Operation Guidelines for MOST Artificial Intelligence Innovation Research Center Program

Chapter 1 General Provisions

1. The Ministry of Science and Technology (hereinafter referred to as MOST) established these guidelines to create Artificial Intelligence (AI) ecosystem and build world-class AI innovation research centers, so as to attain the goals of developing cutting edge technology, training leading talents, enhancing the potentials for commercializing R&D results, and incubating AI startups.
2. Qualifications of applicant institutions (institutions that execute projects), Principal Investigators (PIs), and co-Principal Investigators (co-PIs): applicant institutions, PIs, and co-PIs, whose qualifications meet the Operation Guidelines for MOST Research Project Grants.
3. Program Period: the promotional period of this program is five years. Upon the expiration of the program, MOST may evaluate the outputs and efficacy generated from the program to plan a possible continuance and the next phase of the program for the excellent teams.
4. The categories of projects subsidized by these guidelines:
   (1) Research Project: The projects with research topics falling within the scope of this program which are under individual innovation research center. Such projects can be an individual research project or an integrated research project.
   (2) AI Innovation Research Center Project (hereinafter referred to as research center projects): the promotional projects which are planned to create world-class research centers.
5. MOST shall invite scholars and experts in relevant fields to form a review committee consisting of a number of members. One of the members shall be the convener and such position shall be reserved by MOST's Deputy Minister who supervises the program. All committee members receive no remuneration for their services.
   The tasks of the review committee include:

(1) Assist in making horizontal connections between research centers, guide and integrate the outcomes of this project, promote synergy and spread of the research outcomes.

(2) Assist in reviewing the implementation results of each research center, and supervise the scheduled progress of objectives and strategies.

(3) Assist in identifying research gaps, resource allocations, and then recommend projects for each research center.

(4) Assist MOST in planning, reviewing and recommending PI remuneration and evaluation of projects.

(5) Review other major matters related to this program.

6. In order to facilitate the program, MOST may establish a program office with the following roles and functions:

(1) Roles: Cooperate with and assist MOST in promoting this program and assisting each research center to achieve its goals and functions.

(2) Functions:

1) Assist with the request for proposals and review of research projects and research center projects.

2) Progress evaluation: assist in the management and progress control of the research projects and research center projects.

3) Activities and result promotion: plan and organize AI-related courses and seminars, then coordinate with each research center to promote results.

Chapter 2 Application and Review of Research Projects

7. This project consists of two phases: Concept Proposal and Project Proposal. The application procedures are as follows:

(1) Concept Proposal Phase

1) A PI should compile a concept proposal in accordance with the project application format via MOST's Academic Research Service Portal before sending the documents to an applicant institution. After an applicant institution examines and approves the application, it should be submitted to MOST by post, along with an application list and two copies of the declaration of qualifications of the principal investigator (including official electronic documents). Incomplete or unqualified documents will be rejected.

2) If the concept proposal is approved, MOST will send a notification letter to the applicant Institution for the submission of a complete project proposal.

(2) Project Proposal Phase

1) A PI should compile a project proposal in accordance with the project application format via MOST's Academic Research Service Portal before sending the application to an applicant institution. Once examined and approved by the applicant institution, the application should be sent to MOST by post (including official electronic documents). Late or incomplete applications will be rejected.

2) The project proposal should include an exit plan to be implemented upon the completion of the research project.

(3) A proposal cannot apply for the program if it has already been granted subsidies from MOST.

(4) If the concept proposal or the project proposal is not approved for subsidy, the applicant cannot file petition against such disapproval.

(5) For the new calls for proposals of each research center, if the review committee approves that the submission of concept proposal is not required, MOST may publicly announce the solicitation for project proposals directly.

8. The methods, criteria and processes for reviewing concept proposals:

(1) Review method: scholars and experts in relevant fields are invited to conduct reviews.

(2) Review Criteria:

1) Problems to be solved (including problem type, background, significance and impact level, etc.)

2) Promotion scheme (including the extent of PI's involvement in the project, training programs for doctoral students, plans for employing the core and full-time staff, cooperation targets, implementation methods, and the support of the institutions).

3) Complete scale and feasibility of the overall concept.

4) Expected outcome and efficacy (including technological achievements that can be widely used to benefit society, industries and the world; the potential of creating a world-class AI innovation research center, and the ability to attract investments for AI startups).

(3) PIs who are executing the projects in the AI fields of MOST's "Artificial Intelligence and Deep Machine Learning Program" and "R&D and

Applications for Digital Economy Technology and Innovation" are deemed as being pre-approved for concept proposal, and as such, may submit project proposals directly.

9. The methods, criteria and processes for reviewing project proposals:

    (1) Review method: The two-stage method (initial and secondary review) may be adopted. Scholars and experts in relevant fields are invited to conduct reviews.

    (2) Review Criteria:

    1) The feasibility of the project and the values of research and application (including the consistency between the project proposal and the concept proposal, and whether the proposal is modified in accordance with the review comments from the concept proposal).

    2) Implementation strategies of the project, such as implementation methods, planning of implementation schedules and checkpoints, expected results and milestones.

    3) The organizational structure of the implementation team, its members, and their qualifications, including professional competence and collaboration abilities pertinent to this project.

    4) The rationality of the funding request.

    5) Expected efficacy of the R&D and its resulting international competitiveness.

    6) Integrated research projects, in addition to the review criteria prescribed for individual research projects, have to include statements on the necessity for integration (overall goals, overall job delegation structure, and the relevancy and integration between each sub-project), manpower coordination (the coordination and leadership ability of the PI, professional competence and cooperative harmony between PIs of sub-projects), resource integration (the sharing status of various equipment between sub-projects, and research experience and exchange of ideas, etc.), the cooperation of applicant institutions or other agencies, and the expected comprehensive benefits after integration.

    (3) If the project is deemed inappropriate to be funded as an integrated research project after review, it may be turned into individual research projects to be reviewed upon the condition that its sub-projects are suitable to be implemented as individual research projects.

(4) The PI of an approved concept proposal should reference the relevant approved research topics of a research center, and discuss with the PI of the research center the possibility of inclusion of the project into the said research center. If no inclusion is found in a research center, the Program Office may assist in finding a match for the project. Applicants who do not wish to be incorporated into any research center with a relevant specific topic will not be accepted for individual project application.

Chapter 3 The Establishment, Project Review and Operation Management of a Research Center

10. The roles and functions of a research center are as follows:
    (1) Integrate its subordinate research projects, and become a world-class research center with cross-disciplinary, cross-departmental, and cross-country cooperation.
    (2) Develop cutting-edge technologies, and promote the dissemination of innovative applications.
    (3) Enhance Taiwan's AI research energy and train high-level R&D talents.
    (4) Build AI related data, platforms, and technologies. Strive to promote the contributions of research results to society and economy.
    (5) Facilitate international exchanges and research collaborations for subordinate research projects to enhance international academic and research influence.
11. The formation of a research center and the selection of its director:
    (1) After the review committee puts forward the suggested topics for research centers, MOST will publicly announce the call for proposals for research projects.
    (2) The university where a PI, who meets the criteria set forth in the provisions of Article 7 Paragraph 1 Item 2, or Article 8 Paragraph 3, works may submit the applications for research center projects. Each university may submit up to two proposals maximum; however, only one proposal may be approved for each university.
    (3) The research center project applications must meet the following conditions:
       1) The proposal must be in line with the topics as announced by MOST.
       2) The PI of the project must be a PI as delineated in the provisions of Article 7 Paragraph 1 Item 2 or Article 8 Paragraph 3.

3) The PI must compile and integrate the approved concept proposals, the contents of which meet the research center criteria.

(4) A research center project should be a comprehensive scheme, which references the nation's strengths in overall development and the expertise advantages of the integrated research projects, which must integrate resources of the school on and off campus, and which adopts a cross-disciplinary, cross-institution collaboration method with the goal of creating a world-class research center.

12. In principle, the total yearly subsidy for research centers is 10 percent of the totally yearly budget of this program. The subsidy amount for each research center shall be determined by MOST after an in-depth review made by the review committee in accordance with its implementation effectiveness, feature development, number of its subordinated projects and available funds.

13. The methods and criteria for reviewing project proposals of a research center:

(1) Review method: The two-stage method (initial and secondary review) may be adopted. Scholars and experts in relevant fields are invited to conduct reviews.

(2) Review criteria: The specific approach to achieving Article 10 research center's roles and functions, including:

1) Research center strategy and development priorities.

2) The target and strategic approach to establish an international research center of a specific topic.

3) Research center management and internal control mechanism.

4) Specific approach to integrate subordinated research projects, that brings forth research center synergy and influence.

5) Acquiring support from the university(including space, manpower, administrative resources, etc.) and resources from domestic and foreign industries.

6) Funding and manpower allocation.

14. Each research center shall formulate its operational management specifications, explain its development vision, positioning and tasks, organizational structure and operation approaches, and establish a research center steering committee to supervise the operation and management of the research center, so as to rally the research center in achieving its vision and mission. The operational management specifications of each research center should be submitted to MOST for future reference.

15. Each of the research centers may set up an advisory committee, whose makeup depends on its business requirements, to provide consultation, advice, communications and progress assessments pertinent to the business development of the research center and its subordinated research projects, so as to assist research centers with their internal integration and external connections and bring forth their overall synergy and influence.
Members of this committee shall not receive any remuneration.

Chapter 4 Efficacy Evaluation and Project Management

16. MOST conducts regular result evaluations on each research center project and each research project. All PIs must submit their implementation progress and results accordingly, and participate in result review meetings. If necessary, MOST will conduct on-site visits. A research center must also conduct self-evaluations on its subordinated research projects.
The key evaluation items are as follows:
(1) Project implementation direction and progress.
(2) Project output and efficacy; the extent of compliance with Article 10 research center's roles and functions, must also be included for research center projects.
(3) Funding and manpower status.
(4) The achievement of technological breakthroughs and their application value.
(5) The cooperation mechanism of the applicant institution and its administrative support.
17. According to MOST evaluation results, or if any one of the following circumstances exists during project period, MOST may adjust or reduce the approved subsidies and request to change the PI or adjust PI's remuneration. If any one of the following circumstances is severe or significant, MOST may terminate or revoke the contract.
(1) Delay of the implementation progress, or expenses of the project and failure to improve in time.
(2) Implementation of the project is inconsistent with the contract.
(3) The evaluation of the project has failed to achieve the expected results after project reviews, on-site visits, or audit reviews during the project implementation period.
(4) Breach of contract.

18. A research center must consolidate results of its subordinate research projects, and coordinate with MOST to conduct unscheduled result reporting, result dissemination, as well as application and promotion of project achievements.

19. Multi-year research center projects and research projects approved by MOST shall be implemented according to the approved schedules. The progress reports must be submitted via the MOST online portal two months prior to the end of the projects.

Chapter 5 Others Matters

20. To improve the overall results of the efforts made by this program and research centers, each center may solicit more research projects. The soliciting criteria and process procedures are as follows:

    (1) After MOST weighs and considers the yearly budgets and overall development directions of research centers, each research center shall take stock of the implementation status of its subordinate projects, and with the approval of its steering committee, submit new project solicitation criteria and related funding requirements to MOST.

    (2) After the review committee approves plans for new proposal solicitations submitted by research centers, MOST will consolidate all such solicitations and make a public announcement.

    (3) MOST shall ratify new projects after they have been reviewed and approved.

21. PIs, who are executing projects of the program during the project period, are not allowed to execute any other projects subsidized by MOST. However, such rule does not apply to projects which have overlapping periods shorter than three months. Further, if one of the following 3 conditions is met (and subject to MOST approval), the PI will be allowed to continue carrying out his/her research project to the end:

    (1) When the PI is involved in an academic-industrial research project or an international bilateral collaborative project, and when ending the involvement in these research projects could adversely affect the joint research results, or result in a loss of trust.

    (2) Research projects of which PI's positions are served by head of a university or an institution, or his/her agent, in the name of administrative representative.

(3) When the PI is involved in a research project led by a discipline chair or in other funded projects of great significance. MOST will decide whether to grant approval on a case-by-case basis.

22. If applicants' research projects fail to pass the approval review or PIs' existing projects are terminated due to the failure of performance review, they may apply for grants for other research projects of that year within two months upon the notice of MOST on the condition that they have not applied for MOST research projects of the year. Such application may be incorporated into MOST's batch review process.

23. Depending on actual requirements, research projects and research center projects may be eligible to apply for the following subsidies:

(1) Business fee: include research manpower costs, supplies, materials, books and miscellaneous expenses, as well as expenses for foreign visiting scholars.

1)   Principal Investigator (PI):

(i) Once a research project is approved by MOST, the PI remuneration will be dispersed during the project implementation period. In order to encourage PI to focus on the project, PI remuneration is set as NT$30,000 to NT$60,000 per month; such amount may be reduced due to poor evaluation of the project which is not subject to the NT$30,000 minimum amount per month.

(ii) The review committee shall invite the research center's director and CEO to jointly discuss the PI remuneration for a research project, while taking into consideration the project scale and complexity, project performance evaluation and overall planning of the center, then report their conclusions to MOST for future reference.

2)   The CEO of a research center and other full-time staff: A research center shall have a full-time CEO and employ other full-time staff as needed. The applicant institution shall measure the nature and scale of the establishment, job attributes of staff, comparable salary levels in private industry, supply and demand of professional talent in the market, and other relevant factors, to make salary payout according to a compensation schedule of its own devise. Wherein, the monthly salary for a CEO shall not exceed NT$300,000.

3) Full-time researchers, engineers, full-time assistants, and part-time assistants: shall be paid with remuneration in accordance with the institution's standards.

4) The labor and health insurance, insurance premium, labor pension (or relevant compensation upon resignation) for personnel as listed above shall be in accordance with relevant regulations.

5) Year-end bonus: shall be earmarked as 1.5 times of the monthly salary.

6) Expenses for research center's office space lease, repair and maintenance.

(2) Research Equipment Expenses: Various equipment that is necessary for and is directly related to the implementation of the project, where the unit price is NT$10,000 minimum and it has an expected service life of more than two years. MOST shall build a high-performance AI computing service facility under a separate scheme. In principle, the purchase of large AI computing equipment is not allowed for any project. If the PI deems it necessary, after project reviews made during the implementation period, to acquire additional computing equipment, the execution institution shall submit a request to MOST for its consent on the addition of said items, and the required funding shall, in principle, come from other subsidized items. However, if the cost for additional computing equipment acquisition falls under NT$300,000, the research conducting institution may process the expense in accordance with its internal administrative procedures without having to report it to MOST.

(3) Overseas Travel Expenses:

1) Travel expenses to foreign countries or mainland China, due to the requirements of implementing the research project. The types of overseas travel are limited to the following two items:

(i) Execution of international collaboration and off-site research:
The PI and relevant personnel involved in the research project are required to engage in collaboration with foreign researchers to conduct experiments, field studies, collect samples, or carry out off-site research at facilities abroad.

(ii) Participation in international academic conferences:
The PI and relevant personnel involved in the research project take part in an international academic conference in order to publish their

research papers, give a keynote speech or serve as the chair of the conference.

   2) Travel expenses incurred by the PI and relevant personnel while making specific visits and investigations abroad, as required, for the implementation of the research center project.

(4) Management Expenses: Expenses required by the execution institution for implementing the research project. The administration expenses shall be budgeted and spent by the execution institution in line with relevant government regulations. The maximum limit for the said expense is 15 percent of the total funding of the project.

24. Any surplus funds under the research center projects shall be fully returned.

25. Any matter not specified or mentioned in the Guidelines shall apply the Operation Guidelines for MOST Research Project Grants, its Funding Directives, and other relevant regulations.