-to-day management of S&T ethics, and actively assess and resolve the ethical risks of S&T activities in their own units in a timely manner. They shall establish S&T ethics (review) committees in their own work units according to the actual circumstances, and provide the necessary conditions and assurance for them to work independently. Institutions engaged in S&T activities such as those in life sciences, medicine, and artificial intelligence (AI), or whose research involves sensitive areas of S&T ethics, shall establish S&T ethics (review) committees.

(3) Give full play to the ethical self-discipline function of S&T community groups (社会团体). S&T community groups such as societies, associations, and research institutes shall cooperate extensively with institutes of higher education, scientific research institutions, medical institutions, and enterprises to strengthen propaganda and popularization of knowledge about S&T ethics, so as to raise public awareness of S&T ethics. They shall formulate and publish guidelines on S&T ethics, organize and mobilize S&T personnel to actively participate in the governance of S&T ethics, and promote industry self-discipline.

(4) Guide S&T personnel to consciously abide by S&T ethics requirements. S&T personnel shall take the initiative to learn about S&T ethics, enhance their awareness of S&T ethics, consciously practice S&T ethics principles, adhere to the bottom line of S&T ethics, and actively report and resolutely resist acts that violate S&T ethics requirements. The person responsible for an S&T project (topic) must carry out research in strict accordance with the scope of the S&T ethics review and approval, strengthen the ethics management of team members and the entire process of project (topic) implementation, and comply with provisions and be rigorously prudent when publishing, disseminating, and applying research results involving sensitive S&T ethics issues. S&T personnel engaged in S&T ethics review, assessment, consultation, etc. shall conscientiously perform their duties, promptly point out any S&T ethics risks and problems identified, strengthen guidance, and supervise and urge prevention.

IV. Improving the Governance System for S&T Ethics

(1) Refine S&T ethics norms and standards. We shall formulate S&T ethics norms and guidelines for key areas such as life science, medicine, and AI, study and formulate standards related to S&T ethics, improve the S&T ethics standards system, and clarify S&T ethics requirements, so as to guide and regulate S&T personnel to conduct S&T activities in a compliant manner.

(2) Improve the regulatory system for S&T ethics. We shall clarify the regulatory responsibilities for S&T ethics, and improve the regulatory process for S&T ethics and the regulatory rules for S&T ethics review, risk management, and handling of violations. We shall establish S&T ethics (review) committee establishment standards, operating mechanisms, internal control systems, etc. Certification by a certification body not approved by the Chinese government shall not be used as a standard or condition for evaluating, assessing, or funding S&T ethics (review) committees.

(3) Raise the level of the rule of law (法治化) in the governance of S&T ethics. We shall strengthen legislative research in key areas of S&T ethics, promptly upgrade important S&T ethics norms into laws and regulations, and strengthen accountability for conduct that violates S&T ethics requirements.

(4) Promote the construction of a theoretical system of S&T ethics with Chinese characteristics. We shall support relevant research institutions, think tanks, community groups, etc., in conducting research on the S&T ethics system, prospectively study the conflicts in rules and ethical challenges brought about by technological development, and actively promote and participate in the formulation of international S&T ethics rules and the international discussion of major issues.

V. Strengthening the Review and Regulation of S&T Ethics

(1) Strictly review S&T ethics. An ethical risk assessment or review shall be carried out in order to conduct S&T activities. S&T activities involving high ethical risks to humans or laboratory animals must be reviewed and approved by an S&T ethics (review) committee. A work unit that does not meet the conditions for establishing an S&T ethics (review) committee shall commission another S&T ethics (review) committee to conduct reviews. S&T ethics (review) committees shall adhere to the principles of scientific basis, independence, impartiality, and transparency in carrying out the review, supervision, and guidance of S&T ethics, so as to effectively grasp the relationship between S&T and ethics. Relevant work units shall establish and improve the quality control and evaluation and supervision mechanisms for S&T ethics reviews, and encourage their S&T ethics (review) committees to improve the quality and

efficiency of reviews. The establishment of professional S&T ethics review centers and regional S&T ethics review institutions should be explored. We shall gradually establish a mutual recognition mechanism for S&T ethics review results.

We shall establish and improve an emergency S&T ethics review mechanism for emergencies such as public health incidents, improve emergency review procedures, rules, etc., and incorporate the emergency S&T ethics review system and capacity building into the mechanism design and governance framework, so as to achieve rapid response.

(2) Strengthen oversight of S&T ethics. We shall accelerate improvement of the S&T ethics oversight framework, establish and improve S&T ethics oversight mechanisms for the entire process of S&T activities, and, for high-ethics-risk S&T activities in sensitive fields, strengthen dynamic tracking, risk assessment, and the emergency handling of ethics-related incidents. No work unit, organization, or individual may fund S&T activities that violate S&T ethics requirements. Science and technology plans (special projects, funds, etc.) established with government funding shall strengthen oversight of S&T ethics, covering all aspects such as preparation of guidelines, review and approval of project proposals, process management, project completion and acceptance, oversight and assessment, etc. The review and oversight of S&T ethics in international collaborative research activities shall be strengthened. The formulation of a list of high-ethics-risk S&T activities shall be studied. We shall explore establishing a public registration system for S&T ethics (review) committees and for projects (topics) with major ethical risks, and implement departmental oversight and supervision by society (社会监督).

(3) Early warning of S&T ethics risks. We shall establish a collaborative S&T ethics monitoring and early warning mechanism involving relevant departments, research institutions, community groups, enterprises, etc., to track and monitor cutting-edge developments in emerging technologies, analyze the S&T ethics risks they may bring about, and propose countermeasures.

(4) Strictly investigate and punish S&T ethics violations. No unit or individual shall carry out S&T activities that endanger societal security, public security, or biological and ecological security, cause harm to human life, physical and mental health, or personal dignity, or infringe on S&T activity participants' right to know or right to choose. Institutes of higher education, scientific research institutions, medical institutions, enterprises, etc., are the entities with primary responsibility for investigating and handling S&T ethics violations. They shall formulate and improve relevant investigation and punishment provisions of their work units, promptly and proactively investigate S&T ethics violations, and strictly hold violators accountable

and apportion blame in accordance with laws and regulations. Localities and industrial main oversight departments shall strengthen their guidance and supervision of the investigation and handling of S&T ethics violations in their respective localities and industries in accordance with their duties, powers, and affiliations.

The relevant industrial main oversight department, funding agency, or the work unit of the person responsible shall, distinguishing between different situations and in accordance with the law, impose punishments such as ordering the person responsible for the S&T ethics violation to stop the relevant S&T activity, recovering the funding, revoking rewards or honors received, canceling relevant professional certifications, restricting the person from undertaking or participating in government-funded S&T activities for a certain period or permanently, and prohibiting the person from engaging in relevant S&T activities for a certain period or permanently. If the person responsible for the S&T ethics violation is a public servant, they shall be punished according to laws and regulations; if they are a Party member, they shall be punished through Party discipline according to laws and regulations. Where a violation of laws and regulations is suspected, the case shall be transferred according to law to the supervisory or judicial authorities for handling.

VI. Strengthening S&T Ethics Education and Propaganda

(1) Emphasize S&T ethics education. S&T ethics education should be made a compulsory part of relevant undergraduate and postgraduate education, and S&T ethics education courses should be offered to educate young students so they establish a correct awareness of S&T ethics and comply with S&T ethics requirements. Mechanisms for training S&T ethics talent should be improved to accelerate the training of a high-quality, professional S&T ethics talent cadre with a background in both science and technology and ethics.

(2) Promote institutionalization of S&T ethics training. S&T ethics training should be integrated into activities of S&T personnel, such as new staff training, undertaking of scientific research tasks, and academic exchanges and seminars, to guide S&T personnel in consciously complying with S&T ethics requirements and conducting responsible research and innovation. Industrial main oversight departments, local governments, and relevant work units shall regularly carry out targeted training for members of S&T ethics (review) committees to enhance their ability to perform their duties and ensure the quality and efficiency of ethics reviews.

(3) Do a good job of S&T ethics propaganda. S&T ethics propaganda directed at the general public should be conducted to encourage the public to consciously raise awareness of S&T ethics and rationally deal with S&T ethics issues. S&T personnel

shall take the initiative to communicate with the public about the ethical issues in technological innovation. For scientific research that may bring about S&T ethics challenges due to differences in public perception, relevant work units and S&T personnel shall strengthen science popularization and guide the public to view such matters scientifically. The news media shall improve their S&T ethics literacy and report on S&T ethics issues in a scientific, objective, and accurate manner. Societies, associations, research institutes, etc., are encouraged to set up S&T ethics propaganda platforms to disseminate knowledge of S&T ethics.

VII. Organization and Implementation

Party committees and governments at all levels must attach great importance to the governance of S&T ethics, strengthen their bottom-line mindset (底线思维), refine and put into practice the work arrangements of the CCP Central Committee and the State Council on improving the S&T ethics system and strengthening the governance of S&T ethics, improve organizational leadership mechanisms, clarify the division of labor, and make solid progress, focusing on preventing major ethical risks brought about by technological innovation. Relevant industrial main oversight departments and localities shall regularly report to the National Science and Technology Ethics Commission on their work in performing their duties of regulating S&T ethics, and accept supervision.