Moonshot Agriculture, Forestry and Fisheries Research and Development Program

Project Manager

Application Guidelines

[Application Period]
May 11,2020 (Mon) - July 20,2020 (Mon) 12:00(Japan time)

[Note]

- All applications for this project must be submitted via the Cross-Ministerial R&D Management System (e-Rad). (We do not accept submissions by post, in person, or via email.)
- Applicants must register their research institutes and researchers prior to access to e-Red. Both representative organizations and joint research institutes must obtain a research institution code and researcher numbers.
- Make sure to allow at least two weeks for the registration process, as it may take a few days.

May, 2020

Bio-oriented Technology Research Advancement Institution
(BRAIN)

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Bio-oriented Technology Research Advancement Institution (hereinafter referred to as the "BRAIN") supports R&D of bio-oriented technologies by private companies, universities, national R&D corporations, prefectural laboratories, and local independent administrative agencies. BRAIN will carry out the "Moonshot Agriculture, Forestry and Fisheries Research and Development Program" (hereinafter referred to as the "Program") under the Moonshot Research and Development Program.

We are looking for project managers (PMs) for the Program to be responsible for R&D project (hereinafter referred to as the "Project") aimed at the implementation of the R&D plan elaborated by the Ministry of Agriculture, Forestry and Fisheries (hereinafter referred to as "MAFF") defining the fields and areas in which ambitious R&D should be promoted (hereinafter referred to as the "R&D Plan") to achieve Moonshot Goal 5 "Creation of industry that enables sustainable global food supply by exploiting unused biological resources by 2050", one of the six moonshot goals (hereinafter referred to as the "MS Goals") set by the Council for Science, Technology and Innovation (hereinafter referred to as the "CSTI").

If you wish to be considered for the Program, follow the present Guidelines and submit Exhibit 5: Project Plan Proposal.

1. Project Overview

(1) Background and Purpose

With the aim of creating disruptive innovations in Japan, CSTI has made the decision to promote ambitious R&D (moonshot) based on bold ideas that go beyond the extension of conventional technologies.

BRAIN will set up a fund under the Moonshot Research and Development Program as a research promotion corporation conducting operations related to such R&D and promote ambitious R&D aimed at the implementation of the R&D Plan elaborated by the MAFF to achieve the MS Goals set by CSTI.

(2) Program Description

The Program will conduct R&D combining various research ideas based on the R&D Plan elaborated by MAFF to achieve the MS Goals set by CSTI.

Described below are the MS Goal and the R&D Plan of the Program:

① MS Goal

The goal of the Program is "Creation of industry that enables sustainable global

food supply by exploiting unused biological resources by 2050". See Exhibit 1 for details.

② Research and Development Conception

The Research and Development Conception describes the R&D expected to be conducted and its direction towards the achievement of the MS Goal. See Exhibit 2 for details.

(3) Project Period

The period would be generally five years and maximum ten years, starting from 2020. Depending on the results of the evaluation of the third year, the Project may be modified (accelerated or decelerated) or terminated. In addition to the evaluation in the third year counting from 2020, the evaluation will be performed in the fifth year and when deemed necessary by the PD. In any case, depending on the results of the evaluation, the Project may be modified (accelerated or decelerated) or terminated. If the Project are to continue for more than five years, they may continue for a maximum of ten years. Note, however, that CSTI will decide whether to continue or terminate the R&D program aimed at the achievement of the MS Goals in the fifth year (FY 2024) after the beginning of the research.

(4) Budget and Project Sizes

No limit will be set on the budget per Project, but we would recruit several PMs. The budget for the Program would be 5.1 billion yen for the first five years of the research beginning in May 2020.

2. Project Promotion Framework

(1) Roles of BRAIN

BRAIN is responsible for the implementation of the Plan aimed at the achievement of the MS Goals, and plays the following roles as its main functions:

① Appointment of a person deemed qualified as the PD. It may also appoint a sub-PD (or sub-PDs) to assist the PD if necessary.

② Acceptance of applications and recruitment of several PMs upon consultation with the PD.

③ Determination of a management plan (hereinafter referred to as the "Portfolio") summarizing the structure (combination) of Project constructed by the PD and policies for the allocation of resources.

④ Provision of instructions to PMs to develop a project plan under the direction of the PD.

⑤ Collection and analysis of information on domestic and international R&D trends and issues related to the social implementation of R&D results. The collection and analysis of

information will incorporate the opinions of external experts including researchers in the humanities and social sciences.

⑥ Acquisition of information from the PD and PMs on the progress of Project, the adequacy of the allocation of research funds and the review of the recipients of the allocation, and the appropriateness of the division of roles between the public and private sectors in accordance with factors such as the progress of R&D, as well as the presentation of an annual report on these to the Strategy Council (provisional name) to be established by the Cabinet Secretariat and the Cabinet Office.

⑦ Provision of support in intellectual property management, international standardization, public relations, research on technology trends, etc. to facilitate appropriate management by the PD and PMs. In addition, promising Project (or part of Project) will be identified at an early stage in terms of social implementation of R&D results to gain professional assistance if necessary in setting a concrete path toward social implementation in an effective manner. BRAIN will also provide support to facilitate interactive communication activities (dialogue on science and technology with the public) in which the PD and PMs provide the public with a clear explanation on their research activities to gain public understanding and support.

⑧ Since support for cross-cutting issues such as ethical, legal, and social issues (ELSI) and mathematical science is also important for the acceleration of R&D as well as social implementation, BRAIN will organize a session for the PD and multidisciplinary researchers to exchange opinions, and is required to establish a system that allows PMs to receive support from multidisciplinary researchers if the PD deems support from a multidisciplinary researcher necessary for a PM and the PM also requires the support.

⑨ Management of the data catalog consisting of the metadata submitted by the PM and researchers through the research data infrastructure system to promote advanced data management.

(2) Roles of the PD

BRAIN has appointed Kazuhiro Chiba, President of Tokyo University of Agriculture and Technology, as the PD aiming at the achievement of MS Goals and the implementation of the R&D Plan.

PD plays the following main roles:

① Strategic creation of a Portfolio as well as ambitious and systematical promotion of R&D to achieve MS Goals and implement R&D Plan.

* Portfolios should be created reflecting the innovative nature and originality of R&D as well as economic and social repercussions.

② Maintenance of knowledge about the progress of R&D based on the Portfolio, review of the Portfolio according to the progress of the research, and provision of unified guidance and supervision to the PMs in charge of the management of their Projects.

③ Conduct of review of Portfolios based on evaluations and advice from external experts.

(3) Roles of PMs

The PM is authorized to move forward with Project.

A PM is responsible for the entire Project and required to manage each Project under his/her own direction by incorporating different knowledge and ideas in the basic research stage and engaging in challenging research without fear of failure.

Listed below are the principal roles of PMs:

① Formulation of project plans (establishment of project goals, creation of R&D descriptions and the implementation schedule, construction of the implementation framework, development of plans for the allocation of research funds to research institutes participating in projects) and strategic implementation of Project. They are also required to be able to make agile and flexible changes of direction including modification of Project and separation and independence of some research results.

② Appropriate management of intellectual property and information to actively and strategically promote international cooperation.

③ Objective evaluation of research to identify R&D research and development at a stage where the use of private funds is effective as well as the conduct of the search for potential private companies while seeking to use private funds. PMs also have the responsibility to conduct interactive communication activities (dialogue on science and technology with the public) to provide the public with a clear explanation on Project.

④ Formulation of a data management plan (DMP) to define the scope of data to be managed, as well as the aggregation of the metadata of the managed data from researchers based on the DMP and its submission to the research promotion corporation. The research data infrastructure system will also be used to store and share the managed data to the extent necessary.

* For more information on the above (1) to (3), see Exhibit 3: Guidelines for the Operation and Evaluation of the Moonshot R&D Program

(4) Roles of the Board of Trustees

BRAIN will establish an evaluation system for external experts to conduct an external evaluation.

In principle, the external evaluation will be conducted in the third and fifth years after the beginning of the research, and in the eighth and tenth years if it is to continue for more than 5 years.

BRAIN may accelerate the predetermined evaluation period based on the progress of projects.

BRAIN will conduct self-evaluation every year (excluding the years in which external

evaluation is performed) based on the evaluation criteria specified separately, and report the results to the Strategy Council (tentative name) and MAFF.

(5) Roles of Operational Management Committee

MAFF will set up an Operational Management Committee within BRAIN to facilitate the implementation of the Programin accordance with its purpose.

The roles of the Operational Management Committee are as follows:

① Selection of PD and PM candidates, nomination of members of groups such as committees that evaluate Project, and specification of agenda items

② Approval of candidates and the criteria for the selection of PD and PM candidates

③ Approval of Portfolios (drafts)

④ Approval of the criteria for the evaluation of Project

⑤ Guidance and supervision based on evaluation results

3. Application Requirements

(1) Research Implemementation System

Applicants must propose a Project to be carried out in a research group consisting of multiple research institutes (hereinafter referred to as a "Research Group") with the research institute to which they belong as the representative organization.

Note, however, that since the PD will formulate the Portfolio before the establishment of the commission agreement after a candidate is recruited as a PM, the research implemementation system may be subject to change.

(2) Requirements for PMs

Applicants are required to be capable of fulfilling all the roles described in the above 2 (3) Roles of PMs. Applicants can be of any nationality, but they must be based in Japan after being appointed as a PM.

(3) Requirements for Representative Organizations

Applications must be submitted under the names of applicants and the organizations to which they belong (hereinafter referred to as “Representative Organizations”).

Representative organizations must meet the following requirements from ① to ⑥:

① To be a research institute (*) with legal personality, such as a private company, technology research association, public-benefit or general corporation, national R&D corporation, university, local government, non-profit corporation, or cooperative association.

(*) A research institute refers to an institution with legal personality established in Japan and meets the following two conditions:

(i) Possession of a research system, researchers, equipment etc. for conducting

R&D.

(ii) Establishment of a capacity and system to manage administrative tasks related to intellectual property.

② To be qualified to compete for the selection by MAFF(qualification for all ministries and agencies) in the Service Provision (Investigation and Research) Sector in FY 2019, 2020, and 2021.

Candidates who are not eligible to participate in the competition when submitting a proposal must be qualified before signing the commission agreement (scheduled for around December in 2020). Since it takes some time to obtain the qualification, make sure to apply for eligibility immediately after submitting the proposal. If a successful candidate fails to obtain the qualification, the decision to recruit the candidate will be withdrawn. It is not necessary for local governments to apply for the qualification.

・Website for application for qualification and procurement information search (https://www.chotatujoho.go.jp/va/com/ShikakuTop.html; in Japanese)

③ To be able to agree to the commission contract presented by BRAIN to establish a commission agreement.

④ Have legal personality in Japan and have their base of operations in Japan.

⑤ Have an appropriate management system established for the execution of project expenses (including cases where system development is confirmed), such as an accounting system to facilitates separate accounting, the appointment of an accounting manager, and confirmation of the execution of expenses by several persons.

⑥ Have the ability and system established to smoothly carry out coordinating operations such as dissemination of research results and coordination with joint research institutes.

(4) Requirements for Research Groups

Research Groups must meet the following requirements:

① All institutions participating in a Research Group must agree to organize the Research Group and conduct joint research.

② Research Groups must be able to perform one of the following before signing a contract with BRAIN:

(i) Development of regulations regarding the research project to be implemented (regulation method).

(ii) Mutual agreement between the participants in the Research Group on the research project to be carried out (agreement method).

(iii) Establishment of a joint research agreement (joint research method).

If, after a candidate is selected as a PM, a significant change such as a major change in the participating research institutes that constitute the Research Group is made before the establishment of the agreement, the decision to appoint the candidate as a PM may be

revoked.

Research Groups may be changed as the result of the creation of Portfolios after the appointment of PMs, but they should be prepared for the establishment of a consortium in advance to be able to submit the necessary documents including the terms for the establishment of the consortium.

③ In addition to complying with the "Policy on Intellectual Property in Agriculture, Forestry and Fisheries Research" (determined by the Agriculture, Forestry and Fisheries Research Council in February 2016), Research Groups are required to prepare an agreement on the basic treatment of intellectual property (hereinafter referred to as "Intellectual Property Rights Agreement") in accordance with the commission agreement in relation to the basic policy on the treatment of intellectual property at the initial stage of research, establish an Intellectual Property Steering Committee, formulate an intellectual property rights policy (hereinafter referred to as "Policy on Acquisition of Rights") to specify the policy regarding the acquisition of rights to research results, their confidentiality, disclosure of these through publication of academic papers and adjustments regarding decisions on standardization and licensing, to manage intellectual property. (See 11 (1) Intellectual Property Management for details.)

④ The financial status of the research institutes constituting a Research Group must be stable. If the financial situation is determined to be extremely unstable, the R&D institution may be removed from the Research Group.

(5) Requirements for Joint Research Institutes

Joint research institutes other than representative organizations participating in a Research Group must meet the following requirements:

① Have the ability and system established to carry out appropriate management and operation in conducting relevant research.

② Have the ability and system established to smoothly carry out research and mutual adjustment with relevant organizations.

③ From the perspective of appropriate management of implementation, foreign research institutions participating research must have a contact or an agent in Japan capable of handling paperwork related to commissioned research

(6) Collaborators

Collaborators are third parties whose cooperation is required for the implementation of a research project. Since collaborators are different from the members of a Research Group, they are treated as follows:

① Research finds will not be allocated directly to collaborator. Necessary expenses will be paid by representative organizations or joint research institutes in the form of outsourcing, requested business trips, awards, etc.

② Collaborators cannot own patents related to research results. Provided, however, that collaborators shall be allowed to share intellectual property with representative organizations or joint research institutes only in cases where the representative institution or a joint research institute specifies the reason for adding a collaborator as a joint applicant, which must be approved by BRAIN, a joint application agreement stipulating the protection of confidentiality and the compliance with the treatment of intellectual property rights prescribed in the commission agreement is signed between the collaborator and the representative organization or a joint research institute, and the agreement allows the joint application within the Research Group.

③ Since collaborators do not carry out research projects, they cannot present the results of research projects alone. However, collaborators may present such results with the members of the Research Group as long as the members provide the reason for the joint presentation.

④ Collaborators are subject to neither the provisions of the commission agreement between BRAIN and Research Groups nor confidentiality obligations. However, collaborators are in a position to know the purpose, details, and results of research as they participate in the review sessions run by the Research Group of the contractor. It is necessary to set forth confidentiality in the agreements or Intellectual Property Rights Agreements established for each Research Group to prevent divulgation of results.

4. Expenses Covered by Commission Expenses

(1) Commission Expenses

Expenses that can be recorded as commission expenses (research expenses) are as follows:

1） Direct expense:

The following expenses directly required for carrying out research, compiling research results, and conducting and providing support for the dissemination of dialogues on science and technology with the public:

① Cost of supplies (equipment and consumables)

② Labor costs and rewards

③ Travel expenses

④ Other expenses (outsourcing, printing and binding, conferences, communication and transportation, utilities, overheads, and consumption tax equivalents)

The above expenses needs be classifiable as directly necessary expenses in accounting terms.

2) Indirect expense (*)

Expenses other than those that should be classified as direct expenses and indirectly required by research institutes in relation to the conduct of research spent to support research such as maintenance and operating costs for facilities of administrative

departments, research departments, and other relevant business departments. The indirect cost rate can be recorded up to the amount equivalent to 10% to 30% of the total direct expenses (the ratio varies with each research institute).

*1 For more information on indirect expenses, see the “Common Guidelines for Execution of Indirect Expenses of Competitive Funds” (Agreements on Competitive Funding at the Liaison Conference of Relevant Ministries and Agencies on April 20, 2001, in Jpanese)
(https://www8.cao.go.jp/cstp/compefund/shishin1_tekiseisikkou.pdf).

*2 Expenses that can be recorded as direct expenses are those that are classifiable in accounting terms as directly necessary for the conduct of commissioned research and the compilation of research results. Be especially careful when including costs of consumables, utilities, fuel, etc. Since labor costs and wages are calculated based on the number of hours directly engaged in commissioned research, make sure to keep a record of the hours worked by all research staff engaging in the commissioned research to facilitate the grasp of the working arrangements for commissioned research as well as effort management (management of the actual working arrangements for commissioned research). As for travel expenses, keep record of business trip requests and reports to demonstrate the relevance of the business trips to commissioned research.

*3 The equipment costs included in the cost of supplies are limited to the items to be used in research projects of the Program with an estimated usable period of at least one year and an acquisition price of 100,000 yen or more. However, if the cost of research can be reduced by renting, a financing lease, or an operating lease as compared to purchasing, select the most economical method. In a finance lease, the lease will be paid for in equal monthly installments during lease contract period which will be equal to or longer than the statutory useful life, and payments for the lease term exceeding the period of commissioned research will be made at the participating institute’s own expense.

*4 Expenses necessary for the acquisition of rights to the results obtained through the Program, such as patents (expenses for patent applications, request for examination of application, amendments, trials, etc.), can be included in direct expenses. However, the cost of registration and maintenance will be borne by the Trustee.

(2) Attribution and Management of Purchased Equipment

The ownership of supplies such as equipment purchased by all institutions constituting a consortium (hereinafter referred to as the “Trustees”) under the commission agreement belongs to the Trustees during the period of agreement. The Trustees must manage these supplies such as equipment with the care of a good manager during the period of commissioned research. After the completion of the commissioned research, they may continue to use the equipment free of charge for a certain period of time upon application,

provided that such equipment is used for research purposes. BRAIN will inform the Trustees of the details at the end of the commissioned research period.

At the same time, the supplies such as equipment purchased under the commission agreement must be registered in a management record, while a sticker must be affixed to the items to indicate that they were purchased for the Program.

5. Process from Application to Commission Agreement

May 11, 2020 (Mon)	Public announcement of recruitment guidelines.
July 20 (Mon) 12:00(Japan time)	Closing date for receipt of applications.
Early August	Document screening.
Late August	Interview screening.
Mid-September	Selection/announcement of selected PM.
September–November	Determination of R&D project details (Within 3 months, as a general rule).
December	Establishment of Commission Agreement

(Note) The schedule may change, depending on the progress of COVID-19 pandemic and the state of screening, etc. Immediate notification will be made via the website of the Bio-oriented Technology Research Advancement Institution if further changes will be made.

6. Application Procedures

(1) How to Apply

Use the Ministries of the Cross-Ministerial R&D ManagementSystem(hereinafter referred to as “e-Rad”; https://www.e-rad.go.jp/en/ (see Exhibit 4) to apply. Applicants should summarize the content of the research to be conducted by the Research Group and apply.

You need to register the information of your research institute and all the researchers involved in the proposal to use e-Rad. Make sure to allow at least two weeks for the registration process, as it may take several days. If you have already registered for a program or project under the jurisdiction of another ministry or agency, you do not need to register again. (Contact the help desk of e-Rad for details.)

To apply, you need to have your application information (Note) approved by the administrative representative of your research institution on e-Rad. Note that your application information will not be submitted to BRAIN unless it is approved by the administrative representative within the application period. For further information on the procedures required to use e-Rad, visit the e-Rad portal.

(Note) Application Information

In e-Rad, the information included in the “Application File", which contains the

basic research information, information on research institutes, application status, entered by the applicant, as well as the application form specified by BRAIN, are collectively referred to as “Application Information”.

(2) Application Period

The application period for the Program is from May 11, 2020 (Mon) to July 20 , 2020 (Mon) at 12:00 p.m (Japan time). The system is available from 0:00 to 24:00 on both weekdays and holidays.

It is also available during the above hours on public holidays. However, the system operation may be suspended when maintenance or inspection is performed during the above available hours.

We will notify you in advance on the portal site when operations are going to be suspended.

(3) Application Form

Fill out Exhibit 5: Project Plan Proposal in accordance with the present Guidelines to prepare a proposal.

Download the application form from our website (https://www.naro.affrc.go.jp/laboratory/brain/moon_shot/public_call_for_project_manager/index.html). Confidentiality of the information submitted will be maintained. We also impose a duty of confidentiality on the committee members who conduct the screening.

In principle, application forms will not be used for any purpose other than screening. However, approved proposals may be used for the evaluation of Project and follow-up studies on the results of research conducted by BRAIN.

Unsuccessful applications will be discarded at BRAIN.

(4) Note on Application

① Applications submitted after the deadline for the Program will not be accepted.

② No other application form than the one specified in the present Application Guidelines will be accepted.

③ Applications submitted by any other method than by using e-Rad (e.g., by post, facsimile, or e-mail) will not be accepted.

④ Applications not meeting the application requirements or submitted with an incomplete application form will not be considered.

⑤ Application information files cannot be modified after the application period has ended.

⑥ Applicants are responsible for all costs associated with the application.

⑦ Note that applications will be invalid in the following cases:

(i) If the proposal is submitted by a person who is not eligible to apply

(ii) If the proposal is flawed and the applicant is unable to modify it by the specified deadline after being requested to revise the proposal

(iii) If the proposal is found to be false

7. Handling of Conflicts of Interest

Since the PD and sub-PD are responsible for the selection of PMs as well as the creation and management of Portfolios, they are not allowed to participate in the program as PMs or researchers. In the meantime, since it is not appropriate to judge conflicts of interest between the PD, sub-PD, and PMs based on uniform criteria and consequently prevent them from combining Japan's top-level R&D capabilities and different knowledge, conflicts of interest between the PD, sub-PDs, and researchers in the Portfolio to be created by the PD will not be excluded from the implementation framework based on uniform criteria. Appropriate decisions will be made on their participation based on the necessity, reasonability and adequacy of the relationship.

Note that parties not listed in the form may also be considered as stakeholders.

Parties falling under any of the following categories from ① to ⑥ are considered as stakeholders:

① Those who belong to the same department (faculty, research area, etc.) as the PD in the same private company, university, national R&D corporation, or other research institutes.

② Those who have kinship ties with the PD.

③ Those who are in a direct competitive relationship with the PD.

④ Those who are in a close collaborative relationship with the PD.

⑤ Those who are in a close mentoring relationship or direct employment relationship with the PD.

⑥ Any other cases where the relationship is inappropriate by the director in making a fair judgment.

Conflicts of interest between PMs and researchers belonging to joint research institutes will not be excluded from the implementation framework based on uniform criteria of interests. Appropriate decisions will be made on their participation based on the necessity, reasonability and adequacy of the relationship.

Note that parties not listed in the form may also be considered as stakeholders.

Parties falling under any of the following categories from ① to ⑥ are considered as stakeholders:

① Those who belong to the same department (faculty, research area, etc.) as PMs and researchers belonging to joint research institutes in the same private company, university, national R&D corporation, or other research institutes.

② Those who have kinship ties with PMs and researchers belonging to joint research institutes
③ Those who are in a direct competitive relationship with PMs and researchers belonging to joint research institutes
④ Those who are in a close collaborative relationship with PMs and researchers belonging to joint research institutes
⑤ Those who are in a close mentoring relationship or direct employment relationship with PMs and researchers belonging to joint research institutes
⑥ Any other cases where the relationship is inappropriate by the director in making a fair judgment.

If it is not possible to determine whether or not there is a conflict of interest, applicants may be asked to provide additional information.

8. Selection of PMs

(1) Selection Method

PM will be selected by the Board of Trustees based on (2) Screening Criteria. Applicants may be asked to submit additional materials in addition to their proposals for screening if necessary.

The screening process will not be made public and we will not be able to respond to inquiries regarding the progress of the screening. Stakeholders related to the content of the proposal are to be excluded from the screening of the proposal.

The names and affiliations of the members of the Board of Trustees will be announced on the website of BRAIN after the contractor is determined. However, the details of the screening will not be made public to protect personal information and intellectual property information included in the proposal.

Note that research institutes that are deemed by the Board of Trustees to be inappropriate to undertake commissioned research under the Program may be removed from the Research Group.

(2) Screening Criteria

Proposals will be screened based on the following criteria:

a. Have a broad personal network of relevant domestic and international researchers etc. and specialized knowledge for the promotion of cutting-edge R&D
b. Have management and leadership capabilities to build an optimal R&D system and review the system flexibly according to the progress made.
c. The goals and content of the Project proposed by PMs (hereinafter referred to as the "Proposed Content") are based on bolder ideas and more challenging and innovative compared to the conventional ones, and are expected to have a significant impact on the

industry and society in the future.

d. Clearly explain a reasonable scenario (hypothesis of success) from a technological perspective and in terms of social implementation including the division of roles between the public and private sectors to achieve the goal set for 2050.

e. The Proposed Content brings together both domestic and international top-level R&D capabilities, knowledge, and ideas.

f. Each participating organization has a policy on the management of intellectual property and a management system with departments and officials in charge.

g. The budget plan for Project is adequately prepared without excess or deficiency.

h. The proposal includes on the participation of many young researcher (under 40) (subject to additional points).

In consideration of the importance of research integrity, assurance of the transparency and integrity of research, appropriate handling of research results, and management of information will also be considered.

(3) Screening Process

In principle, there are two stages of screening: screening of documents and interview.

① Screening of application documents

The members of the Board of Trustees will examine proposals and applications in accordance with the above (2) Screening Criteria, and based on the results of the examination, they will select the proposals to be passed on to the next stage.

② Interview

Applicants whose proposals are selected in ① will be interviewed, and the Board of Trustees will select the proposals to be approved.

③ Selection of PMs

BRAIN will check the proposals selected in ② for duplicate applications. The result of the selection will be determined based on the deliberation ,etc of the Operational Management Committee of MAFF, and the research institute to which the PM belongs will be selected as the contractor of the Program.

(4) Notification of Screening Results

Applicants will be notified of the results of the screening of application documents and interview, and the application numbers given to applicants when they submit their proposals via e-Rad will be posted on the website of BRAIN.

Applicants whose proposals are rejected at the interview stage will be informed of the reason for the rejection when they receive the result.

To protect the applicants' trade secrets and intellectual property information, we will not respond to any inquiries regarding the screening process.

Applicants whose proposals are approved at the interview stage will be informed of modifications required to be made to conduct research if necessary when they receive the result. Selected PMs will be responsible for revising the Proposed Content under the direction of the PD to make the necessary modifications. Note that a commission agreement will not be signed with PMs who fail to perform necessary modifications.

9. Refinement of R&D Project

Under the direction of the PD, recruited PMs will brush up (review and embody) the content of the Project proposed upon submission of the application, including scenarios for achieving the MS Goals, project plans, joint research institutes and collaborators (added or removed), and research funds.

Once Project have been refined, and the creation of Portfolios, the establishment of a consortium, and the contract procedures are completed, commissioned R&D is ready to be implemented.

10. Establishment of Commission Agreement

(1) Establishment of Commission Agreement

A commission agreement will be established directly between the representative organizations selected in accordance wit the procedures specified in 8 and BRAIN. See Exhibit 6 for more information.

Prior to the establishment of agreement between a representative organization and BRAIN, the representative organization must establish a consortium by either development of regulations regarding the commissioned research to be implemented (regulation method), mutual agreement between the participants in the Research Group on the commissioned research to be carried out (agreement method), or establishment of a joint research agreement (joint research method).

If it is deemed to be difficult to conduct research due to exceptional circumstances of the members of the contractor during the period between the selection of the contractor and the establishment of agreement, it is possible to change the contractor of the commissioned agreement.

(2) Commission Period

The start date of the commission period of the Program is the date on which BRAIN receives the commissioned experiment and research plan (outline of the project plan) attached to the commission agreement after the refinement of Project has been completed. The representative organization to which PMs belong may set back the start date of the commission period to a maximum of three months during the period of the R&D project (or the date of the notification of selection if the submission of the commissioned experiment and research plan is submitted within three months of the date on which the application

result is communicated), and R&D expenses incurred after the start date of the commission period can be recorded as research expenses before the date on which the agreement is established. Note that in this case, if the offer of the position of PM is conditional, the research must meet the conditions specified, and if the research does not result in the establishment of an agreement, the contract institution will be responsible for its own expenses.

(3) Review and Cancellation of R&D Project

The content of research may be reviewed and R&D may be suspended in the middle of its course.

For details on the establishment of a commission agreement, see the "Guidelines for the Implementation of Commissioned Research: Administrative Procedures".

11. Intellectual Property

To ensure the success of R&D and the realization of the national interest through the practical application and commercialization of the results, as well as to secure incentives to encourage the participation of outstanding human resources and institutions, BRAIN will not, in principle, take over intellectual property rights of the research results obtained by domestic institutions from the Trustees in accordance with the Japanese version of the Bayh-Dole Act (Article 17 of the Industrial Technology Enhancement Act).

(1) Intellectual Property Management

In addition to being based on the "Policy on Intellectual Property in Agriculture, Forestry and Fisheries Research" (determined by the Technology Council of Agriculture, Forestry and Fisheries in February 2016), an agreement on the basic treatment of intellectual property (hereinafter referred to as "Intellectual Property Rights Agreement") in accordance with the commission agreement in relation to the basic policy on the treatment of intellectual property within the consortium at the initial stage of research must be prepared and agreed (see Exhibit7). If a joint research institute agreement etc. stipulates the treatment of intellectual property as required by the Intellectual Property Rights Agreement, it is not necessary to prepare a separate Intellectual Property Rights Agreement.

Efforts must be made to provide flexible responses such as facilitation of free access for the members of a consortium to intellectual property obtained from within the consortium for quick commercialization and operationalization of research results. In addition, during the research period, a policy on acquisition of rights to intellectual property that specifies the policy regarding the acquisition of rights to research results, their confidentiality, disclosure of these through publication of academic papers etc., and adjustments etc. regarding decisions on standardization and licensing (hereinafter referred to as the "Policy

on Acquisition of Rights etc.") must be formulated based on the Intellectual Property Rights Agreement to manage intellectual property.

To promote R&D that brings together domestic and international wisdom, foreign research institutes are expected to participate in the Program. However, make sure to take appropriate measures in preparing the Intellectual Property Rights Agreement and the Policy on Acquisition of Rights etc. to prevent divulgation of research results abroad.

(2) Intellectual Property Committee

BRAIN will establish an Intellectual Property Committee. The Intellectual Property Committee, which consists of the PD, PMs, relevant ministries, and intellectuals, makes policy decisions on patents etc. and collaborates with consortia as necessary. Adjustments will be made for the treatment of patents etc. obtained from research results if it can hinder the performance of commissioned operations.

(3) Intellectual Property Steering Committee

① Each consortium will establish an Intellectual Property Steering Committee.

② The Intellectual Property Steering Committee will be chaired by a PM and the representative organization of each consortium will establish the secretariat.

③ The Intellectual Property Steering Committee will consist of PMs and joint research institutes concerned with the intellectual property rights subject to consultation, and, if necessary, may include external experts who agree to comply with the provisions regarding confidentiality.

④ In accordance with the provisions of the Intellectual Property Rights Agreement, the Intellectual Property Steering Committee is responsible for the publication of academic papers on the results of R&D, application and maintenance of patents (including plant breeder's rights; hereinafter referred to as "Intellectual Property Rights"), treatment of know-how, and determination of policies on the granting of rights such as privilege, as well as coordination of policies on the use of intellectual property and licensing of intellectual property rights.

⑤ Consultation on the exercise of intellectual property rights may be substituted by written consultation etc., if any of the following items apply:

- Consultation on minor matters
- If a consultation is required after the program is completed

⑥ The operation of intellectual property after the completion of the Program will be determined by consultation with the Intellectual Property Steering Committee.

(4) Intellectual Property Rights Arrangements

BRAIN will specify, in advance, the treatment of confidentiality, background intellectual property rights (intellectual property rights held by the members of a consortium prior to

participating in the research commissioned under the Program), and foreground intellectual property rights (intellectual property rights arising as a result of the implementation of the research commissioned under the Program) in the Commission Agreement etc.

(5) Licensing of Background Intellectual Property Rights

A license to exercise background intellectual property rights may be granted by an intellectual property right holder exclusively for the purpose of conducting commissioned research in accordance with the terms and conditions specified by the intellectual property right holder. If the measures taken by the intellectual property right holder, such as the establishment of the terms and conditions, are likely to interfere with the promotion of the Program, the Intellectual Property Steering Committee will make adjustments and provide a reasonable solution.

(6) Treatment of Foreground Intellectual Property Rights

Foreground intellectual property rights will, in principle, be vested in the organization to which the inventor belongs (contractor) under the Japanese version of the Bayh-Dole Act (Article 17, Paragraph 1 of the Industrial Technology Enhancement Act) and Exhibit3: Guidelines for the Operation and Evaluation of the Moonshot R&D Program, provided that the inventor submits without delay, after signing the Commission Agreement, a written confirmation of the ownership of intellectual property to BRAIN, promising to comply with the rules of the present Guidelines, including the following ① to ④, and the conditions required by BRAIN. However, BRAIN shall have the right to use the copyrighted materials submitted to BRAIN and grant the right to use the works to third parties to the extent necessary for BRAIN to use the works.

① Obtained results must be reported to BRAIN without delay.

② When BRAIN requests the right to use intellectual property rights as being particularly necessary for the public interest, the right to exercise such rights must be granted free of charge to BRAIN or a party designated by BRAIN.

③ If the owner of intellectual property rights has little intention of commercialization, the Intellectual Property Committee recommends the transfer of rights and establishment of a license etc. to a party seeking to commercialize intellectual property.

④ Transfer of intellectual property rights, establishment of an exclusive license, etc. must be approved in advance by BRAIN, except in cases where the transfer is due to a merger or demerger of a corporation, or in the following cases (provided, however, that prior approval is not required in the following cases, but the transfer or granting of the intellectual property rights must be reported to BRAIN):

・Where intellectual property rights are transferred or granted to a subsidiary (referring to a subsidiary as specified in Article 2, Item 3 of the Companies Act) or a parent

company (referring to a parent company as specified in Item 4 of the same Article)

- Where intellectual property rights are transferred or granted to an approved TLO (a party approved under Article 4, Paragraph 1 of the Act on the Promotion of Technology Transfer from Universities to Private Business Operators (Act No. 52 of 1998) (including those approved for changes under Article 5, Paragraph 1 of the same Act)) or a certified TLO (a party certified under Article 12, Paragraph 1 or Article 13, Paragraph 1 of the same Act)
- Where a technology research association transfers or grants intellectual property rights to its members

If a member withdraws from a consortium during the commission period due to his or her own circumstances, misuse, etc., or due to a revision of the research plan etc., BRAIN or other members shall obtain the right to exercise or grant free of charge the intellectual property rights etc. acquired by the withdrawing member in commissioned research.

(7) Licensing of Foreground Intellectual Property Rights

Consortiums are expected to grant the foreground intellectual property rights pertaining to the results of commissioned research within the consortiums during the commission period in accordance with the terms and conditions specified by holder of the foreground intellectual property rights, exclusively for the purpose of conducting the commissioned research. In addition, PMs may, at their discretion etc., request participants in other commissioned research within a consortium to practice foreground intellectual property rights free of charge within the scope of moving forward the commissioned research (including not only R&D, but also practical application and commercialization of its results). Foreground intellectual property rights may also be granted to third parties by intellectual property rights holders, provided that the terms and conditions are not more favorable than those applied to the participants in the commissioned research. If the measures taken by intellectual property right holders, such as the establishment of the terms and conditions, are likely to interfere with the promotion of research and project, the Intellectual Property Steering Committee may make adjustments and provide a reasonable solution.

To prevent adverse effects on domestic industry due to the divulgation of research results abroad, it is necessary to consult with BRAIN before granting a patent to a foreign country.

(8) Treatment of Intellectual Property Rights upon Termination

At the end of the research commissioned under the Program, the Intellectual Property Committee will discuss the treatment of intellectual property rights etc. that no party wishes to own (surrender, or succession by BRAIN etc.).

(9) Participation of Foreign Institutions (Foreign Companies, Universities, Researchers, etc.)

From the perspective of appropriate management of implementation, foreign research institutions participating research must have a contact or an agent in Japan capable of handling paperwork related to commissioned research etc. Article 17, Paragraph 1 of the Industrial Technology Enhancement Act shall not apply to foreign institutions etc. Intellectual property rights shall, in principle, be shared between BRAIN and foreign institutions etc., and at least 50% of the total equity of the Trustees and BRAIN shall belong to BRAIN.

(10) Management of Intellectual Property Rights

The following matters must also be kept in mind in relation to intellectual property rights:

① Intellectual property rights acquired as a result of research commissioned under the Program will be treated in accordance with the "Guidelines on Research Licenses for Intellectual Property Rights Arising from Government-Funded Research and Development at Universities etc." (determined by the Council for Science and Technology Policy (*1) on May 23, 2006) and the "Guidelines for Facilitating the Use of Research Tool Patents in the Life Sciences" (determined by the Council for Science and Technology Policy (*2) on March 1, 2007).

*1: https://www8.cao.go.jp/cstp/output/iken060523_2.pdf (in Japanese)

*2: https://www8.cao.go.jp/cstp/output/iken070301.pdf (in Japanese)

② Prior to the establishment of the Agreement, an agreement must be signed with officers or employees of the contractor (hereinafter referred to as "Employees etc.") to the effect that the right to domestic and international intellectual property rights related to the results obtained from the conduct of commissioned operations is to be succeeded by the contractor from Employees etc. Provided, however, that this does not apply to cases where the succession by the contractor from the inventor has already been specified in the Regulations for Employee Inventions etc. and is applicable to the Program.

③ Note that if research results are disclosed before the application for a patent, it may result in a lack of novelty and ineligibility to claim intellectual property rights. If the results need to be published promptly, follow the procedures for the application of the exceptive clause to the loss of novelty of inventions in a timely manner.

12. Treatment of Research Results

(1) Effective Use of Research Results

To make effective use of research results, the Intellectual Property Committee may, if deemed necessary, require consortia to exchange information on unpublished or unapplied research results.

(2) Data Management

Data obtained from publicly funded R&D is an intellectual asset shared by the public, and to promote open science, it is necessary to consider the characteristics of research and create appropriate data sharing policies, data management plans, repositories, etc., to manage and disclose data, while taking into account the characteristics of the research.

To promote advanced data management, BRAIN manages the data catalog consisting of metadata submitted by PMs and researchers by using research data infrastructure systems (e.g. NII Research Data Cloud).

PMs are required to formulate a data management plan (DMP) that defines the scope etc. of the data to be managed, compile metadata of the data to be managed submitted by researchers based on the DMP, and submit it to BRAIN. The research data infrastructure system etc. will also be used to store, share and disclose the managed data to the extent necessary.

(3) Research Result Reports etc.

① Research Result Reports

The members of each consortium are required to prepare a research report at the end of each year and at the end of research, submit it to BRAIN through the research representative of the consortium, and inform BRAIN of the use of the results for five years after the completion of the research.

② Research Performance Report

The members of each consortium are required to submit a report summarizing the use of the expenditure of the commissioned research to BRAIN through the research representative of the consortium regularly each year during the commission period.

(4) Presentation of Research Results

If the results of the Program are to be widely presented to domestic and international academic societies, mass media, etc., it must be done in accordance with the policies established by the Intellectual Property Steering Committee and in consideration of the protection of intellectual property.

Participants in the Program are required to notify BRAIN through the research representative of the consortium in advance if they wish to present the activities or results of research conducted under the Program on websites, in newspapers, books, magazines, at symposia, conferences, etc. In addition, the materials to be made public must clearly state that they relate to the activities or results of the research project conducted under the Program, and published materials must be submitted to BRAIN.

(5) Treatment of Research Results

Participants in the Program are required to keep the following in mind when treating research results:

① Developed technologies shall be licensed appropriately even if their patents or the right to use them have been granted.

② To pursue the sophistication of developed technologies, the know-how to be kept confidential among research results shall be identified and managed appropriately, and the know-how shall be improved through the accumulation and analysis of exercised intellectual property rights.

③ When a business operator or other entity makes use of research results, they should be presented as clear results.

(6) Provision of Information from e-Rad to the Cabinet Office

In the 5th Science and Technology Basic Plan (approved by the Cabinet in January 2016) to pursue science and technology innovation policies based on objective evidence, all public funds will be registered in e-Rad to be evaluated and analyzed, and this information will be used for appropriate evaluation of R&D funded by the Government and for developing effective and efficient comprehensive strategies and resource allocation policies.

In response to this, the Council for Science, Technology and Innovation as well as the relevant ministries and agencies decided to register all academic papers, patents, and other information on research results in e-Rad to link output and outcome information to the input of the public research funding system.

As a result, the information on the results of commissioned research conducted under approved proposals needs to be entered in e-Rad every year. Information necessary for macro-analysis, including information on research results, will be provided to the Cabinet Office.

For details on the treatment of intellectual property and research results, including the presentation of research results, see the “Guidelines for the Implementation of Commissioned Research: Administrative Procedures”.

13. Evaluation of R&D Project

(1) Period etc. of Evaluation by External Experts

Based on Exhibit3: Guidelines for the Operation and Evaluation of the Moonshot R& D Program, BRAIN will conduct external evaluations in the evaluation system (Board of Trustees) of external experts. In principle, the external evaluation will be conducted in the third and fifth years after the beginning of the research, and in the eighth and tenth years if it is to continue for more than five years. BRAIN may accelerate the predetermined evaluation period based on the progress of Project etc.

In addition to external evaluations, BRAIN will conduct self-evaluation every year (excluding the years in which external evaluation is performed) based on the evaluation criteria specified separately, and report the results to the Strategic Council (provisional name) and the relevant ministries and agencies that formulated the relevant plans. In self-evaluation, external experts will also be asked for their opinions, which will then be reported with the status of how they are reflected in the self-evaluation.

(2) Evaluation Items and Criteria

The evaluation items and criteria for evaluating the necessity, efficiency, and effectiveness of the Moonshot Research and Development Program based on the above guidelines for the program are as listed below. In addition to judgments of achievements and shortfalls, evaluations also include analysis of their causes and factors, as well as suggestions for improvement measures.

Evaluations may result in changes in project plans, increases or decreases in R&D expenses etc., or cancellation (dismissal of the PM).

[Evaluation Perspectives]

The external evaluation is to be performed mainly from the following perspectives, and based on these perspectives, BRAIN, in cooperation with the relevant ministries and agencies, will establish detailed evaluation criteria separately.

<Evaluation of Project>

- Adequacy of objectives and content of Project for the achievement of the MS Goals etc.
- Progress toward the objectives of Project (comparison of progress of domestic and international Projects)
- Future prospects for the objectives of Project
- Construction status of R&D system
- Status of project management by PMs (including mobility, flexibility, etc.)
- Status of research data storage, sharing, and publication
- Status of collaboration and bridging with industry (including acquisition (matching) of private funds, spin-out, etc.)
- Effective and efficient promotion through international cooperation
- Challenging and innovative approaches based on bold ideas
- Effective and efficient use of research funds (including the division of roles between the public and private sectors and stage gate process)
- (1) Activities related to dialogs on science and technology with the public

(3) Other

Depending on the management method, the portfolio management by the PD may provide opportunities for each PM to conduct flexible reviews outside the designated evaluation period.

14. Follow-Up Survey

Follow-up evaluations may be conducted after a certain period of time has elapsed since the completion of Project. In such cases, you will be asked to provide information and respond to interviews.

15. Elimination of Unreasonable Duplication and Excessive Concentration

Unreasonable duplication (*1) and excessive concentration (*2) will be eliminated in accordance with the "Guidelines for the Appropriate Execution of Competitive Funds" (Agreements on Competitive Funding at the Liaison Conference of Relevant Ministries and Agencies on September 9, 2005

https://www8.cao.go.jp/cstp/compefund/shishin2_kansetsukeihi.pdf; in Japanese).

(1) Completing the Application Form

Applicants for the Program are required to include in the proposal the information (program name, name of experiment and research plan, research period, research budget, and effort (full-time employment rate) on the projects in which they currently participate (other commissioned projects and competitive funds including those of other ministries and agencies; hereinafter referred to as "Project etc.")). If discrepancies are found in proposals, disciplinary actions such as rescindment of approved proposals, cancellation of the commission contract, and refund of research funds may be taken.

(2) In the Case of Elimination of Unreasonable Duplication and Excessive Concentration

If unreasonable duplication or excessive concentration is found in proposals and information from other ministries and agencies, we may remove the applicant from the screening process, revoke the decision to approve the proposal, or reduce costs.

*1 Unreasonable duplication refers to a situation in which multiple Project etc. are unnecessarily overlapped and allocated to the same experiment and research plan of the same researcher (referring to the name and content of the research to which Project etc. are allocated; the same shall apply hereinafter), and any of the following cases applies.

- When a virtually identical (including cases where there is a considerable overlap; the same shall apply hereinafter) experiment and research plan is submitted and approved for several projects

- When several applications are submitted for a virtually identical experiment and research plan as approved and allocated Project etc.
- When there is an overlap in the use of research funds between several experiment and research plans
- Other cases similar to the above

*2 Excessive concentration refers to cases where the entire research funding allocated to a researcher or a Research Group (hereinafter referred to as "Researchers etc.") in a year exceeds the limit of the amount that can be used effectively and efficiently, to the extent that all the funding cannot be spent within a given research period, and any of the following cases applies:

- Research funds allocated are excessive for the capabilities of researchers and their research methods
- Funds allocated for an experiment and research plan are excessive for the time and resources allocated to the plan (i.e., the ratio of the time required to conduct the research to the researcher's total working hours (%))
- Purchase of unnecessarily expensive research equipment etc.
- Other cases similar to the above

16. Measures to Prevent the Misuse of Research Funds

(1) Measures to Prevent Misuse

To prevent the misuse of research funds, the "Guidelines for the Management and Audit of Public Research Funds at Research Institutions (Standards of Practice)" (Agricultural Association, No. 706 of October 1, 2007 notified by Secretary-General of the Agriculture, Forestry and Fisheries Research Council, Director-General of the Forestry Agency, and Director General of the Fisheries Agency; hereinafter referred to as the "Guidelines for Management and Audit") *1) established by MAFF in accordance with the "Measures to Prevent the Misuse of Public Research Funds (Common Guidelines)" (determined by the Council for Science and Technology Policy on August 31, 2006) and the "Guidelines for the Implementation of the Suspension etc. of Experiment and Research for Misconduct in Research Activities" of BRAIN (Institute of Industrial Science, The University of Tokyo, No. 18, of April 26, 2007; hereinafter referred to as "Misconduct Guidelines") *2) will be applied.

The Trustees must establish an appropriate operation and management system for research expenses in accordance with the Guidelines for Management and Audit. The Trustees are also required to check the status of the implementation of the system in accordance with Annex 2: Guidelines for the Management and Audit of Public Research Funds at Research Institutions: Self-inspection Check Sheet attached to the Guidelines for Management and Audit.

BRAIN may request reports etc. on the status implementation of the system development

and may also conduct firsthand investigations as necessary. Any misuse of research funds identified must immediately be reported to BRAIN.

*1 To access the Guidelines for Management and Audit (in Japanese), visit:
URL:
http://www.affrc.maff.go.jp/docs/pdf/141218_kanri_kansa_guidline.pdf

*2 To access the Misconduct Guidelines, visit:
URL:
https://www.naro.affrc.go.jp/laboratory/brain/contents/kenkyuchushi_jisshiyoryo_fuseikoui.pdf

(2) Measures to be Taken in Case of Misuse etc.

Any researcher who has returned all or part of the research funds due to misuse or fraudulent receipt of the research funds (hereinafter referred to as “Misuse etc.”) in the Program or other projects of MAFF and other ministries and agencies and any accomplice of such researchers ,in principle,will not be allowed to apply for or participate in the Program for a certain period of time from the year following the year in which research funds are returned as described below:

① Researchers who have engaged in misuse (referring to the use of competitive funds etc. for other purposes intentionally or by gross negligence, or the use in violation of the decision to grant competitive funds, etc. or the conditions attached thereto) and their accomplices

(i) When the use of funds for personal gain is confirmed: 10 years

(ii) Cases other than (i)

a When the social impact of the act is deemed significant and the act is judged to be highly malicious: 5 years

b Cases other than a and c: 2 to 4 years

c When the social impact of the act is deemed insignificant and the act is judged to be less malicious: 1 year

② Researchers who have engaged in fraudulent receipt (meaning receipt of competitive funds etc. by deception or other fraudulent means) and their accomplices: 5 years

③ Researchers who are not directly involved in Misuse etc. but has violated the duty of care of a good manager: at least 1 year and up to 2 years, depending on the degree of violation of the duty of care of a good manager by the researchers

④ Researchers who have engaged in Misuse etc. of other competitive funds, including those of other ministries and agencies, their accomplices, and researchers who have violated the duty of care of a good manager*: for the same period of time as the period for which they are restricted from applying for or the relevant competitive funds and

participating in projects covered by such funds

* Examples of violation of the duty of care of a good manager: cases where researchers who are capable of managing research funds on a daily basis and are in a position to manage them when conducting research fail to know the state of the use and management of competitive funds etc. and fail to fulfill their responsibilities as administrators, resulting in misconduct by those under their management (other researchers).

If all or part of research funds are returned due to the Misuse etc. of research funds in the Program, the outline of the Misuse etc. will be made public, while such information will be provided to other national organizations that have jurisdiction over competitive funds. This may result in restrictions on applications for other competitive funds.

If, as one of the causes of the Misuse etc. of research funds, the management and monitoring system of public research funds at the institutions to which the researchers etc. involved in the Misuse etc. of research funds belong is found to be inadequate, they will be requested to improve the system, and if the improvement is not made, measures such as reduction of the amount of indirect expenses by a certain percentage in the following fiscal year and thereafter may be taken.

Restrictions will be applied on participation in research projects after Misuse etc. in accordance with the “Participation in Research Project after Misuse etc. of Public Research Funds at Research Institutions” (January 25, 2013, Secretariat of the Agriculture, Forestry and Fisheries Technology Council) below:
(http://www.affrc.maff.go.jp/docs/pdf/kenkyuhusei_sanka_taiou.pdf; in Japanese)

17. Response to False Applications

If fraud acts are revealed in the application for the Program, we may cancel the commission agreement for experiment and research plans and request the contractor lump-sum repayment of research finds, compensation for damages, etc.

In addition, the same measures will be taken against researchers who have received funds from the project through illegal means and who have conspired with them, as in the case of the Misuse etc. described in 16 (2).

18. Measures to Prevent Misconduct in Research Activities

(1) Measures to Prevent Misconduct

To prevent misconduct in research activities carried out in the Program, the "Guidelines for Responding to Misconduct in Research Activities Funded by MAFF" (Agricultural Association, No. 1147 of December 15, 2006 notified by Secretary-General of the Agriculture, Forestry and Fisheries Research Council, Director-General of the Forestry

Agency, and Director General of the Fisheries Agency; hereinafter referred to as the "Guidelines for Misconduct" *) formulated by MAFF, as well as the Misconduct Guidelines will be applied.

Research institutes are required to have a system to prevent misconduct based on the Guidelines for Misconduct, such as appointment of research ethics education supervisor, provide research ethics education to those involved in research activities conducted at the research institutes before the contract is established, and submit a “Research Ethics Pledge” when signing the contract. (Research institutes that do not provide research ethics education are not eligible to participate in the program.) It is also necessary to respond appropriately to specified misconduct in research activities (fabrication, falsification, and theft of data and survey results presented in published research results), including establishment of a contact to receive accusations of such misconduct, establishment of an investigation committee, and conduct of investigations of accusations of such misconduct.

BRAIN also has a contact established to receive inquiries about misconduct in research and accusations of such misconduct, which will be responded to in accordance with the Misconduct Guidelines. BRAIN may conduct necessary investigations upon consultation with research institutes. Any misconduct in research activities identified must immediately be reported to BRAIN.

* To access the Guidelines for Misconduct (in Japanese), visit:
URL:
http://www.affrc.maff.go.jp/docs/pdf/h30_fusei_guideline_20180720.pdf
to see the Management and Audit Guidelines.

(2) Measures to be Taken in Case of Specific Misconduct

Organizations to which research funds have been allocated for research in which specific misconduct has been confirmed may be asked to return part or all of the research funds allocated for the research.

At the same time, MAFF may restrict applications for research funds under the jurisdiction of MAFF, including the Program, for a certain period of time as specified below, to those who are found to have been involved in specific misconduct as well as authors who are not found to have been involved in specific misconduct but are found to be responsible for the content of academic papers etc. on the research in which specific misconduct is found to have been engaged in:

① Those who are found to have been involved in specific misconduct: two to ten years from the year following the year in which the specific misconduct is confirmed, depending on the degree of the misconduct

② Authors who are not found to have been involved in specific misconduct but are found to be responsible for the content of academic papers etc. on the research in which

specific misconduct is found to have been engaged in: one to three years from the year following the year in which the specific misconduct is confirmed

The name and affiliation of those subjected to the above measures, the details of such measures, and the description of the specific misconduct will be made public, and such information will be provided to the ministries and agencies that have jurisdiction over the government-financed research funds and to the independent administrative agencies under the jurisdiction of MAFF. This may result in restrictions on applications for other projects.

If, as one of the causes of misconduct in research activities, preventive measures such as provision of research ethics education at the institutions to which the researchers etc. belong are found to be inadequate, they will be requested to improve such measures, and if they fail to make the improvement, they may become subject to measures such as reduction of the amount of indirect expenses by a certain percentage.

19. Treatment of Applications by Suspended Organizations

Applications from research groups participated in by research institutes that have been suspended by MAFF for collusion etc. during the application period will not be accepted if their research will be conducted in the areas subject to the suspension. If institutions are suspended after the end of the application period and before the selection of proposals, Project in the area will be rejected.

20. Support for SMEs (Small Business Innovation Research: SBIR)

The Program is planned to be designated as a “specified subsidy etc.” under the Small Business Innovation Research (SBIR) program. Small and medium-sized enterprises etc. receiving this specific subsidy etc. is eligible for the following support measures when conducting business activities using the results (separate screening is required to use each system):

(1) Low-interest loans from the Japan Finance Corporation.
(2) Reduction (by half) of the fees for examination requests for patents and patent fees.
(3) Companies with more than 300 million yen in capital may receive investment from small and medium business investment and consultation companies.
(4) The participation of companies in national and other bids will be facilitated regardless of the grade of participation or past delivery record.
(5) Promotion of business on the SBIR special website e.g. presentation of R&D results.

For more information about the SBIR program, visit the SBIR special website (in Japanese). (https://j-net21.smrj.go.jp/develop/sbir/index.html)

21. Cooperation with the National Bioscience Database Center

The National Bioscience Database Center (https://biosciencedbc.jp/en/) was established

by the Japan Science and Technology Agency in April 2011 to promote the integrated use of life science databases created by various research institutions.

In addition to encouraging the active participation of relevant organizations, the center promotes the integration of databases in the life sciences with four pillars: strategic planning, establishment and operation of a portal site, R&D of the basic technology for the integration of databases, and promotion of integration of bio-related databases. This is aimed at the sharing and use of the results of research in the life sciences in Japan by a wide community of researchers to encourage research in the life sciences as a whole, including R&D for basic research and industrial applied research.

In this regard, we would appreciate your cooperation in providing the Center with copies of raw data related to research results published in academic papers etc. in the life sciences, or copies of databases constructed for public use.

The copies provided may be used on a non-exclusive basis for duplication, modification, and in other necessary forms.

Note that we may also ask for your cooperation in providing information necessary for the use of the copies at the request of organizations to which the copies have been provided.

<Contact information>

National Bioscience Database Center, Japan Science and Technology Agency
TEL: 03-5214-8491

22. Support for Young Researchers and Effective and Efficient Use of Research Funds

(1) Support for Diverse Career Paths for Young Postdoctoral Researchers

The "Basic Policy on Support for Diverse Career Paths for Young Postdoctoral Researchers Employed with Public Research Funds by Ministry of Education, Culture, Sports, Science and Technology" (Human Resources Committee of the Council for Science and Technology on December 20, 2011; in Japanese) (https://www.mext.go.jp/b_menu/shingi/gijyutu/gijyutu10/toushin/1317945.htm) seeks

“support for public research institutions and research representatives employing young postdoctoral researchers with public research funds to secure diverse career paths for young postdoctoral researchers in Japan and abroad”. In this light, organizations hiring young postdoctoral researchers with public research funds (competitive funds and other project research funds, as well as publicly available education and research funds for universities) are expected to ensure the provision of support for them in securing a variety of career paths.

(2) Employment of Students in the Second Half of Their Doctoral Program as RAs (Research Assistants)

One the numerical targets set for the third, fourth, and fifth term of the Science and

Technology Basic Plan in search for outstanding students and working adults in Japan and abroad is to “provide about 20% of students in (the second half of) their doctoral program with an amount equivalent to their living expenses” to enhance financial support for graduate students, especially those in the second half of their doctoral program.

Science and Technology Basic Plan, Cabinet Office
URL: https://www8.cao.go.jp/cstp/english/basic/

The Program also allows students in the second half of their doctoral program to be registered as research assistants (RAs) and be paid for participating as researchers.

Students in the second half of their doctoral program who deal with confidential information obtained through the Program must sign a commission agreement specifying confidentiality obligations with the university organization that has an agreement established with BRAIN, and all parties directly engaged in the Program must be registered as researchers.

(3) Support for Young Researchers’ Voluntary Research Activities

Based on the “Implementation Policy for Voluntary Research Activities etc. of Young Researchers Hired to Implement Project with Competitive Research Funds” (Agreements on Competitive Research Funding at the Liaison Conference of Relevant Ministries and Agencies on February 12, 2020) formulated in accordance with the “Integrated Innovation Strategy 2019” (approved by the Cabinet on June 21, 2019) and the “Comprehensive Package for Enhancement of Research Capabilities and Support for Young Researchers” (approved by the Council for Science, Technology and Innovation on January 23, 2020), the Program allows young researchers hired for the implementation of Project to allocate part of their time and resources to voluntary research activities etc., with the expenditure of labor costs from the Project for which they are hired if approved by their research institutes, to create opportunities for young researchers to learn and participate in research as well as to develop their career paths. PMs are expected to actively support young researchers’ voluntary research activities. If their research institutes approve voluntary research activities of young researchers, these need to be included in the project plan etc.

The details will be communicated after the selection of proposals.

(4) Inclusion of Systematic Numbers for Research Funds in Acknowledgments etc.

Based on the “Inclusion of Systematic Numbers for Research Funds in Acknowledgments etc.” (Agreements on Competitive Funding at the Liaison Conference of Relevant Ministries and Agencies on January 14, 2020), a systematic number must be assigned to each research fund, and the systematic number must be included in the acknowledgments of academic papers and in the submission of such papers, to link each project with the corresponding academic papers to clarify the relationship between research

results and research trends etc., as well as to use it as a reference for evidence-based evaluation of each project/institution, policy making, etc.

The details will be communicated after the selection of proposals.

(5) Unification of Effort Management

Differences in procedures and documents to be submitted for effort management required by each fund-distributing organization have created administrative burdens for researchers and research institutions. For this reason, the Integrated Innovation Strategy 2019 (approved by the Cabinet on June 21, 2019) also indicates that “different effort management systems of fund distributing organizations should be unified”.

In the light of these circumstances, the expansion of effort management will be promoted through establishment of standard procedures for declaration of time and resources allocated, confirmation of status, and reporting in each system of competitive research funds under the jurisdiction of the fund distributing organizations, as well as the unification of the documents to be stored and submitted by the research institutes to simplify and streamline the procedures for effort management.

The details will be communicated after the selection of proposals.

(6) Purchase of Shared Facilities under Multiple Research Funding Systems (Combined Use)

Although the combined use of research funds was only allowed in some of the competitive research funding systems, as a result of the establishment of the “Purchase of Shared Facilities under Multiple Research Funding Systems (Combined Use)" (agreed between fund distributing organizations and the relevant ministries and agencies with jurisdiction on March 31, 2020), the research funding system was expanded to allow the purchase of shared facilities in accordance with the purposes of each system by combining the research funds of multiple systems, as long as the ownership of the purchased facilities belongs to research institutes, to achieve the research objectives of each system and make more effective and efficient use of research funds.

The Program also allows research institutes (researchers) to purchase equipment to be used by multiple systems of competitive research funds allocated by fund distributing organizations by combining the research funds of multiple systems.

The details will be communicated after the selection of proposals.

23. Optimization of Information Management

(1) Implementation Framework for the Program

The establishment of the following systems must be ensured, and any changes to these systems shall be discussed in advance with BRAIN:

① Appointment of Chief Information Management Officer or Information Management Supervisor (hereinafter referred to as “Information Managers etc.”) qualified to handle

the information necessary for the performance of a contract to engage in tasks for the performance of the contract.

② Information Managers etc. are required to have the background, knowledge, qualifications, language skills (native and foreign language skills), cultural background (nationality etc.), achievements, etc. that are necessary or useful for the performance of contracts.

③ Information Managers etc. are capable of carrying out the operations required for the performance of a contract in relation to other tasks etc. for which they are responsible.

(2) Information Security

Information to be protected that comes to light in the performance of a contract for the Program(referring to information related to the operations of BRAIN that has not been made public but needs to be thoroughly managed especially by the Trustees, as the leakage of such information to parties other than BRAIN may interfere with the performance of operations; the same shall apply hereinafter) shall be managed in an appropriate manner in accordance with Exhibit 8: Information Security Standards for Procurement (hereinafter referred to as the “Standards”) and Exhibit 9: Additional Provisions for Ensuring Information Security in Procurement (hereinafter referred to as the “Additional Provisions”). In this regard, the following information management systems should be established to manage information to be protected, and BRAIN must be notified without delay of any changes in this system:

① An system to ensure that all information collected, organized, and prepared by the Trustee as part of the performance of a contract is treated as information that should be protected until BRAIN determines that no protection is required.

② A system to ensure that no one other than those designated to handle information with the consent of BRAIN is allowed to handle information

③ A system to ensure that information is not provided or leaked to any party other than the Trustees, including parent companies (referring to the “parent companies etc." as defined in Paragraph 2, Item 14 of the Standards), fellow subsidiaries (referring to the “fellow subsidiaries” as defined in Paragraph 2, Item 15 of the Standards), regional headquarters, brand licensors, franchisors, consultants, and other parties that provide guidance, supervision, business support, advice, or auditing to the Trustees, unless BRAIN individually approves in writing

(3) Requirements for Applicants

① Applicants must understand and accept the Standards, the present Guidelines, and the Additional Provisions to apply.

② Applicants should fill out Form 7: Information Management System of Exhibit 5: Project Plan Proposal based on the provisions of (1) and (2).

Applicants are also required to submit a copy of the consortium agreement or company rules stipulating items 5 through 12 of the Standards or a written pledge stating that they will comply with such items, before signing the contract.

Applicants are responsible for providing explanations on the submitted materials, answering questions, submitting additional materials, and responding to the request for consultation with BRAIN. Note that the application will be rejected if the systems are deemed insufficient.

24. Compliance with Laws, Regulations, Guidelines, etc.

In addition to the provisions of the present Guidelines, if research is conducted in violation of applicable laws, regulations, guidelines etc., such research may be subject to suspension, cancellation of contract, or withdrawal of the decision to approve proposals.

(1) Promotion of "Dialogue on Science and Technology with the Public"

In accordance with the Promotion of "Dialogue on Science and Technology with the Public" (policy for basic approach) (*) formulated on June 19, 2010 by the Science and Technology Policy Minister and intellectual members of the Council for Science and Technology Policy, researchers receiving an annual allocation of more than 30 million yen per project of public research funds are, for the time being, required to engage in interactive communication activities to provide the public with a clear explanation on the content and results of their research activities.

(* For more information, see
https://www8.cao.go.jp/cstp/stsonota/taiwa/taiwa_honbun.pdf; in Japanese.)

(2) Treatment of Personal Information

Personal information provided by applicants will not be used for any purpose other than the selection of organizations to maintain the interests of proposers as well as to comply with the Act on the Protection of Personal Information Held by Administrative Organs etc. All personal information, except the personal information of selected organizations, will be destroyed by BRAIN after the selection process.

(For more information,visit
http://www.soumu.go.jp/main_sosiki/gyoukan/kanri/kenkyu.htm.)

In compliance with this Act, information may be provided (including the provision of personal information to outsource the electronic processing and management of data to private companies) to institutions concerned with other research funds only to the extent necessary to restrict duplication of applications.

Information on each approved experiment and research plan (name of the plan, research outline, names of research institution and researchers, and research implementing organization, etc.) may be made available to the public as information held by

administrative agencies.

Application information on approved research plans may be used by BRAIN to support research after the plan is approved.

Personal information contained in the application information will be shared with the "Government Research and Development Database*" of the Cabinet Office via the Ministries of the Cross-ministerial R&D Management System.

※ Government Research and Development Database

The Government Research and Development Database is used by representatives of relevant ministries and agencies to search and analyze information to facilitate the Council for Science, Technology and Innovation (CSTI) to obtain information in a centralized and comprehensive manner for an appropriate evaluation of the results of R&D funded by the government, formulation of comprehensive strategies, and appropriate allocation of resources.

(3) Security Export Control

To prevent technology leakage abroad, export of goods or technology controlled under the Foreign Exchange and Foreign Trade Act (Act No. 228 of 1949) must be, in principle, approved by the Minister of Economy, Trade and Industry. In addition to the export of goods, the provision of technology (provision of technical information such as blueprints, specifications, manuals, samples and prototypes on paper, by e-mail, CD, USB memory, or other storage media, provision of working knowledge through technical guidance and skills training, and technical support at seminars) is subject to control.

For more information visit the website of the Ministry of Economy, Trade and Industry Security Export Control.

(https://www.meti.go.jp/policy/anpo/englishpage.html)

(4) Performance of Research Using Overseas Genetic Resources

Research involving the acquisition or use of foreign genetic resources (including relevant traditional knowledge) needs to be conducted in compliance with the Convention on Biological Diversity (CBD), the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGR), as well as relevant laws and regulations of the countries that donate genetic resources, and conduct such research appropriately in accordance with Japan's domestic measures (ABS* Guidelines). For more information on the domestic contact for ABS measure support, ABS Guidelines, CBD, and ITPGR, visit the following website:

ABS Support Team for Academia, National Institute of Genetics

http://nig-chizai.sakura.ne.jp/abs_tft/en/

Japan Bioindustry Association, National Institute of Biological Resources
https://www.mabs.jp/eng/index.html
Ministry of the Environment (ABS Guidelines)
http://abs.env.go.jp/english.html
Convention on Biological Diversity (CBD)
http://www.cbd.int/

International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGR)
http://www.fao.org/plant-treaty/en/

* ABS: Access and Benefit-Sharing

(5) Performance of Animal Experiments

Animal experiments etc. conducted using animal species specified in the "Basic Guidelines for Conducting Animal Experiments etc. at Research Institutes under MAFF" (Notice of the Secretary-General of the Council of Agriculture, Forestry and Fisheries Technology* dated June 1, 2006) must be performed appropriately based on the above basic guidelines and the relevant laws and regulations indicated in the guidelines.
(* Visit: http://www.maff.go.jp/j/kokuji_tuti/tuti/t0000775.html; in Japanese.)

25. Working Language

The official version of the present Guidelines is written in Japanese. In cases where the Guidelines are translated into English for reference, only the original version written in Japanese shall be in force and any English version shall have no effect.

26. Holding of Presentation Meetings

To prevent the spread of new coronavirus (COVID-19), we will not hold presentation meetings to explain the procedures and submission of proposals for application for the Program. Videos in Japanese on the application for the Program will be uploadedon our website instead.

Website to watch videos explaining the application process
https://www.youtube.com/watch?v=jNA6FFgw3kk&feature=youtu.be

27. Inquires

If you have any questions regarding the Program, reach us via the following contact details before the application deadline. Note that we are unable to respond to any questions regarding the screening process, information on proposals of other applicants, or matters that may benefit certain applicants. Note that inquiries on matters other than those specified above and answers will be published on our website without disclosing personally identifiable

information.

Make sure to contact us by e-mail.

○ Regarding this public call

Bio-oriented Technology Research Advancement Institution (BRAIN)

Moonshot Agriculture, Forestry, and Fisheries Research and Development Program Coordinator.

E-mail: seiken-moonshot@ml.affrc.go.jp

Address: 〒210-0005

8 Higashidacho, Kawasaki-ku, Kawasaki, Kanagawa

Parale Mitsui Building, 16F

http://www.naro.affrc.go.jp/laboratory/brain/moon_shot/public_call_for_project_manager/index.html

○ Regarding the contract procedur

Research Management Division, Research Management Department, BRAIN

E-mail: seiken-moonshot@ml.affrc.go.jp

○ e-Rad

e-Rad Help Desk

TEL: 0570-066-877

03-6631-0622 (Direct line)

See also the “Inquiries” section of “the Cross-Ministerial Research and Development Management System (e-Rad)” portal site.

URL: https://www.e-rad.go.jp/en/contact.html

＜Moonshot Goal 5＞

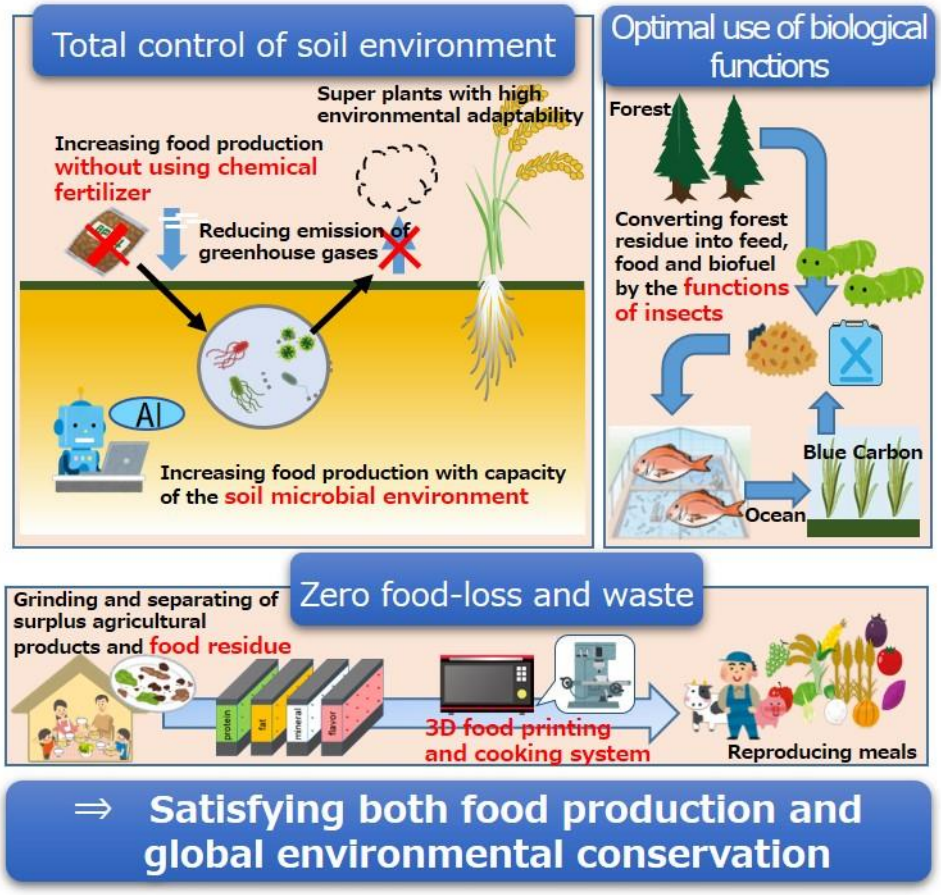
Creation of the industry that enables sustainable global food supply by exploiting unused biological resources by 2050

- Technical development of the circular food production systems by biological measures, e.g. utilizing microbes and insects, by 2050.

- Development of technical solutions for eliminating food loss and waste and for achieving both healthy life and sustainable food consumption by 2050.

- Evaluation of the technical achievements and discussion on the ethical, legal and social implications (ELSI) matters will be done by 2030, for global spread of the technology by 2050.

-----[Reference]-----



（Exhibit 2）

【Moonshot Goal 5】

"Creation of the Industry That Enables Sustainable Global Food Supply
by Exploiting Unused Biological Resources by 2050"
Research and Development Conception

March 2020
Ministry of Agriculture, Forestry and Fisheries

１． Moonshot Goal

Among Moonshot goals (Decision on Council for Science, Technology and Innovation, January 23rd, 2020), we promote research and development to achieve the goal shown below.

<Moonshot goal>

"Creation of the industry that enables sustainable global food supply by exploiting unused biological resources by 2050"

(Targets)

- ○Technical development of the circular food production systems by biological measures, e.g. utilizing microbes and insects, by 2050.
- ○Development of technical solutions for eliminating food loss and waste and for achieving both healthy life and sustainable food consumption by 2050.
- ○Evaluation of the technical achievements and discussion on the ethical, legal and social implications (ELSI) matters will be done by 2030, for global spread of the technology by 2050.

(Research promotion organization: Bio-oriented Technology Research Advancement Institution)

２． Necessity of setting the Moonshot goal

To date, we have been developing farmland, woodlands and oceans on the earth, and achieved increases in food production making full use of various technologies according to the growth rate of the world population. However, it has also brought about destruction of the natural environment and overhunting of natural resources causing various problems including degradation of soil caused by excessive use of chemical fertilizers and agricultural chemicals, and contamination of rivers and groundwater.

In recent years, the global warming due to greenhouse gases has intensified, and the reduction of such gases has become an urgent task. Globally, a quarter of the total emission of greenhouse gases including nitrous oxide (N_2O) and methane is caused by the agricultural and forestry industries, and the use of land.

It is estimated that the world population in the year 2050 will increase by a factor of 1.3 (relative to 2010). With the increase in demand for grain as food for livestock in medium income countries, it is anticipated that the demand for food will greatly increase by a factor of 1.7. It is anticipated that there could be a serious shortage of food worldwide in 30 years time, thus it is necessary to increase food production furthermore in the future. However, although organic substances, which constitute food, circulate as agricultural products, foodstuffs, excretory products, soil materials and so on, the circulation collapses under the current methods which only focus on production efficiency, and this exert bad influence on global environment including climate change and obstruction of sustainable food supply. To satisfy both increasing food production and conserving global environment, we should revise current food production methods radically.

On the other hand, in some organizations including microorganisms and insects, there should be a large number of unutilized biofunctions. It is important to elucidate the unexploited “knowledge” and to make full use of functions of nature and organisms for creating new socio-economic activity systems.

Therefore, in order to ensure our food sustainably in the future and to achieve increases in food production according to the growth of the world population, we must develop the circular food production systems by biological measures, e.g. utilizing microbes and insects.

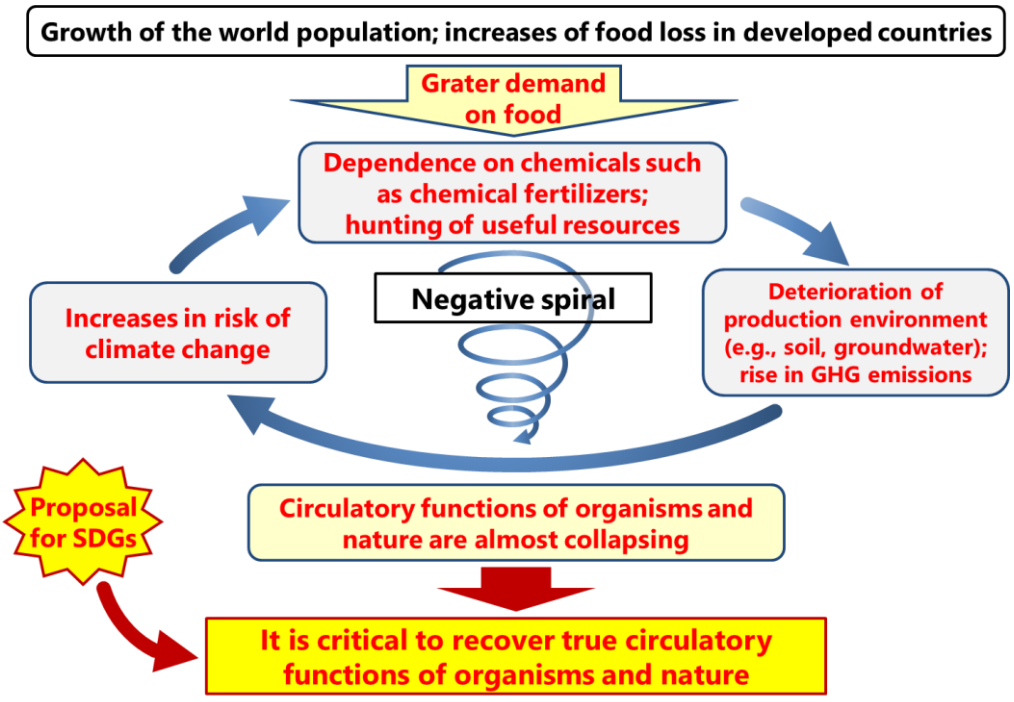


Figure 1. Anticipated food supply issues in 2050

In addition, it is necessary for us to reconsider consumer behavior in future. Currently, social problems, such as the waste of large amount of food, and increases in obesity and lifestyle-related diseases are mainly occurring in developed countries, including Japan.

Therefore, it is necessary to take challenging actions that will expand globally through the creation of new solutions for eliminating food loss and waste and for achieving both healthy life and sustainable food consumption.

Furthermore, the United Nations Sustainable Development Goals promote the importance of:

(1) Conserving the ecosystem, increasing the capacity to adapt to climate fluctuations, and promoting sustainable agriculture (Goal 2)

(2) Expanding afforestation on a global scale, and promoting conservation of natural ecosystems, including conservation of biodiversity (Goal 15)

(3) Conserving oceans and ocean resources, and utilizing them in a sustainable manner (Goal 14)

(4) Reducing food waste and food losses, and ensuring sustainable forms of production and consumption (Goal 12),

and today international cooperative activities are starting.

In view of the above, there is an urgent necessity to bring together the wisdom of researchers and businesspeople throughout the world to promote challenging research and development based on the goal “Creation of the industry that enables sustainable global food supply by exploiting unused biological resources by 2050”, in order to satisfy both the anticipated growth of the world population and conservation of global environment.

３． Direction of Research and Development

Based on the discussion on Moonshot International Symposium (December 17th and 18th, 2019) and so on, the direction of research and development at the moment is as follows.

（１） The Target Areas of Challenging Research and Development

In order to achieve a sustainable increase in food production while responding to climate change that is expected in the future, it is necessary to remarkably improve the environmental adaptability of crop plants. In order to maintain the food production, it is also required to drastically reduce the dependence on water and artificial materials, to prevent adverse effects on the global environment, striving for conservation of biodiversity. Therefore, it is essential to elucidate and utilize the unexploited biofunctions such as insects, soil microorganisms, microorganisms in human body, and plants for creating the circular food production systems.

With increasing food production, it is also significant to consume food effectively for eliminating food loss and waste, thus it is required to make an innovation in our consumption behavior. While we are currently facing social problems, such as environmental deterioration by the waste of large amount of food, and the increase in obesity and lifestyle-related diseases which are mainly occurring in developed countries, the starvation problem has not yet been solved. Therefore, it is preferable to develop new solutions which will reduce food loss and waste, and reliably deliver the necessary amount of food to the people who require it.

In view of the above, it is necessary to establish the food production and consumption systems that achieving both food supply expansion and global environment conservation by exploiting unused biological resources, however, at this moment in time it is too difficult to realize it, and research and development in elucidation and utilization of biofunctions is far from social implementation. Therefore, we suppose to set “satisfying both increasing food production and conserving global environment” as the area for promoting challenging research and development in Moonshot Research & Development

Program.

（２）Research Subjects Toward Moonshot Goal

In Moonshot Research & Development Program, we invite challenging research and development in the above target area both within and outside Japan.

In the program, we implement the challenging subjects which conduct technical development contributing achievement of Moonshot goal. In terms of technical approach, we adopt subjects based on scientific verification, and implement them with setting Stage Gate. In addition, in order to adopt the most efficient and effective methods, the latest scientific trends are reviewed, and they are reflected to the research and development.

From the perspective of smooth social implementation of the research results, the research system must be examined so that researchers with various backgrounds can participate in the discussion about ethical, legal and social issues (ELSI) related to the program.

<Food Production Systems Achieving Both Food Supply Expansion and Global Environment Conservation>

Supposed examples of research and development are described below.

- Elucidating the whole mechanism of "resilience" of wild species that can resist poor surroundings
- Creating new lineage of plants with designed functions by reconstructing plant genomes from nothing
- Making full use of soil nutrients and developing technology to reduce emission of greenhouse gases by total control of the soil microbial environment
- Developing complete pest control technology unaffecting ecosystem
- Creating plants and alga with high ability to absorb carbon dioxide and developing circulation system of organic substance by utilizing them

<Food Consumption Systems Realizing Zero Food-loss and Waste>

Supposed examples of research and development are described below.

- Developing systems that can match and deliver all supply and demand needs in real-time in cyberspace
- Developing super-long food conservation technology by biological measures
- Developing technology that converts surplus agricultural products and household food residue into health- and environment-conscious edible food, e.g. development

of 3D food printing and cocking systems that reusing these residues by grinding and separating

- Developing technology that converts food and land residues into food and/or feed for aquaculture by biological measures

（３）Direction of Research and Development Toward Moonshot Goal

〇2030 (Output Goals)

<Food Production Systems Achieving Both Food Supply Expansion and Global Environment Conservation>

Develop and evaluate the prototype of “the circular food production systems by biological measures”.

<Food Consumption Systems Realizing Zero Food-loss and Waste>

Develop and evaluate the prototype of “the technical solutions for achieving both healthy life and sustainable food consumption”.

〇2050 (Outcome Goal)

“Creation of the industry that enables sustainable global food supply by exploiting unused biological resources” means that both “the circular food production systems by biological measures” and “the technical solutions for achieving both healthy life and sustainable food consumption” spread globally. The image of 2050 (outcome goal) is shown in Figure 2.

For achieving 2050 (outcome goal), i.e. establishing both “the circular food production systems by biological measures” and “the technical solutions for achieving both healthy life and sustainable food consumption”, we need enough time to establish evaluation fields, to solve technical problems at each stage, and to spread products and systems. In addition to research and development, discussion of discussion on the ethical, legal and social implications (ELSI) matters is also necessary. Thus, the goal by 2030 is establishment of prototypic technology.

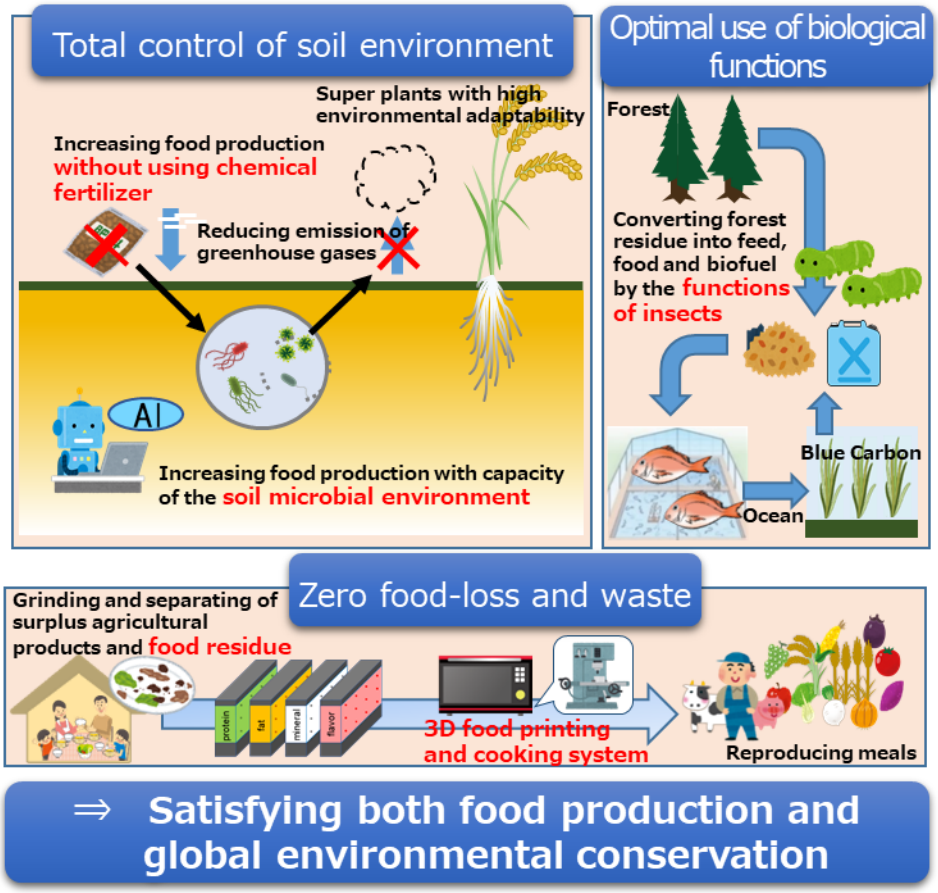


Figure 2. The image of 2050 (outcome goal)

＜Reference：Analysis Toward Moonshot Goal＞

According to Initiative Report at Moonshot International Symposium (December 17th and 18th, 2019) and so on, analysis toward Moonshot goal is as follows.

（１）Technology and Research Trends Related to the Food Production System Achieving Both Food Supply Expansion and Global Environment Conservation

Studies on the interaction between plants and soil microorganisms (Figure 3, gray dots) and symbiosis between plants and microorganisms (green dots) are ongoing but started to increase from 2012. There has been a slight increase in research on soil microorganisms and greenhouse gases since 2015, but the number of studies is still small (yellow dots). Studies on genome editing in microorganisms have been increasing since 2013 (orange dots), but when the studies are limited to soil microorganisms, the number is extremely small (11 cases, data not shown). Therefore, studies on the design and modification of soil microorganisms could be regarded as a future field of research.

However, the number of studies on genome editing in plants has increased rapidly since 2013 (blue dots). This coincides with the time when CRISPR/Cas9 began to be applied to plants. Research results are expected on topics including the development of basic technology for genome editing and crop creation using genome breeding technology. In contrast, there are still few studies on breeding using AI (39 cases, light blue), which shows that this research is in its infancy. However, the number of cases began to increase in 2019 and research in this field is expected to increase rapidly in the future.

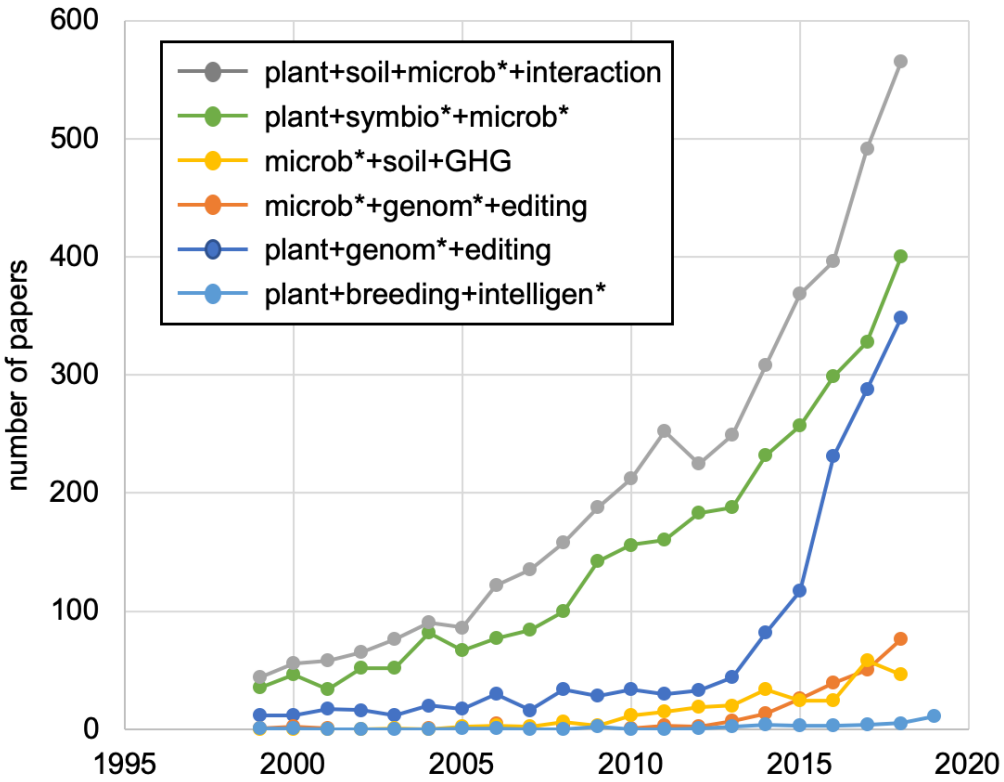


Figure 3. Research trends on breeding and soil microorganisms in Japan and overseas from 1999 to 2019 (Clarivate Analytics, Web of Science)

An overview of the research trends on the development of pest control methods, shows that the two predominant fields with the largest number of papers to date are chemical control (chemical pesticides) and biological control (use of natural enemies of pests) (Figure 4-A). The next largest fields of research are related to physical control, cultural control, resistant varieties, symbiotic microorganisms, and sterile insect techniques. Of these, the two areas in which the number of research cases has increased significantly over the past five years are the use of symbiotic microorganisms and the release of infertile insects (Figure 4-B, purple and light blue dots). However, the number of studies on pest control using genome editing has increased rapidly in the last three years and research using drones and AI is also starting to increase. Research in these fields is expected to increase further in the future (Figure 4-C).

In the field of life sciences, omics analysis at the single cell level has become possible over the past few years, and imaging technology has made significant progress. Furthermore, the accuracy of genome editing technology has improved, and it is being developed for application in medical and food industries. Information and communication

technologies (ICTs) such as measurement technology and AI machine learning are steadily making inroads into life sciences through automation and scale-up. In addition, understanding of life phenomena is progressing through a new “data-driven” approach to discover laws from a large number of phenomena occurring in life. On the contrary, with the progress of AI, genome editing, synthetic biology, and so on, ELSI are posited as important challenges in the promotion of science and technology (R&D overview report, integrated version 2019).

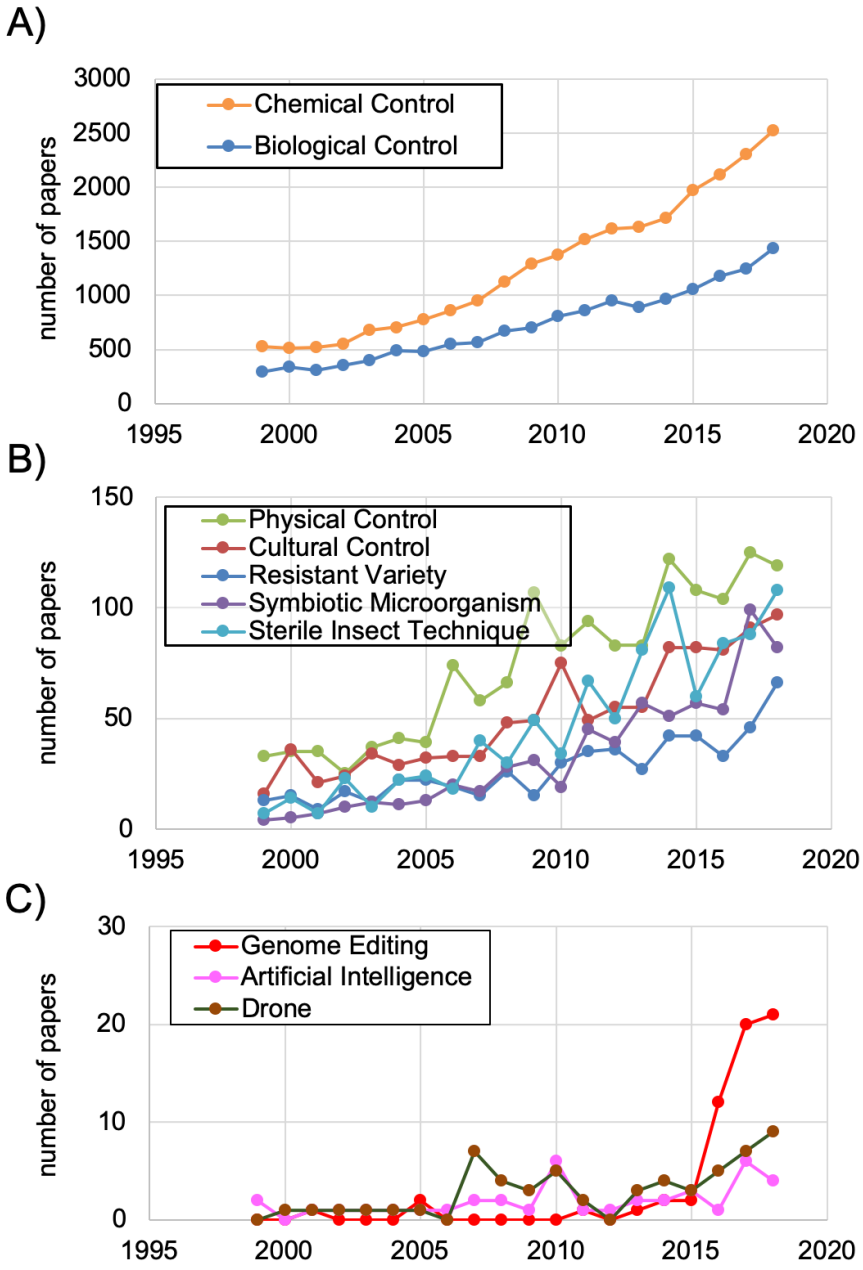


Figure 4. Research trends on pest control in Japan and overseas from 1999 to 2018 (Clarivate Analytics, Web of Science)

（２）Technology and Research Trends Related to Food Consumption System for Achieving Zero Food Loss

Research into food losses and waste has been on the increase (Figure 5), particularly in the last five years. While much of the literature from around 2000 is in the fields of

zoology, sociology, nutritional science, and oceanography, research in the fields of transportation science technology, transportation, and telecommunications has seen growth in recent years.

This indicates growing momentum toward actively managing supply-demand mismatches in food from the stages of production through consumption (i.e., in food supply chains), which are largely responsible for food losses and waste.

To reduce food losses and waste, it may be useful to link food supply chains to AI-based information networks, particularly IoT and ICT, which have progressed rapidly in recent years. However, research in this field has still received little attention, with only three studies in 2014 and eleven in 2018. The key characteristic of fresh foods is the fact that they deteriorate in quality or decay during the course of the distribution process after harvest, and eventually become worthless. Therefore, future application of IoT to food distribution should take into consideration not only information about the quantity of food, but also about its quality (such as quality changes over time).

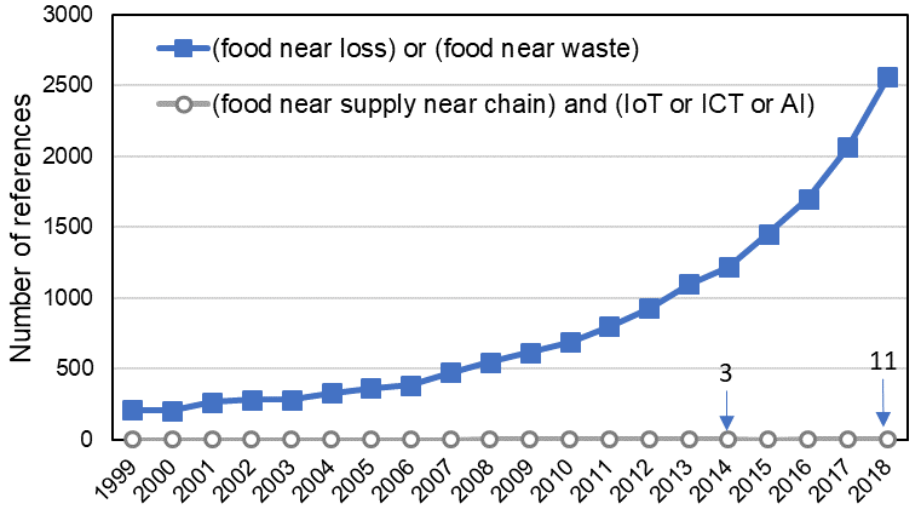


Figure 5　Research trends in food losses and waste, and food supply chains　(Clarivate Analytics, Web of Science)

When considering the active use of food losses and waste, one solution is to convert them into energy or materials. Among the existing research projects on food losses and waste, studies addressing these topics account for approximately 24% and 14%, respectively, suggesting a relatively large interest (Figure 6). Methods of converting food to energy or materials include smart use of biofunctions, in addition to chemical and physical methods. Although related research has been conducted to date, however, it

accounts for only about one-seventh of the research into energy and materials conversion overall.

Meanwhile, recycling of food losses and waste has been the subject of highly successful projects such as one on fermented liquid feeding (Sasaki et al., 2011), but such studies represent as little as 5% of all research projects on food losses and waste. This area of research is far from being advanced due to issues of social acceptance and technical difficulties.

Another potential approach to recycling would be to take advantage of Japan's ocean resources to explore the possibility of aquaculture applications for food losses and waste; however, little attention has been paid to this area so far.

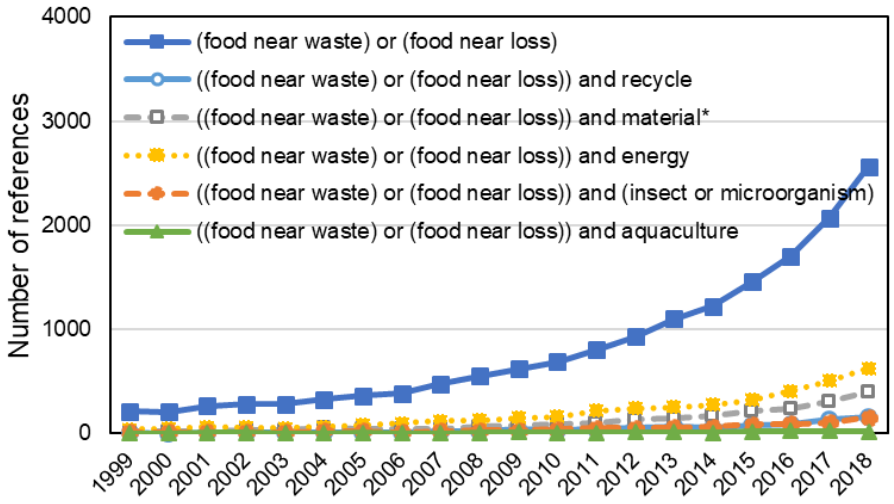


Figure 6. Research trends in food losses and waste focusing on recycling, materials/energy conversion, insects/microorganisms, and aquafarming (Clarivate Analytics, Web of Science)

One means of reducing food loss, waste, or disposal is the method of "reprocessing" into foods with excellent nutritional benefits and taste by using edible resources such as surplus agricultural products, non-standard products, and by-products as food materials. In recent years, the development of 3D printing technology has been remarkable (Figure 7). Such 3D printing technology can produce small quantities as well as a large number of individual items and is thus considered a promising means of enabling individuals to select various foods in the food field. However, there are actually few studies on the use of 3D printers in the food field (Figure 7 orange) as opposed to the industrial field. In

addition, the materials used in the food field are limited to ingredients that are easy to put into the printer.

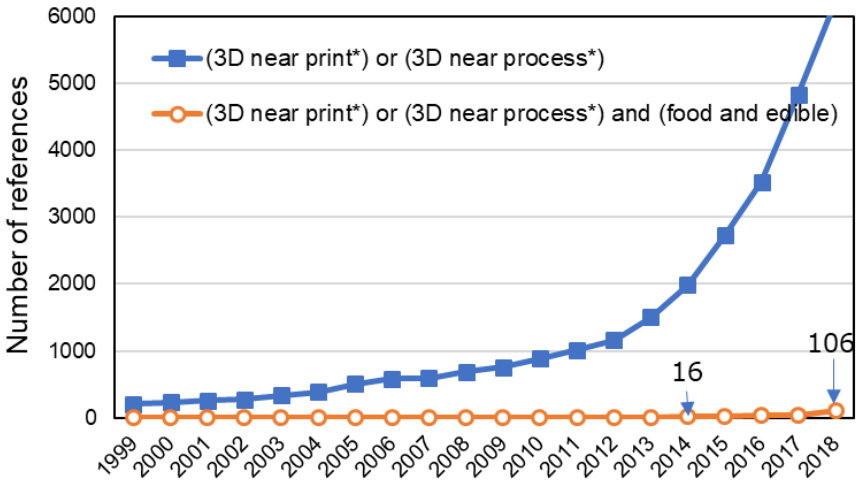


Figure 7. Research trends in food losses and waste, and food supply chains (Clarivate Analytics, Web of Science)

Provisional translation

（Exhibit 3）

February 4, 2020
Partial Revision March 4, 2020
Director General for Science, Technology and Innovation Policy, Cabinet Office
Director General, Science and Technology Policy Bureau, MEXT
Director General, Council's Secretariat, Agriculture, Forestry and Fisheries Research Council, MAFF
Director General, Industrial Science and Technology Policy and Environment Bureau, METI

Guidelines for Operation and Evaluation of the Moonshot R&D Program

1. Program Features

○ The government presents ambitious goals, Moonshot Goals (hereinafter referred to as MS Goals), which attract people, and R&D concepts, from the perspective of looking toward a future society, and solving domestic and overseas social issues that will arise.

○ Challenging R&D concepts by being based more on bold ideas that will not just be extensions of conventional technology, and which are promoted by maximizing knowledge and ideas in the basic research phase.

○ To achieve the MS Goals, multiple project managers (hereinafter referred to as PMs) are, in principle, selected under respective MS Goals, and a program director (hereinafter referred to as the PD) is appointed to direct and supervise, in a unified manner, the program that is comprised of multiple R&D projects (hereinafter referred to as projects) that PMs promote.

○ Authority for promoting the project is granted to PMs. Flexible management is promoted under the direction of each PM, while bringing together the wisdom of researchers from all over the world.

○ The PD drafts a portfolio (the management plan that summarizes the project components (combination) and resource allocation, etc., (hereinafter referred to as portfolio) to strategically achieve the MS Goals, and the research promotion agencies (funding agencies, hereinafter referred to as FAs) make a final decision on the portfolio based on this. The PMs apply diverse knowledge and ideas in the basic research phase, undertake challenging research without fear of failure, and discover and foster innovative research results.

○ While utilizing the benefits of the multiple-year funding system and repeatedly restructuring the portfolio, we implement R&D that allows for support for up to 10 years from the start of the research.

○ As well as always sharing relevant domestic and overseas R&D trends, we establish the most advanced research support system through which researchers can challenge leading-edge research through cooperation.

○ To promote the use of research data[1] generated through research activities and to support advanced research management, we pursue advanced data management, by means such as proactively utilizing the Research Data Infrastructure System (NII Research Data Cloud)[2].

○ Looking ahead to practical use of the R&D results in society in the future, we actively encourage utilization of the R&D results and examine the open and close strategy involving industry from the R&D phase.

2. Determination of the Moonshot Goals and Formulation of the R&D Concept

○ The Visionary Council consisting of experts was established to discuss drafted MS Goals, from the perspectives of looking toward a future society and solving domestic and overseas social issues that will arise.

○ The Council for Science, Technology and Innovation (hereinafter referred to as CSTI) determines the MS Goals in light of advice from the Visionary Council. When MS Goals are determined, we make sure to establish a research support system to maximize ideas and knowledge from researchers.

○ Relevant ministries and agencies formulate the R&D concept (hereinafter referred to as the concept) to achieve the MS Goals. Consideration is given to incorporating ideas for achieving the MS Goals and international strategy perspective.

○ According to changes in the social environment and advances in science and technology, if deemed necessary, CSTI adds and/or changes the MS Goals after evaluating their technical feasibility and listening to domestic and overseas opinions.

3. The R&D Promotion System

[CSTI/CSTI Members]

○ CSTI determines the MS Goals.

○ CSTI members receive a report on the progress of R&D every year from the Strategy Council (tentative name), and advise on the promotion of this entire program from a broad perspective.

[Strategy Council] (tentative name)

○ A Strategy Council (tentative name) comprised of people from industry, relevant ministries and offices, and researchers, is established to strategically promote R&D, to accelerate the practical use of the R&D results in society, and to achieve effective cooperation and coordination among the relevant ministries/offices and the relevant FAs.

○ The duties of the Strategy Council (tentative name) are listed below:

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[1]Research data means data generated in the R&D process, which is manageable in an electromagnetic form. (Source: the Cabinet Office Report, “Research data infrastructure development and international cooperation working group” October 2019)

[2]The NII Research Data Cloud is being developed for full-fledged operation during FY2020 as a research data infrastructure system to promote research data management, disclosure, and retrieval based on the Integrated Innovation Strategy 2019 (the Cabinet approval in June 2019).

1) Receive a report of progress and other matters from the relevant FAs every year in principle, and give advice and approval on the concept of project components and fund allocation, etc., from a global and comprehensive perspective to achieve the MS Goals.
2) Advise on the ways and means for the practical use of the R&D results in society. This involves bridging the gap between the R&D and practical use in society, collaborating with the private sector, and attracting well-timed private investment based on role-sharing at the different stages of R&D activities between the public and private sectors. Also provide support for the practical use of the R&D results in society. In addition, give advice to promote international cooperation.

○ Progress reports and the minutes of meetings of the Strategy Council (tentative name) are, in principle, disclosed to give maximum consideration to the transparency of the program's operation and accountability.

[Relevant Ministries and Agencies]

○ The relevant ministries and agencies formulate the concept with the aim of achieving the MS Goals, and strategically and collectively promote related R&D, cooperating with other ministries and offices.

[FAs]

○ FAs are responsible for realizing the concept that achieves the MS Goals.

○ The duties of FAs are listed below:

1) Appoint a PD who is deemed qualified for each MS Goal, then manage and supervise them. One or more sub-PDs who assist the PD may be appointed, as necessary.
2) After discussions with the PD, openly recruit and select, in principle, more than one PM.
3) Determine a portfolio based on the PD`s draft.
4) Instruct the PMs to draw up a project plan under the direction of the PD.
5) Collect and analyze information on domestic and overseas R&D trends and the challenges for the practical use of the R&D results in society, with incorporating the opinions of outside experts, including researchers in humanities and social sciences.
6) Hear from the PD and PMs about the status of the project's progress, the resource allocation and the role-sharing between the public and private sectors, according to the progress of the R&D, and report the details to the Strategy Council (tentative name) every year.
7) Provide support for the management of intellectual property, international standardization, public relations, and technical trends surveys, so that the PD and PMs can properly manage these. In addition, identify a promising project (or a part of the project) in an early stage from the perspective of the practical use of its R&D results in society, and ensure that support from specialists can be acquired as necessary so that the capability to identify a project that will be practically used in society in the future can be effectively demonstrated. To gain public understanding and support, help the PD and PMs to smoothly conduct bi-directional communication activities (public dialogue on science and technology) through which they can explain to society their research activities.
8) Since crosscutting support such as ELSI (Ethical, Legal and Social Issues) /mathematical science is also important for R&D acceleration and its practical use in society, provide an opportunity for the PD and crosscutting researchers to exchange their opinions, and establish a system through which a PM can acquire the support of crosscutting researcher(s), if the PD deems it necessary, and if the PM requires it.
9) Promptly appoint a new PD when an accident occurs or a vacancy arises, or when it is deemed that the PD is not fulfilling their duties.

10) Decide the details of PDs', sub-PDs', and PMs' working conditions.
11) Construct an environment in which young researchers with bold and flexible ideas, who will define future society, can actively participate in a project.
12) The relevant FAs cooperate and share related domestic and overseas R&D trends to build the most advanced research support system.
13) To pursue advanced data management, manage a data catalogue comprised of metadata[3] submitted by PMs and researchers by utilizing system such as the Research Data Infrastructure System.

○ When performing these duties, FAs strive to create an environment in which researchers can focus on research by improving the efficiency of evaluation work, as well as continue their efforts in cooperation with the relevant ministries and offices, and other research promotion organizations. Also FAs utilize advanced data management to ensure fairness of research, and engage in efforts to prevent a contractor from committing a wrongful act and misapplying research funding.

[PD]

○ The terms of the PD and sub-PD are, in principle, five years, and they may also be reappointed.

○ Any nationality is welcome to be the PD, but the PD is principally based in Japan after being appointed.

○ The duties of the PD are listed below:

1) To realize the concept and achieve the MS Goals, strategically build a draft of portfolio, and promote R&D in a challenging and systematic way.
2) When building a draft of portfolio, in principle, combine multiple projects that take different research approaches by taking into account their R&D innovation and originality, and future economic and social ripple effects, since the chance of success (or failure) and their research results (return) will vary according to their respective research approaches, even among the research projects that aim for the same goal. For example, let's assume there is a project through which significant research results can be achieved, but with a limited chance of success, while there is another project through which a certain level of research results can be achieved with a high chance of success. In such case, funds will be allocated by comprehensively considering the chance of success and research results. In the case of a project that requires technical examination, although research results can be anticipated if successful, the project starts as its feasibility study with a small start. Thereafter the allocation of funding fluctuates according to the progress status.
3) Always understand the progress of R&D based on the portfolio, and manage and supervise in a unified manner the PMs who oversee the relevant projects while constantly reviewing the portfolio, such as allocating resources with a focus on research that is steadily progressing, and discontinuing a project if it is deemed to be unlikely to produce results.
4) Lead the portfolio review based on advice from external evaluators and the Strategy Council (tentative name).
5) Objectively evaluate the research content and lead the utilization of private funding, as well as indirectly support PM activity by pursuing the practical uses of the R&D results in the society and collaboration with the private sector, and promoting international cooperation. In addition, conduct bi-directional communication activities (public dialogue on science and technology) to explain the research activities to society.
6) Conduct other actions necessary to promote the research for which the PD is responsible.

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[3] Metadata provides explanatory information about research data, such as data name, content, administrator, location of storage, contact of administrator, and policy for closure, sharing, and disclosure of research data.

[PM]

○ All nationalities are welcome to be a PM, but PM is principally based in Japan after being appointed.

○ Allow PM to concurrently engage in other work. The time allocated for research (effort rate) is set by FAs.

○ The duties of a PM are listed below:

1) Under the direction of the PD, refine a proposed project during an open call to improve it, draw up a project plan (target setting of project, preparation of R&D details and implementation schedule, establishment of an R&D system to implement the project, and formulation of a plan to allocate research funding to participating R&D institutions in the project), and strategically implement the project. Moreover, flexibly and nimbly implement project modifications and changes in direction, including practical use of some research results in society.
2) Properly manage intellectual property and information, and actively and strategically promote international cooperation.
3) Objectively evaluate the research content, seek sponsors from private enterprises if R&D is at the phase at which private funding can be used, and also try to draw on private funding. In addition, conduct bi-directional communication activities (public dialogue on science and technology) to explain the research activities to society.
4) Develop a data management plan (DMP) that defines the data to be managed, and also aggregate metadata about the data to be managed from researchers based on DMP, and submit that to FAs. In addition, with system such as the Research Data Infrastructure System, store and share the data to be managed, and publish the data to the extent necessary.

4. The R&D Implementation Method

[Open Recruitment and Selection]

○ After discussions with the PD, FAs openly recruit and select, in principle, more than one PM inside and outside Japan. On this occasion, establish an evaluation system comprised of outside experts, and ask for the opinions of outside experts to recruit PMs from a comprehensive perspective. Furthermore, when establishing an evaluation system, it should be taken into consideration that the Moonshot R&D Program aims at challenging R&D concepts by being based more on bold ideas that will not just be extensions of conventional technology.

○ The following points should be taken into consideration when selecting a PM:

・They have expert knowledge and a wide human network such as relevant researchers inside and outside Japan, to promote cutting-edge research.
・They have management and leadership skills such as the ability to establish an optimal R&D system, and nimbly review the system according to the status of progress.
・Project targets and contents proposed by the PM (hereinafter referred to as proposal details) are challenging and based more on bold ideas than existing proposals, and comprise innovative proposals from which a substantial impact on future industry and society is expected.
・From the perspective of technical feasibility and practical use of its R&D results in society, appropriate scenarios (hypothesis for success) for achieving the MS Goals by 2050 can be clearly explained.
・The proposals contain top-level R&D capabilities, knowledge, and ideas, regardless of whether they come from inside or outside Japan.

[Building a Portfolio/Drawing up of a Project Plan]

- ○ FAs instruct the PMs to refine a proposed project during an open call to improve it and draw up a project plan under the direction of the PD.
- ○ To realize the concept and achieve the MS Goals, the PD strategically builds a draft of portfolio.
- ○ FAs determine the portfolio based on a draft of portfolio built by the PD.
- ○ FAs establish a system to check the PD and PMs do not have conflicts of interest during the course of drawing up a project plan and R&D implementation, so as to promote R&D in a fair and appropriate manner.

[R&D Implementation]

- ○ Under the direction of the PD, the PMs flexibly and nimbly promote acceleration and deceleration of individual R&D challenges in the projects according to the progress of R&D, and changes in direction, including practical use of some research results in society, with their own authority and responsibilities.
- ○ The PD and PMs always understand domestic and overseas R&D trends, and nimbly review the portfolio and projects according to the progress of R&D. In particular, they strive to understand similar R&D trends overseas, actively attract high-profile overseas researchers, and promote joint research.
- ○ The PD and PMs pursue advanced data management, such as encouraging information exchange among researchers, and data storage, sharing, and disclosure.
- ○ FAs actively support management activities of the PD and PMs, and develop an environment in which outside experts can advise the PD and PMs as required.

[Report on the Status of Progress to the Strategy Council] (tentative name)

- ○ FAs report on the status of the program's progress and other matters every year to the Strategy Council (tentative name), and improve the program (project components and fund allocation, etc.) by receiving the Council's advice and such.

[Implementation Period]

- ○ Support is available for up to 10 years from the start of the research (the start of the first project among multiple projects), while the portfolio is repeatedly reviewed.
- ○ FAs report on the results of external evaluations and self-evaluations to the Strategy Council (tentative name). After discussing with the PD, they rule on project continuation, acceleration, deceleration, modification, and termination (such as a portfolio review), based on the Council's advice.
- ○ CSTI evaluates the status of progress of the program's R&D aimed at achieving the MS Goals, and the prospects of achieving the MS Goals in the fifth year after the start of research, and decides whether to continue or terminate the program aimed at achieving the MS Goals.

5. R&D Evaluation

[Evaluation]

○ FAs establish an evaluation system comprised of outside experts, and implement external evaluations.

○ External evaluations are, in principle, implemented in the third and fifth years from the start of research. If it is decided that a program will continue for more than five years, it will then be evaluated in its eighth and tenth years. If FAs find it necessary to accelerate the evaluation period according to the project features, an appropriate schedule shall be established in advance.

○ FAs implement a self-evaluation based on the evaluation criteria specified in the following section every year (other than those years in which external evaluations are implemented) and report the results to the Strategy Council (tentative name) and the relevant ministries and agencies that formulate the concept. They will also consult with outside experts as necessary. In that case, they will also report the details of their opinions and how they are reflected in the self-evaluation.

[Evaluation Perspectives]

External evaluation is mainly based on the following perspectives, through which FAs specify detailed evaluation criteria in cooperation with the relevant ministries and offices.

<Evaluation of the program>

・The appropriateness of the portfolio aimed at achieving the MS Goals
・The status of progress of the program's R&D aimed at achieving the MS Goals
・The future prospects for the program's R&D aimed at achieving the MS Goals
・PD's management status (including portfolio management, direction to and supervision of PMs, flexibility and nimbleness)
・Cooperation with industry and the status of bridging the gap between the R&D and practical use in society (including the status of acquiring private funding [matching] and spin-out)
・Effective and efficient R&D promotion through international cooperation
・Challenging and innovative efforts based on bold ideas
・Effective and efficient use of research funding (including role sharing between the public and private sectors, and stage-gates)
・Bi-directional communication activities (public dialogue on science and technology)
・FAs' support for PD/PM activities

<Evaluation of the project>

・The appropriateness of project targets and contents aimed at achieving the MS Goals
・The status of progress toward project targets (particularly comparisons of both domestic and overseas)
・The future prospects of project targets
・The status of establishing an R&D system
・PM's project management status (including flexibility and nimbleness)
・Status of research data storage, sharing, and disclosure
・Cooperation with industry and the status of bridging the gap between the R&D and practical use in society (including the status of acquiring private funding [matching] and spin-out)
・Effective and efficient R&D promotion through international cooperation
・Challenging and innovative efforts based on bold ideas
・Effective and efficient use of research funding (including role sharing between the public and private sectors, and stage-gates)
・Bi-directional communication activities (public dialogue on science and technology)

[Handling Evaluation Results]

○ FAs report on the results of external evaluations and self-evaluations to the Strategy Council (tentative name) and relevant ministries and agencies that formulate the concept. The results of external evaluations and self-evaluations are made public in principle.

○ FAs report on the results of external evaluations and self-evaluations to the Strategy Council (tentative name). After discussing with the PD, they rule on project continuation, acceleration, deceleration, modification, and termination (such as a portfolio review), based on the Council's advice.

○ If a project, or some part of a project, is discontinued after a review of the portfolio, FAs, the PD and PMs will provide the necessary support so that the secondary research results obtained to that point can be utilized in other businesses and R&D projects, with help from the Strategy Council (tentative name).

○ FAs will announce publicly how the results of external evaluations and self-evaluations were reflected in the project continuation, acceleration, deceleration, modification, and termination (such as a portfolio review).

○ FAs will make a follow-up evaluation after a certain period of time has elapsed after R&D termination, and conduct a follow-up of the achievements of PMs' projects.

6. Eligible Project Costs

○ Costs necessary to promote the projects are taken care of by making withdrawals from the funds established by FAs for this program.

○ Eligible project costs include the following, with details of costs determined by FAs. The indirect cost ratio is 30% for universities and 10% for private enterprises (but 20% for SMEs), the ratio for others is established respectively by FAs. The following R&D may include verification up to POC (Proof of Concept) as necessary.

1) Costs required to implement R&D
2) Costs required for project management

○ Costs associated with an application for intellectual property rights (hereinafter referred to as costs for intellectual property rights) may be paid as R&D expenses (direct costs) in a commissioned research contract. If it is difficult to pay the costs for intellectual property rights through direct costs, FAs may pay such expenses through a contract executed separately from the commissioned research contract. Costs for intellectual property rights after project termination are borne by the R&D institution.

7. Handling Intellectual Property, etc.

○ Intellectual property rights, in principle, belong to the R&D institution that is a contractor, or a researcher belonging to the said institution, by applying Article 17 of the Industrial Technology Enhancement Act. The PMs place importance on utilizing intellectual property rights to achieve the MS Goals, and determine the policy for utilizing intellectual property rights. Procedural details are defined by FAs.

○ In the case of the participation of a foreign R&D institution, more than 50% of the foreign R&D institution's ownership interests of the intellectual property rights obtained by carrying out the research, is compelled to belong to FAs.

○ The transfer of intellectual property rights obtained by carrying out the research, and the establishment and transfer of an exclusive license, shall all require the prior approval of FAs.

○ Data to be managed shall be managed by the R&D institution that is a contractor, or by researchers belonging to the said institution under their responsibilities in accordance with the data policy of each institution. The categories of storage, sharing, and disclosure of data to be managed shall be clarified based on the open and close strategy, and research data are disclosed to the extent necessary by utilizing system such as the Research Data Infrastructure System.

8. Handling Conflicts of Interest

○ Since the PD is responsible for selecting PMs and for building and managing a portfolio, the PD is not allowed to participate as a PM or as a researcher. On the other hand, it is not appropriate to judge conflicts of interest between the PD or PMs and participating R&D institutions by a one-size-fits-all criteria, if that prevents Japan from attaining top-level capabilities in R&D and diverse knowledge as a result. Therefore, FAs will render proper judgment on permitting participation or not, in the light of necessity, reasonability, and appropriateness of the respective relationships, with respect to conflicts of interest between the PD and participating R&D institutions in the portfolio that the PD is responsible for building, and between the PMs and participating R&D institutions in projects that the PMs are responsible for drawing up. The results will be published as necessary. The details are defined in documents such as the application guidelines by FAs.

(Exhibit 4)

How to Apply Using the Cross-Ministerial Research and Development Management System (e-Rad)

1. About the Cross-Ministerial Research and Development Management System (e-Rad)

The Cross-Ministerial Research and Development Management System is a cross-ministerial system enabling online management of research and development processes (acceptance of applications, screening, acceptance, management of accepted projects, results reports, etc.) for the Competitive Funding System run by Japanese ministries and agencies and other funding systems.

(1) Access to the e-Rad portal site

The Cross-Ministerial Research and Development Management System（e-Rad）portal site is accessed through the Web browser via "https://www.e-rad.go.jp/en/ ". On the portal site, the latest information about the system is shown. Also, the system can be logged into from the portal site.

(2) The system usage time and inquiries about how to operate e-Rad

System usage time: Available for 24 hours a day including weekends and holidays.
Helpdesk telephone number: 0570-066-877（Free-dial）
03-6631-0622（Direct line）
Helpdesk opening hours: 9:00 am-6:00 pm on weekdays.

2. Period of Application Reception

From May 11, 2020 (Mon) to July 20, 2020 (Mon) at noon, Japan Standard Time

3. Preparations for system usage

In line with the "Registration and Procedures" on the portal site, the administrative officers on e-Rad at the Representative Organization and Joint Research Institutes should make an application to register the respective research organization/institutes and also register the member researchers. If registration has already been completed, there is no need to make an application or registration again.

Registration of member researchers should be performed for all the researchers involved in the research proposal.

Registration of organizations/institutes may normally takes 1-2 weeks, but a longer period of time may be required during busy periods, so please allow sufficient time for application.

4. Producing the proposal

(1) Downloading Application Guidelines and Application Forms (application information files)

The applicant should download the Application Guidelines and Proposal Forms (Exhibit 5

"Project Plan Proposal") from the BRAIN website (http://www.naro.affrc.go.jp/laboratory/brain/moon_shot/public_call_for_project_manager/) or from "Calls for Applications" on the e-Rad portal site, and should prepare Exhibit 5 "Project Plan Proposal" in line with the Application Guidelines.

(2) Producing PDF of Proposal

Please convert the "Project Plan Proposal" file to PDF format on e-Rad or using a scanner (10MB or less. Both color printing and black and white printing are acceptable.).

5. Registration of Application Information

(1) Preparation of Registration of Application Information

When inputting application information to the system, prepare the following items.

i) Operation Manuals (for researchers)
(https://www.e-rad.go.jp/en/manual/for_researcher.html) and this document

ii) The Proposal document and its PDF

iii) Researcher number for researchers involved in the research proposal

iv) Based on the proposed research plan, the budget amount (Direct costs (total) and Indirect costs (total)) required for each researcher for each fiscal year of the implementation period

(2) Application Information Entry Process

Application information is entered by searching for the application task after the PM from the Representative Organization logs in to the portal site (can also be entered by the research implementation manager, etc., from the Joint Research Institute). The name of the application on the system is ""Moonshot Agriculture, Forestry and Fisheries Research and Development Program". Project Manager Application". Please refer to "Operation Manuals (for researchers)" for details of the system operation process.

(3) Submission and Approval of Application Information

The applicant who enters the application information confirms that there are no mistakes in the details and submits the application information. A message will be displayed stating "Application information finalized" if submitted correctly, and the information for the application task will be submitted for the administrative officer of the Representative Organization on e-Rad.

For the submission of application information to BRAIN, the "Approval" of the administrative representative of the Representative Organization on e-Rad is required. Please note that, if the "Approval" of the administrative representative of the Representative Organization on e-Rad is not received during the period of application, the application information will not be submitted to BRAIN. Please refer to the "Operation Manuals (for administrative representatives)", https://www.e-rad.go.jp/manual/for_organ.html, only in Japanese) regarding the approval.

6. Other notes

(1) Revision of submitted application information

During the period of application, application information submitted to BRAIN can be retrieved and amended. In this case, the revision must be completed during the period of application, the application information must be re-submitted and the approval of the administrative representative of the Representative Organization on e-Rad is required again.

As the close of the application period approaches, it is expected that connecting to the e-Rad helpdesk will be difficult. Also, at times, the system may be suspended for emergency maintenance, etc.

By confirming the "Notices from System Administrator " on the portal site, please enter the application information and submit the proposal with time to spare.

(2) Inquiries after the close of the application period

The applicants (the PM candidates) may be contacted by administrative officers of BRAIN, etc. regarding the details of the application, so please ensure that communication is possible for one week after the close of the application period.

(Exhibit 5)

(Delete this page before submission)

- The Project Plan Proposal is organized as follows.
- **In principle, the study period is 5 years. Although it is possible to have a maximum study implementation period of 10 years, please produce a Project plan for the required period.**
- All applications for this Project are to be made on the "The Cross-Ministerial Research and Development Management System(e-Rad)." Please submit all necessary Forms via the e-Rad system.

※Please refer to (Exhibit 4) "How to Apply Using The Cross-Ministerial Research and Development Management System(e-Rad)."

※Please delete the blue characters when submitting.

Moonshot Type Agriculture, Forestry and Fisheries Research and Development Program		
・Forms	Cover	【Required】
・Form 1－1	Project Manager (PM)	【Required】
・Form 1－2	Scenario	【Required】
・Form 2－1	Project plan points	【Required】
・Form 2－2	Study Group Formation	【Required】
・Form 2－3	Role of Research Institute	【Required】
・Form 2－4	Project plan implementation system chart (Study Group relationship chart)	【Required】
・Form 2－5	Project plan summary	【Required】
・Form 3	Project plan details	【Required】

・Form 4	Status of initiatives for intellectual property rights of planning institute, etc.	【Required】
・Form 5	Accounting business system	【Required】
・Form 6	Junior researcher participation	【Required】
・Form 7	Information management implementation system	【Required】
・Form 8	Information regarding conflicts of interest	【Required】
・Form 9	Statement of reason for using study management steering committee	【 Corresponding Project Plan only】
・Form 10	Consent and Understanding	【Required】

(Delete this page before submission.)

Moonshot Type Agriculture, Forestry and Fisheries Research and Development Program
Project Plan Proposal

Please select the R&D target corresponding to the proposal issue.

Moonshot Goal 5 Creation of the Industry That Enables Sustainable Global Food Supply by Exploiting Unused Biological Resources by 2050		
R&D target (Please check one)	☐	**Technical development of the circular foodproduction systems by biological measures, e.g.utilizing microbes and insects, by 2050.**
	☐	**Development of technical solutions for eliminating food loss and waste and forachieving both healthy life and sustainable foodconsumption by 2050.**

Project Name of Plan	
Name of Representative Organization	
Study implementation period	FY 2020-FY 202●(1)

Necessary expenses (total) (2) forecast (Unit: 1000 yen)

FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Total (3) (5 years)
FY 2025～202●(4)	Total(5) (Total period)				

(Note 1) Although the maximum study implementation period is 10 years (until FY 2029), please enter the necessary study period.
(Note 2) Please enter the necessary expenses (total) for each fiscal year in the forecast amount (total) of research funds for each fiscal year as stated in (1) of the Application Guidelines4.
(Note 3) Please enter the total forecast amount of research funds from FY 2020 to FY 2024.

(Note 4) Please enter the total forecast amount of research funds from FY 2025 to FY 202●.
(Note 5) Please enter the total forecast amount of research funds for the total study period (FY 2020～FY 202●).

Project Manager (PM)			
Name of PM		Job Title	
Name of employing institution/office			
Accountancy manager (Representative Organization)			
Name of accountancy manager		Job Title	
Name of employing institution/office			

Form １－１【PM】*Required　1 x A4 paper*

Project Name of Plan			
Name of Representative Organization		Name of PM	

１．Suitability as PM for this Project

Please enter the following points.

- Your wide personal network of relevant domestic and international researchers, etc. and specialist knowledge for the promotion of cutting-edge R&D
- Your management capabilities and leadership capabilities for flexible system review, etc. in line with the status of progress, etc. and for the construction of optimal R&D systems

2. Policies for R&D Project management implementation

- Please enter the policies for the management of the proposed R&D Project in light of the study history and management experience of the proposer.. When filling this in, please also state what kind of initiatives will be made for intellectual property management and research data management.

3. PM Information

① PM CV, etc.

Name	
Educational background	
Degree	
Main work experience Study details	

② Main research papers, publications and patents acquired

Name	Degree	Affiliations/Job Title	Main research papers, publications and patents (up to five of the key items within recent years)	Connection to Project plan

(Note 1) Please place an "◎" next to the items that are connected to the proposed Project plan.

(Note 2) Underline the name when the author (co-author) includes the proposer and a main researcher

③ Effort

Ratio (%)	

(Note) Effort refers to the ratio (%) of time allocation required for the implementation of each research activity, etc., against the total work hours (total essential work hours including not only research activities but also education activities, etc.) per year.

Also, in the case that the topic for which the application is made is selected, the effort will be determined once again at that time and registered on e-Rad.

Form 1－2【Scenario】*Required 1 x A4 paper*

Project Name of Plan			
Name of Representative Organization		Name of PM	

Scenarios leading to achievement of 2050 Moonshot Goal

1. Scenarios leading to achievement of 2050 Moonshot Goal

Regarding the scenarios from now on leading to the achievement of the 2050 Moonshot Goal 5, please make a specific statement including the goals for each year and the achievement targets.

- Among the Scenarios until 2050, please separately state the developments/verifications of prototypes that are the target for the Project period from 2020 to 2030, and the outlook for implementation, commercialization and popularization from after the completion of the Project in 2030 through to 2050.
- In comparison to conventional R&D, please make a statement about items based on even more daring concepts of research, more challenging items, and innovative items that are expected to have a major impact on industry/society in the future.
- Toward 2050 goal achievement, please make a statement that clearly specifies valid scenarios (successful assumptions) based on technical perspectives and social implementation perspectives including public-private role division.
- Please make a statement about the concentration of top-level R&D capabilities, knowledge and ideas whether domestic or international.
- Please make a statement about Ethical, Legal and Social Issues (ELSI: Ethical, Legal and Social Issues) and initiatives for the acceleration of R&D and promotion of social implementation. Also, please state if any considerations are being given to inter-disciplinary initiatives such as math and science.

2. Social/Economic Impact at the time of Achieving the Moonshot Goal

- Please make a statement about the Social/Economic Impact at the time of Achieving Moonshot Goal 5 including back-up data.

Form 2－1 【Project plan points】*Required 1 x A4 paper*

Name of Project Plan			
Name of Representative Organization		Name of PM	

※Based on “the Scenarios” leading to achievement of 2050 Moonshot goal in Form 1 - 2, please state the summary of the Project Plan from FY 2020 to FY 2029.
※Please briefly state each item according to the character count.

① Technical issues to be resolved (summary)	*(100 characters or less)*

② Project plan target (summary)	*(200 characters or less)*

③ Project plan details (summary)	*(100 characters or less)*

④ Technical superiority	*(100 characters or less)*

(Note) Please state a summary of the scientific evidence and technologies, etc. that will form the breakthrough for achieving the goal stated in 1 (2) of Form 3－1 - (2)【Project plan target and details 】.

⑤ Exit strategy for Proposed Project plan (summary)	*(100 characters or less)*

Form 2－2【Study Group Formation】*Required*

－	Name of organization (Including branch name, etc.)	Main role (1)	Research funds forecast amount (2)(1000 yen)							
			FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Total (3) (5 years)	FY 2025～202●(4)	Total(5) (Total period)
Representative Organization	○○University ○Department	・General outline and adjusted ・ ○○analysis and ○○development ・ Publication of research results, etc.								
Joint Research Institutes	○○Prefecture○ ○Laboratory ○○Branch	○○evaluation technique and○○technology development								
	(National research)○○Organization○○study center	○○production								
	○○University ○○Department	Based on the results of an analysis of ○○, clarification of ○○								
	(Independent)○○Organization ○study center	○○production								
	○○Co., Ltd.	Reforming ○○								

Collaborators	○○Co., Ltd.	Evaluation of ○○								
Total										

(Add or remove lines as necessary) Important points are stated on following page.

(Note 1) Please briefly state the role allocation of Joint Research Institutes and Collaborators in Study Groups.

(Note 2) In the forecast amount of research funds for each fiscal year, please state the forecast amount of research funds for each fiscal year as specified in Application Guidelines 4 (1). Please produce the necessary period, although the maximum study implementation period is 10 years.

(Note 3)Please enter the total forecast amount of research funds from FY 2020 to FY 2024.

(Note 4) Please enter the total forecast amount of research funds from FY 2025 to FY 202●.

(Note 5) Please enter the total forecast amount of research funds for the total study period (FY 2020～FY 202●) in (　　).

Form 2－3【Role of Research Institute】*Required*

－	Name of Research Institute	Role allocation (state in detail)
Representative Organization	○○University ○Department	Plan the general outline and adjustments as a Representative Research Institute. Implementation of analysis of ・・・and・・・・・・・・・technology development. In addition to sharing the developed・・・・・・technology, etc. study results, etc. with the planning institute, they are published nationwide on the website, etc.
Joint Research Institutes	○○Prefecture○○Laboratory ○○Branch	○○Based on information analyzed at University・・・・・・・・・・・・evaluation techniques were developed, and local surveys of・・・・・・・・・were conducted・・・・・・・for implementation alongside technical development.
	(National research)○○Organization ○○study center	Based on the study Information, evaluation techniques and prototype reforms of each planning institute,・・・・・・・・・・manuals were produced and distributed.
	○○University ○○Department	Implementation of the analysis of ・・・・・・・・・that is the basis of this study and a clarification of ・・・・・・・・・・・・・・・・・・・based on those results. As a result of the analysis, the clarified ・・・・・・・・・information is shared with other planning institutes and promotes research issues.
	(Independent)○○Organization○study center	Based on information analyzed at ○○University, ○○Prefecture○○Laboratory ○○Branch, a prototype was produced in collaboration with ○○Co., Ltd.
	○○Co., Ltd.	The ・・・・・・・prototype was reformed in collaboration with ○○Organization ○Laboratory.
Collaborators	Co., Ltd. ○○○○	Regarding the ・・・・developed in this study, an evaluation of ・・・・is performed for implementation and commercialization.

(Add/delete as necessary)

※1 Please state what kind of Study Groups were formed and whether the research progressed. Please maintain consistency with the Form 2－2 “ Study Group Formation details.”

※2 The Collaborators refers to a third party required for the execution of the research issue. Collaborators are not Study Group members, so they cannot directly received an allocation of research funds. For details, pleas see Application Guidelines 3 (6).

Form 2－4【Project plan implementation system chart (Study Group relationship chart)】

Required 1 x A4 paper

(Note 1) For each Research Institute, etc., please state the name of the study implementation area (name of prefecture, or name of country if overseas) and Project plan details (research items in the table in Form 3－１-(3) "Project organization and annual plan").

(Note 2) If there is a Research Institute, etc. (Collaborators) cooperating in the implementation of the R&D Project without being assigned for contract research in this Project, please state it clearly.
Example: △△△△Co., Ltd. (Collaborators)

Form 2－5　【Project plan summary】 ***Required1 x A4 paper (Either vertical or horizontal)***

(Note) Please attach any charts, etc., to simplify the understanding of this Project plan.

Form 3【Project plan details】*Required*

Name of Project			
Name of Representative Organization		Name of PM	

1. Project plan specific details

(1) Technical issues to be resolved

Please make a detailed statement of the content entered in Form 2－1 ① "Technical issues to be resolved (summary)."

(2) Project plan target and details

＜Points to be noted when filling in the Project plan targets＞

In line with MOFA's Moonshot Goal 5 and R&D Concept, please make a detailed statement about content entered in Form 2－1② "Project plan target (summary)" regarding the goals to be achieved between FY 2020 and FY 2029 from among the Scenarios up to 2050. Using expressions that are as specific and quantitative as possible, please state the targets for each fiscal year that aim to be realized in a 10-year period based on the undertaking of this Project or by some other means. ("△△△△ is possible." "It is the ○○○○ method." "As for △△△△, it is ○○ or more." "△△ is to be done for ○○ units or more.").

Please state the important milestones (targets) as external evaluations are scheduled after 3 years, 5 years, 8 years and 10 years. Also, please state any prototypes for development/testing by 2030.

Points to note when entering the Project plan details

In line with MOFA's Moonshot Goal 5 and R&D Concept, please make a detailed statement about content entered in Form 2－1③ "Project plan details (summary)" regarding the Project plan to be implemented in order to achieve the goals stated in (1).

Please make a statement to clarify the details of effective and efficient initiatives based on international cooperation.

In comparison to conventional items, with regard to the R&D Project goal and details, please state any items that are based on more daring concepts, are more challenging or that are innovative and are expected to have a major impact on future industry and society.

Please state any items in the proposal details that concentrate top-level R&D capabilities, knowledge or ideas, whether in Japan or overseas.

In particular, please make a statement that clarifies the details and the path to acquiring the scientific evidence and technology, etc. that will be the breakthrough for realizing the target.

Please state specifically how the Research Institutes participating in the Study Group cooperate and how synergy is manifested with regard to individual research issues.

Also, in the case that there are Research Institutes, etc. (Collaborators) cooperating in the implementation of the R&D Project, please state both the specifics of how the Research Institutes and Collaborators participating in the Study Group cooperate, and how synergy is manifested.

(Note 1) In principle, the study period is 5 years. Although it is possible to have a maximum study implementation period of 10 years, please produce a Project plan for the required period.

(Note 2) When executing the Project plan, in the case that management is divided into Subgroups (a group that combines multiple research institutes participating in the Study Group), please produce a table for each subgroup and state the target and details.

Overall Study Group

	Target	Project plan details
FY 2020		
FY 2021		
FY 2022 (External evaluation implementation year)		
FY 2023		
FY 2024 (External evaluation implementation year)		
FY 2025		
FY 2026		
FY 2027 (External evaluation implementation year)		
FY 2028		

FY 2029 (External evaluation implementation year)		
Project plan exit strategy	※１：Please make a detailed statement about the content entered into Form 2－1⑤ “Exit Strategy for Proposed Project Plan(summary)” ※2: Please state the ability, specifications and cost of the prototype, and, if it is achieved, the social/economic impacts that will be brought about.	

Name of Subgroup：○○○○

	Target	Project plan details
FY 2020		
FY 2021		
FY 2022 (External evaluation implementation year)		
FY 2023		
FY 2024 (External evaluation implementation year)		
FY 2025		
FY 2026		

FY 2027 (External evaluation implementation year)		
FY 2028		
FY 2029 (External evaluation implementation year)		

(Add/delete as necessary)

(3) Project organization and annual plan

Regarding the target and Project plan details entered in (2), please make a detailed and easily understandable statement for each fiscal year in the "Project schedule" and for each Study Group planning institute (RepresentativeOrganization, Joint Research Institute and Collaborators).

In the case of management in which the Study Group is divided into multiple Subgroups, please make a detailed statement for each Subgroup.

Also, in the research funds table, please state the procedures used for each research item comprising the Project plan, and the amount of research funding forecast to be required for each fiscal year.

※*Please complete the study plan for a maximum of 10 years.*

Project schedule (Example entry)

Research items	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
1．△△phenomenon investigation (1)・・・・analysis (2)・・・・analysis (3)・・・・confirmation	(1)・・・・analysis (○○University (2)・・・・analysis (○○Prefecture○○Laboratory, ○○Prefecture (3)・・・・confirmation ((National Research Center)○○Organization									
2．○○material development (1)・・requirement study (2)・・・・trial (3)・・・・evaluation	(1)・・・・requirement study (○○University (2)・・・・trial (○○Prefecture○Laboratory) (3)・・・・evaluation (○○○Co., Ltd.)									
3.prototype development (1)・・requirement study (2)・scale-up (3)・・result confirmation						(1)・・・・requirement study (○○University ○Department,				
							(2)・・・・scale-up (○○Prefecture○Laboratory)			
								(3)・・・result confirmation (○○○Co., Ltd.)		

(Add/delete as necessary)

Research funds [1](example entry) (Unit: 1000 yen)

Items	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Total [4] (5 years)	2025～202● FY [5]	Total [6] (Total period)
1-(1) ○ ○ University ○ Department 1-(2) ○ ○ Prefecture ○ ○ Laboratory ○ ○ Prefecture ○ ○ Laboratory 1-(3) ○ ○ Organization ○ ○ Laboratory (1 Total([3]))	####.# ####.# ####.# ####.# (####.#)	####.# ####.# ####.# ####.# (####.#)	####.# ####.# ####.# ####.# (####.#)	####.# ####.# ####.# ####.# (####.#)	####.# ####.# ####.# ####.# (####.#)	####.# ####.# ####.# ####.# (####.#)	####.# ####.# ####.# ####.# (####.#)	####.# ####.# ####.# ####.# (####.#)
2-(1) ○ ○ University ○ Department 2-(2) ○ ○ Prefecture ○ ○ Laboratory 2-(3) ○○○Co., Ltd. (2 Total ([3]))	####.# ####.# ####.# (####.#)	####.# ####.# ####.# (####.#)	####.# ####.# ####.# (####.#)	####.# ####.# ####.# (####.#)	####.# ####.# ####.# (####.#)	####.# ####.# ####.# (####.#)	####.# ####.# ####.# (####.#)	####.# ####.# ####.# (####.#)
3-(1) ○ ○ University ○ Department ××University ×Department 3-(2) ○ ○ Prefecture ○ ○ Laboratory 3-(3) ○○○Co., Ltd. (3 Total ([3]))	####.# ####.# ####.# ####.# (####.#)	####.# ####.# ####.# ####.# (####.#)	####.# ####.# ####.# ####.# (####.#)	####.# ####.# ####.# ####.# (####.#)	####.# ####.# ####.# ####.# (####.#)	####.# ####.# ####.# ####.# (####.#)	####.# ####.# ####.# ####.# (####.#)	####.# ####.# ####.# ####.# (####.#)
Total	#####.#	#####.#	#####.#	#####.#	#####.#	#####.#	#####.#	#####.#

(Add/delete as necessary)

(Note 1) As for research funds, please state the forecast amount of research funding specified in the Application Guidelines 4 (1).
(Note 2) Please state the research funds for each Institution individually.
(Note 3) Please state the total forecast amount of research funds for each fiscal year in (　) for each research item.
(Note 4) Please enter the total forecast amount of research funds for FY 2020 to FY 2025.
(Note 5) Please enter the total forecast amount of research funds for FY 2025 to FY 202●.
(Note 6) Please enter the total forecast amount of research funds for the total study period (FY 2020～FY 202●).

2. R&D results, etc.

(１) R&D from public funding that is actually being implemented or under application

Regarding R&D from national competitive research funding and other systems such as research grants that are actually being implemented or under application by the PM and Main researcher for the proposal issue, please state the name of the system, the name of the research task, the study period, amount of research funding, and difference/correlation with the proposal issue.

PM Name ：○○　○○

System name (Note 1) (Name of allocating institution, etc.)	Name of research task (Project plan)	3. Research period (FY)	Status (being implemented/ under application)	Role (2)	FY 2020 research funds (3) (Amount for total period) (1000 yen)	Effort (4) (%)	Difference from/relevance to proposal issue(5)
【Proposal issue】 (BRAIN)	○○○○○	2020～2029	Under application	Representative	○○1000 yen (○○○1000 yen)	○○%	
○○○○○ (○○○○)	○○○○○	○○○○～○○○			○○1000 yen (○○○1000 yen)	○○%	○○○○○○○○○○○○○○○○○○○○○○○

(Add/delete as necessary)

(Note 1) State this proposal issue at the top, and, below, please state the Project Plan name if any other applications have been made for Moonshot goals (NEDO and JST) other than this Project.

(Note 2) If the role of the researcher in the Project is the stated name of the Representative for the Project, please write it as “Representative.” Please leave it blank if it is the main researcher.

(Note 3) Please state the amount of direct expenses for research funds (amount applied for if under application) received and used by the individual in 2020 at the top, and, in parentheses, state the total amount (forecast amount) that the individual will use in the total study period at the bottom.

Also, in the person is a member of a research team, etc., please state the shared amount (forecast amount) received and used by the individual in 2020 at the top, and, in parentheses, state the shared amount (forecast amount) that the individual will use in the total study period at the bottom (if the shared amount has not been allocated, please write “０” for each).

(Note 4) For “Effort,” if the total working hours for the year (essential working hours including not only research activities but also educational activities, etc.) is 100%, please state the allocated ratio (%) of time that is required to implement each of the research activities, etc.

Also, in the case that the topic for which the application is made is selected, the effort will be determined once again at that time and registered on e-Rad.

(Note 5) If it is related to the research content of this proposal issue, please state the research outcomes or the details in brief, and state that there is a clear distinction from the R&D that will hopefully be implemented in this proposal.

Main researcher　　Name　：○○　○○

System name [1] (Name of allocating institution, etc.)	Project (research issue)名	3. Research period (FY)	Status (being implemented/ under application)	Role [2]	FY 2020 research funds [3] (Amount for total period) (1000 yen)	Effort [4] (%)	Difference from/relevance to proposal issue[5]
【Proposal issue 】 (BRAIN)	○○○○○	2020～2029	Under application		○○1000 yen (○○○1000 yen)	○○%	
○○○○○ (○○○○)	○○○○○	○○○○～○○○○			○○1000 yen (○○○1000 yen)	○○%	○○○○○○○○○○○○○○ ○○○○○○○

(Add/delete as necessary)

(Note 1) State this proposal issue at the top, and, below, please state the Project Plan name if any other applications have been made for Moonshot goals (NEDO and JST) other than this Project.

(Note 2) If the role of the researcher in the Project is the stated name of the Representative for the Project, please write it as "Representative."
Please leave it blank if it is the main researcher.

(Note 3) Please state the amount of direct expenses for research funds (amount applied for if under application) received and used by the individual in 2020 at the top, and, in parentheses, state the total amount (forecast amount) that the individual will use in the total study period at the bottom.
Also, in the person is a member of a research team, etc., please state the shared amount (forecast amount) received and used by the individual in 2020 at the top, and, in parentheses, state the shared amount (forecast amount) that the individual will use in the total study period at the bottom (if the shared amount has not been allocated, please write "０" for each).

(Note 4) For "Effort," if the total working hours for the year (essential working hours including not only research activities but also educational activities, etc.) is 100%, please state the allocated ratio (%) of time that is

required to implement each of the research activities, etc.

Also, in the case that the topic for which the application is made is selected, the effort will be determined once again at that time and registered on e-Rad.

(Note 5) If it is related to the research content of this proposal issue, please state the research outcomes or the details in brief, and state that there is a clear distinction from the R&D that will hopefully be implemented in this proposal.

(2) Status of activities as a Study Group so far

For this application, please briefly state the status of activities as a Study Group (even if it is not exactly the same study implementation system) so far (study group regarding industry-academia-government collaboration, participation in investigative committees, and collaborative study results with other Institutions, etc.).

(3) Self-funded R&D that is actually being implemented or that is scheduled for concurrent implementation

In the case that there is any self-funded R&D that is actually being implemented or that is scheduled for concurrent implementation alongside this Project, please show a clear distinction from the Project plan and accountancy that you wish to implement due to being assigned this Project.

3. Detailed forecast of research funds from each Research Institute, etc.

(1) Breakdown of research funds for each fiscal year

＜Entire Study Group＞

(Unit: 1000 yen)

Major items		Medium items	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Total (1) (5 years)	2025～FY 202●	Total (2) (Total period)
Direct expenses	1. Cost of goods	Cost of equipment								
		Cost of consumables								
	2. Personnel costs ・Recompense	Personnel costs								
		Recompense								
	3. Travel costs	Domestic travel costs								
		International travel costs								
	4. Other	Outsourcing costs								
		Non-outsourcing costs								
	Total direct expenses									
Indirect expenses (Within 30% of above expenses)										
Total										

(Note 1) Please state the total forecast amount of research funds from FY 2020 to FY 2024.
(Note 2) Please enter the total forecast amount of research funds for the total study period (FY 2020-FY 202●).

＜**Representative Organization** ：○○○○＞

(Unit: 1000 yen)

Major items		Medium items	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Total (1) (5 years)	2025～FY 202●	Total (2) (Total period)
Direct expenses	1. Cost of goods	Cost of equipment								
		Cost of consumables								
	2. Personnel costs ・Recompense	Personnel costs								
		Recompense								
	3. Travel costs	Domestic travel costs								
		International travel costs								
	4. Other	Outsourcing costs								
		Non-outsourcing costs								
	Total direct expenses									
Indirect expenses (Within 30% of above expenses)										
Total										

(Note 1) Please state the total forecast amount of research funds from FY 2020 to FY 2024.

(Note 2) Please enter the total forecast amount of research funds for the total study period (FY 2020-FY 202●).

<PM activity expenses：○○○○>

※ Please state the PM activity expenses (number included in breakdown of research funds for each fiscal year for Representative Organization).

Major items		Medium items	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Total (1) (5 years)	2025～FY 202●	Total (2) (Total period)
Direct expenses	1. Cost of goods	Cost of equipment								
		Cost of consumables								
	2. Personnel costs ・Recompense	Personnel costs								
		Recompense								
	3. Travel costs	Domestic travel costs								
		International travel costs								
	4. Other	Outsourcing costs								
		Non-outsourcing costs								
	Total direct expenses									
Indirect expenses (Within 30% of above expenses)										
Total										

(Note 1) Please state the total forecast amount of research funds from FY 2020 to FY 2024.

(Note 2) Please enter the total forecast amount of research funds for the total study period (FY 2020-FY 202●).

＜**Joint Research Institute** ：○○○○＞

※Please enter by adding a table for each Joint Research Institute covering all Joint Research Institutes.

(Unit: 1000 yen)

Major items		Medium items	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Total (1) (5 years)	2025～FY 202●	Total (2) (Total period)
Direct expenses	1. Cost of goods	Cost of equipment								
		Cost of consumables								
	2. Personnel costs ・Recompense	Personnel costs								
		Recompense								
	3. Travel costs	Domestic travel costs								
		International travel costs								
	4. Other	Outsourcing costs								
		Non-outsourcing costs								
	Total direct expenses									
Indirect expenses (Within 30% of above expenses)										
Total										

(Note 1) Please state the total forecast amount of research funds from FY 2020 to FY 2024.
(Note 2) Please enter the total forecast amount of research funds for the total study period (FY 2020-FY 202●).

(2) Breakdown of equipment and furnishing costs (FY 2020-FY 2024)

Name of equipment/furnishing (Name of manufacturer along with the standard, etc.)	Quantity (Unit)	Unit price (1000 yen)	Monetary amount (1000 yen)	Purpose of use and necessity	Installing institution /post
(FY) ○○analytical instrument (Name of manufacturer /model number)					
(FY)					
(FY)					
(FY)					
(FY)					

(Note 1) Please state the planned equipment and furnishing costs for 5 years (FY 2020-FY 2024).
(Note 2) Please state the total equipment and furnishing costs in the "1. Equipment and furnishing costs from among cost of goods" column for the Representative Agencies and Joint Research Institutes on the research funds breakdown table for each fiscal year in (1).
(Note 3) In principle, please totalize the equipment and furnishing costs for the first fiscal year.
In principle, the purchase of equipment/furnishings that are not listed in the total shall not be approved. Also, the acquisition of general buildings and structures shall not be approved.
(Note 4) When introducing equipment/furnishings, please choose the optimal means in terms of economization for expense reduction from among purchasing, leasing and rental, etc. When leasing or renting, make a total in the "4. Other (non-outsourcing)," and enter it in "(6) Leasing and rental breakdown."
(Note 5) When planning 5 items or more, insert a suitable number of lines and state the required items.

(3) Personnel costs breakdown (FY 2020-FY 2024)

	No. of people	Period (Month)	Monetary amount (1000 yen)	Job details	Assignment
(FY) Post-doctoral	5.	8.	○○	1 (1) Responsible for ・・・・ 2 (3) ・・・・	○○University ○○ Co., Ltd.
(FY) Experiment assistant	3.	7.	○○	2 (2) ・・・・	○○Laboratory
(FY) ・・・・					

(FY)					
(FY)					

(Note 1) Please state the planned personnel costs for 5 years (FY 2020-FY 2024).
(Note 2) Please state the breakdown of total personnel costs in "2.Personnel costs from among personnel costs/recompense" for Representative Agencies and Joint Research Institutes in the breakdown of expenses for each fiscal year in (1)
(Note 3) When planning multiple uses, insert a suitable number of lines and state the necessary items.

(4) International travel cost breakdown (FY 2020-FY 2024)

	No. of people	Monetary amount (1000 yen)	Destination	Necessity	Travelling institution/post
(FY) ○○survey					
(FY) ○○survey					
(FY) ○○survey					
(FY) ○○survey					
(FY) ○○survey					

(Note 1) Please state the planned international travel costs for 5 years (FY 2020-FY 2024).
(Note 2) Please make a specific statement of the destination and the necessity for the total international travel costs (trips to other countries or invitations to people from overseas, etc.) in the "3. Travel expenses" column for Representative Organization and Joint Research Institutes in the breakdown of study expenses for each fiscal year in (1).
(Note 3) When planning 5 items or more, insert a suitable number of lines and state the required items.

(5) Outsourcing costs breakdown (1 million yen or more per job) (FY 2020-FY 2024)

Job name	Quantity (Unit)	Unit price (1000 yen)	Monetary amount (1000 yen)	Purpose of use and necessity	Ordering party
(FY)					
(FY)					
(FY)					
(FY)					
(FY)					

(Note 1) (Note 1) Please state the planned outsourcing costs for 5 years (FY 2020-FY 2024).
(Note 2) Of the total expenses in "4. Outsourcing costs from among other expenses" for Representative Organization and Joint Research Institutes in the breakdown of expenses for each fiscal year in (1), please make a statement in the case of any miscellaneous jobs of 1 million yen or more per job (maintenance of equipment directly related to this Project or data analysis, etc.).
(Note 3) When planning 5 items or more, insert a suitable number of lines and state the required items.

(6) Leasing/rental breakdown (FY 2020-FY 2024)

Name of part	Quantity (Unit)	Unit price (1000 yen)	Monetary amount (1000 yen)	Purpose of use and necessity	Department
(FY)					
(FY)					
(FY)					
(FY)					
(FY)					

(Note 1) Please state planned leases/rentals for 5 years (FY 2020-FY 2024).
(Note 2) Please state any Leases/rentals from among the total expenses in "4. Outsourcing costs from among other expenses" for Representative Organization and Joint Research Institutes in the breakdown table for research funds for each fiscal year in (1).
(Note 3) For leases/rentals for the entire study period, please refer to "(8) Introducing goods, etc." in 4 of II of "Research implementation guidelines for consigned project - In connection to administrative

processing."

(Note 4) When planning 5 items or more, insert a suitable number of lines and state the required items.

(7) Prototype breakdown (FY 2020-FY 2024)

Name of Prototype (State the specifications, etc.)	Quantity (Unit)	Unit price (1000 yen)	Monetary amount (1000 yen)	Purpose of use and necessity	Department
(FY)					
(FY)					
(FY)					
(FY)					
(FY)					

(Note 1) Please state the planned prototypes for 5 years (FY 2020-FY 2024).

(Note 2) Please state any planned prototypes from among the total expenses in "1. Costs of goods" or "4. Other expenses" for Representative Organization and Joint Research Institutes in the breakdown table for research funds for each fiscal year in (1).

(Note 3) When planning 5 items or more, insert a suitable number of lines and state the required items.

(8) Status of ownership of equipment, etc., scheduled for use in this proposal (FY 2020-FY 2024)

Name of equipment/furnishing (Name of manufacturer along with the standard, etc.)	Quantity (Unit)	Purpose of use and necessity	Installing institution/post
(FY) ○○analytical instrument (Name of manufacturer/model number)			
(FY)			
(FY)			
(FY)			
(FY)			

(Note 1) Please state the equipment, etc., scheduled for use for 5 years (FY 2020-FY 2024).

(Note 2) When planning 5 items or more, insert a suitable number of lines and state the required items.

【Special notes】

1. Please include consumption tax (10%) in all of the stated required amounts.

2. In principle, approval shall not be given for the purchase of furniture including desks, chairs and shelves that should be maintained by the assignee, highly-generic business equipment such as computers, digital cameras and related equipment, copy paper, toner, USB memory devices, HDDs, OS such as Windows, folders, stationary, work clothes, food wrapping, dictionaries, periodicals and other highly-generic consumables.

   However, the amount can be included for business machinery, etc. such as

   - controller units for research equipment purchased in the assigned Project and computers/printers ancillary to analytical instruments
   - computers/digital cameras, etc. used exclusively for the storage/analysis, etc. of data acquired in the assigned Project
   - computer-relater equipment, etc. required for the storage of data collected in survey sites and for video data storage necessary for the accomplishment of the Project survey

   as long as there is a clear need based on the assumption that such equipment shall be used exclusively for the assigned Project.

   Also, the amount for consumables may be included for the minimum number of items used in the assigned Project as long as it is clearly required directly for the assigned Project.

3. Indirect expenses are expenses other than those that should be classified as direct expenses that are required indirectly by research institutes etc. in relation to conducting research or expenses to support implementation such as maintenance and operating costs for facilities of administrative departments, research departments, and other business departments. relevant to the Project. An amount equal to a maximum of 10-30% of the total amount of direct expenses can be included as the ratio of indirect expenses (30% for Universities, 10 % for private companies (20% for small-to-medium enterprises)). Please calculate the total after consulting the administrative department, etc. in advance regarding the required amount.

4. information about the Representative Organization and Joint Research Institutes, etc.

※Name of and address, etc. of representative at Representative Agencies and all Joint Research Institutes and Collaborators (produce separately for each brand and department, etc. that actually implements research)

RepresentativeOrganization	Name of organization				
	Address	〒○○○－○○○○			
	PM	Name		Job Title	
		Affiliations	○○○Department ○○○Section		
		Tel.: [];	**-****-****(Extension)	FAX	**-****-****
		e-mail		Effort	(%)
	Research implementation manager	Name		Job Title	
		Affiliations	○○○Department ○○○Section		
		Tel.: [];	**-****-****(Extension)	FAX	**-****-****
		e-mail		Effort	(%)
	Accountancy general manager	Name		Job Title	
		Affiliations	○○○Department ○○○Section		
		Tel.: [];	**-****-****(Extension)	FAX	**-****-****
		e-mail			
	Accounts manager	Name		Job Title	
		Affiliations	○○○Department ○○○Section		
		Tel.: [];	**-****-****(Extension)	FAX	**-****-****
		e-mail			
	Job summary				
	Number of employees	(people)			
	Financial	FY	○FY	○FY	○FY

	status (Note 5～６)	Current term profit (1000 yen)			
		Capital (1000 yen)			
		Net assets (1000 yen)			

Joint Research Institute	Name of organization				
	Address	〒○○○－○○○○			
	Research implementation manager	Name		Job Title	
		Affiliations	○○○Department ○○○Section		
		Tel.: [];	**-****-****(Extension)	FAX	**-****-****
		e-mail		Effort	(%)
	Accounts manager	Name		Job Title	
		Affiliations	○○○Department ○○○Section		
		Tel.: [];	**-****-****(Extension)	FAX	**-****-****
		e-mail			
	Job summary				
	Number of employees	(people)			
	Financial status (Note 5～６)	FY	○FY	○FY	○FY
		Current term profit (1000 yen)			
		Capital (1000 yen)			
		Net assets (1000 yen)			

Collaborator	Name of organization				
	Address	〒○○○－○○○○			
	Name of contact:	Name		Job Title	
		Affiliations	○○○Department ○○○Section		
		Tel.: [];	**-****-****(Extension)	FAX	**-****-****
		e-mail		Effort	(%)
	Job summary				

(Note 1) Please state the Representative Organization and all Joint Research Institutes and Collaborators.
(Note 2) The PM should not also be the accounts manager, the research implementation manager should not be the accountancy manager and the Accounts manager should not be the research implementation

manager

(Note 3) Please write the telephone number, fax number and e-mail address in half-width characters.

(Note 4) Please add an extra form if there are multiple Joint Research Institutes and Collaborators.

(Note 5) Regarding the financial status, please enter the monetary amounts corresponding to the financial statements for the last three years, and state the monetary amounts of the balance sheet and profit and loss statement.

(Note 6) Local public bodies do not need to enter the financial status.

5. Main researcher Information

① Background of main researcher (enter the details of the main researcher of any subgroups)

Name	
Educational background	
Degree	
Main work experience Study details	

(Note) Please add a form if there are multiple main researchers.

②Main research papers, publications and patents acquired (enter for all main researchers)

Name	Degree	Affiliations/Job Title	Main research papers, publications and patents (up to five of the key items within recent years)	Connection to Project plan

(Note 1) Please place an "◎" next to the items that are connected to the proposed Project plan.
(Note 2) Please add a form if there are multiple main researchers.
(Note 3) Underline the name if the author (or co-author) includes the proposer and principal a main researcher

③ Effort (enter for main researcher only)

Name	Ratio (%)

(Note 1) Effort refers to the ratio (%) of time allocation required for the implementation of each research activity, etc., against the total work hours (total essential work hours including not only research activities but also education activities, etc.) per year.

Also, in the case that the topic for which the application is made is selected, the effort will be determined once again at that time and registered on e-Rad.

(Note 2) Please add a form if there are multiple main researchers.

Form 4【Status of initiatives for intellectual property rights of planning institute, etc.】*In general within 2 x A4 papers*

Project Name of Plan			
Name of Representative Organization		Name of PM	

1. Existence of management policies such as intellectual property policies at each planning institute

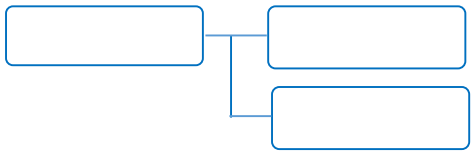
This item confirms whether or not each planning institute has established management policies for intellectual property management, etc., and whether intellectual property is being managed based on those policies. If each planning institute has established management policies for intellectual property management, place an "○" mark and state the details.

※Planning institutes are Representative Agencies and all Joint Research Institutes and s.

Management policies	Details of policies regarding the management of intellectual property such as intellectual property policies
(Example entry) ○	(Example entry) Representative Agency ○○"Yes" : ○○intellectual property policy Collaborative Research Institute ○○"Yes" : Basic policy for intellectual property Cooperative Institution○○"No"

2. Existence of management systems by intellectual property departments, etc. at each planning institute

This item confirms the intellectual property management systems of each planning institute. If each planning institute has established intellectual property management systems, place an "○" mark and state the details.

Management system	(Example entry) ○
Management system details	(Example entry 1) Representative Organization ○○"Yes" An intellectual property department has been established for the management of intellectual property in general, and it is managed by ○ Joint Research Institute ○○"Yes" A person managing intellectual property is employed in the ○○Section Joint Research Institute ○○"Yes" General management by the head of ○○ (external lawyer, etc. is consulted when needed) Joint Research Institution○○"No" (Example entry 2) 

3 intellectual property license ***Required***

※ From the perspective of further promoting commercialization using intellectual property from study outcomes, please state whether there are any policies for wider licensing after the acquisition of intellectual property.

(Example entry)

Of the study results from this Project, regarding the ○○○ technology using ○○○, although a patent is filed, for the wider diffusion of this technology to each producing area, wider licensing is scheduled five years after the acquisition of the intellectual property rights.

Form 5【Accounting business system 】*Required 2 x A4 paper or less*

Project Name of Plan			
Name of Representative Organization		Name of PM	

※ Please state the accounting system of institutions with accountancy managers (Representative Organization). The accounting systems of Joint Research Institutes are not required.

1. Accounts systems for separate accountancy processing

(1) Currently, are accounts systems for separate accountancy processing in place?

※ Please place an "○" mark on one answer.

- Yes
- No

(2) Details

※ For institutions that answered "No," please state the scheduled period for putting them in place (in the case that they will not be in place until the conclusion of the contract, selection will be cancelled).

(Example entry) If "Yes"

- A budget code can be set in the current accountancy system, so for expenses in the assigned Project, it will be possible to conduct separate accounts processing by assigning a new code.
- As there is an accounting system for the breakdown of each type of funding, separate accounts processing is possible.

(Example entry) If "No"

- The current accountancy system in use does not allow for separate accounts, so separate breakdown tables will be produced using spreadsheet software.
  Scheduled date for provision: Timing of selection for adoption
- Currently, although an accounting register is not produced for each expense received, in the case that the assigned Project is implemented, a new accounting register will be prepared for the assigned Project in order to deal with this.
  Scheduled date for provision: Conclusion of contract

Form 6 Junior researcher participation ***Required***

Project Name of Plan			
Name of Representative Organization		Name of PM	

In this Project, the proactive participation of a junior researcher (40 years old or less) is being promoted. For this reason, please state the number of such researchers who are scheduled to participate in the table below. This Information will be utilized for the screening of proposal details.

Name of Representative Organization and Joint Research Institute	No. of researchers 40 years old or below (people)	No. of researchers 41 years old or above (people)
○○Co., Ltd.	○	○
○○University	○	○

(Add/delete as necessary)

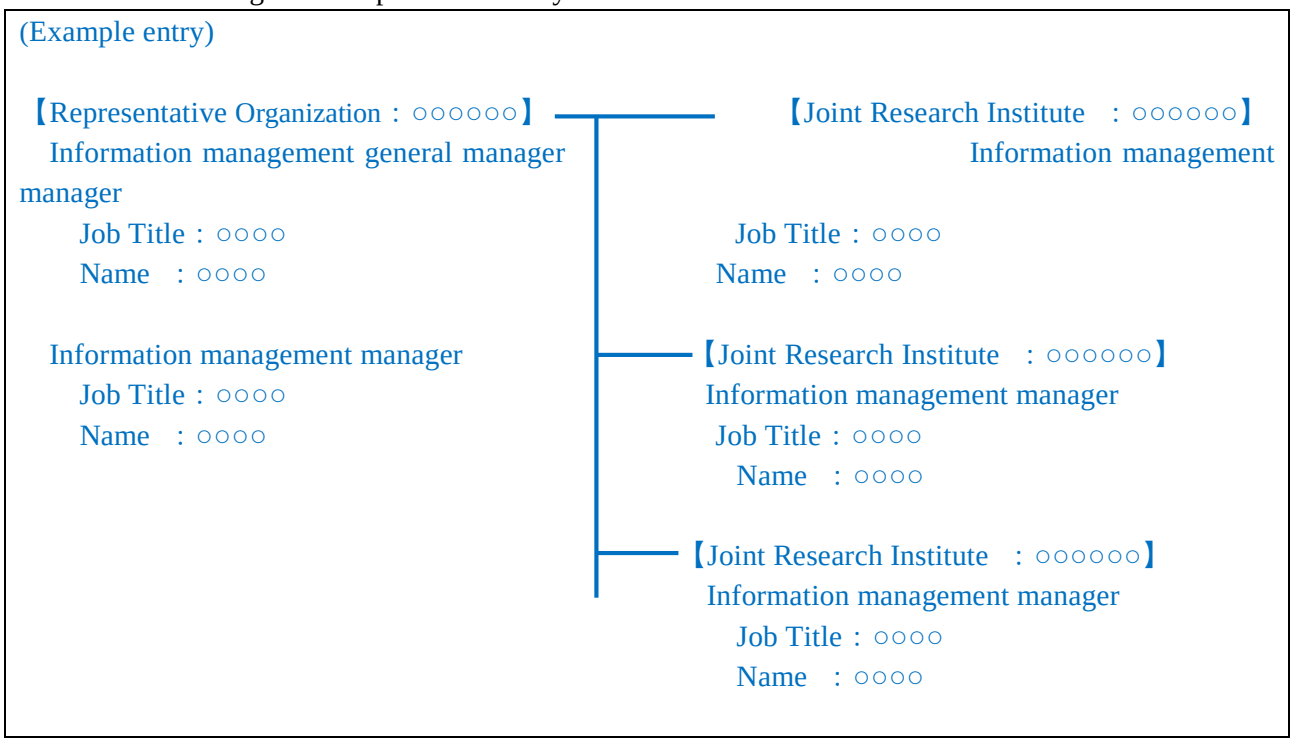
Form 7 Information management implementation system *Required* *2 x A4 paper or less*

Project Name of Plan			
Name of Representative Organization		Name of PM	

Please fill in the following after checking Application Guidelines 23"Optimization of Information management."

Information management implementation system

(Example entry)



(Note) If an appropriate system is in place, it is acceptable for the Information management general manager and the Information management manager to be the same person as the PM (Main researcher).

Form 8 Information regarding conflicts of interest *Required*

Project Name of Plan			
Name of Representative Organization		Name of PM	

1. Information regarding conflicts of interest between PM and PD

Please make a choice as to whether there are any conflicts of interest between the PM and the PD in charge of the Moonshot goal.

If "Yes," please state the necessity, rationality and suitability, etc. of participation in R&D. From the perspective of a fair and transparent evaluation, a PD who has a conflict of interest with the proposer cannot joining the screening.

A "conflict of interest" falls under any of the following categories from ① to ⑥.

①Those who belong to the same department (faculty, research area, etc.) as the PM in the same private company, university, national research and development corporation, or other research institutes.
②Those who have kinship ties with the PM.
③Those who are in a direct competitive relationship with the PM.
④Those who are in a close Joint research relationship with the PM.
⑤Those who are in a close mentoring relationship or direct employment relationship with the PM.
⑥Any other cases in which the relationship is deemed to be inappropriate by the director for making a fair judgment.

There is a conflict of interest between the PM and PD: ☐Yes ☐No

※ Please select one.

If "Yes," please state which of ①～⑥ corresponds to the conflict of interest.

Number:

Please state the necessity, rationality and suitability, etc. of participation in R&D.

2. Information regarding conflicts of interest with the PM and researchers belonging to Joint Research Institutes

Please make a choice as to whether there are any conflicts of interest between the PM and researchers belonging to Joint Research Institutes.

If "Yes," please state the necessity, rationality and suitability, etc. of participation in R&D.

A "conflict of interest" falls under any of the following categories from ① to ⑥.

①Those who belong to the same department (faculty, research area, etc.) as PMs and researchers belonging to joint research institutes in the same private company, university, national research and development

corporation, or other research institutes.
②Those who have kinship ties with PMs and researchers belonging to joint research institutes.
③Those who are in a direct competitive relationship with PMs and researchers belonging to joint research institutes.
④Those who are in a close joint research relationship with PMs and researchers belonging to collaborative research institutes.
⑤Those who are in a close mentoring relationship or direct employment relationship with PMs and researchers belonging to joint research institutes.
⑥Any other cases in which the relationship is deemed to be inappropriate by the director for making a fair judgment.

There is a conflict of interest with the PM and researchers belonging Joint Research Institutes: ☐ Yes

☐No

※ Please select one.

Conflict of interest with researcher belonging to Joint Research Institute

Name of researcher	Belongs to	Number corresponding to conflict of interest	Please state necessity, rationality and suitability, etc.

(Note) Please state which of ①～⑥ from above corresponds to the conflict of interest.

※ In the case that a confirmation of the conflict of interest is to be made, we request your cooperation as the provision of additional information may be requested.

Form 9 Statement of reason for using research management administrative body ***1 x A4 paper or less/submission for corresponding research issue only***

Project Name of Plan			
Name of Representative Organization		Name of PM	
Name of research management administrative body		Name of manager of research management administrative body	

In this Project, if recognized by BRAIN as being necessary, in addition to the representative Organization to which the PM belongs, an institution (referred to hereafter as a "research management administrative body") may be established for undertaking subcontracted work and to carry out accountancy tasks for BRAIN.

Cases in which a research management administrative body is set up

- In the case that the researcher belonging to a local public body is also the PM and the local public body has made considerations for particulars such as the need for budget measures in advance for the implementation of research, and it is recognized as being difficult for the local public body to employ an accountancy manager
- In the case that the PM belongs to an SME or that multiple SMEs, etc. are participating in the Study Group, and there is almost no track record of undertaking contracts from the state, so it is deemed that concluding a subcontract will de substantially delayed

As this is a special measure, in this Form, please make a clear statement of the reason why it is difficult for the Representative Organization to conclude a subcontract with the state.

Also, for the submission of this Form, please ensure that approval is obtained from the head of the finance department of the Prefecture or the SME, etc. and please state the contact information (Name, Department, Job Title, Telephone number and e-mail address) of the head of finance.

If the task is selected, separately, submission shall be made with the official seal of the head of finance of the Representative Organization.

Year○○○○Month○○Day○○

Financial manager of Representative Organization

Contact information for Manager	
Name of Manager	
Affiliated Department	
Job title	
Telephone number/FAX	
E-mail	

(Note) If the Project plan is selected, submission shall be made with the official seal of the manager of finance of the Representative Organization.

Form 10 Consent and Understanding *Required*

Project Name of Plan			
Name of Representative Organization		Name of PM	

(1) Understanding of compliance with laws and regulations, etc.

Please check the boxes after confirming the following laws and regulations that should be complied with in the establishment of this Proposal.

1.	☐	Implementation of intellectual property management based on "Policy regarding intellectual property rights from agriculture, forestry and fisheries research" (enacted February 2016 by the Agriculture, Forestry and Fisheries Research Council), etc.
2.	☐	"Guidelines for responding to fraud in research activities related to research funding from MOFA" (18th Agricultural Association No. 1147 Notification from Director of Agriculture, Forestry and Fisheries Research Council, Director of Forestry Agency and Director of Fisheries, dated December 15, 2006. Includes later revisions.)
3.	☐	"Guidelines for Managing and Auditing Public Research Funds at Research Institutions (Implementing criteria)" (19th Agricultural Association No. 706, Notification from Director of Agriculture, Forestry and Fisheries Research Council, Director of Forestry Agency and Director of Fisheries, dated October 1, 2007. Includes later revisions.)
4.	☐	Promotion of Public Engagement in Science and Technology (policy for basic initiatives) (State Minister in Charge of Science and Technology Policy and Executive Members of Council for Science and Technology, dated June 19, 2010)
5.	☐	Regarding security trade control (dealing with international technical leakage), laws, ordinances and notifications, etc., established by various ministries, including the Foreign Exchange Foreign Trade Act, so that cutting-edge research outcomes, etc., do not fall into the hands of developers of weapons of mass destruction, terrorist groups and other parties who may divert such outcomes to military use, etc.
6	☐	International rules and the laws and ordinances of relevant countries when conducting R&D using genetic resources from overseas (including related conventional knowledge)※ ※Convention on Biological Diversity, Nagoya Protocol, and the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGR), as well as the laws and ordinances of the countries that provide and use genetic resources.

7.	☐	"Basic Guide for the implementation of animal experiments, etc., in research institutions owned by MOFA" (Notification from Director of Agriculture, Forestry and Fisheries Research Council, dated June 1, 2006)

(Note) Please refer to Application Guidelines 11 "Intellectual Property" 16 "Measures to Prevent the Misuse of Research Funds" 18 "Measures to Prevent Misconduct in Research Activities" and 24 "Compliance with Laws, Regulations, Guidelines, etc."

(2) Consent regarding outsourcing contracts

In the case that the proposal issue is adopted, for the execution of outsourcing contracts, please check the box below in the case that there is no objection to making contracts based on the conditions stated in the Outsourcing Contract (draft) presented by BRAIN. (Please refer to Application Guidelines 3(3) "Requirements for Representative Agencies.")

☐ **No objection to giving consent to the Outsourcing Contract.**

(3) Consent to data management

In the case that the proposal issue is adopted, based on the items stated in Application Guidelines 12 (2) "Data management," please check the box below in the case that there is no objection to the appropriate management/publication of data gained from R&D.

☐ **No objection to giving consent regarding data management.**

(Exhibit6)

Procedures e.g. Contracts for the Moonshot Agriculture, Forestry and Fisheries Research and Development Program

Regarding the Moonshot Agriculture, Forestry and Fisheries Research and Development Program, a consignment contract will be concluded with the consignee being a Consortium jointly established by a Study Group comprising multiple members.

（The figure is Exhibit 1）

1． For the Consortium contract, the Representative Agency of the Consortium will make a contract with BRAIN (contracts between BRAIN and multiple individual institutions shall not be made.). The Representative Agency shall fulfill the "Requirements for Representative Agencies" in Application Guidelines 3 (3), and after clarifying the role distribution of each participating Representative Agency, etc., a Consortium shall be established as the contract party centering on the Representative Agency. It is the responsibility of the Representative Agency, etc. to enforce research expenses.

【Consortium Establishment Method】

① Method of enacting an agreement regarding the implementation of the Project, etc., and obtaining consent of Representative Agency that organizes the Consortium the consignment (agreement method)

② Method of exchanging written agreements between each Representative Agency that organizes the Consortium regarding the implementation of the consignment Project, etc. (Written agreement method)

③ Method of enacting collaborative research contracts among each Representative Agency that organizes the Consortium regarding the implementation of the consignment Project, etc. (collaborative research method)

※The framework for agreements and written agreement will be attached.

2． The main jobs of the Representative Agency are as follows.

① Conclusion of consignment contract with BRAIN

② Invoice and receipt of funding related to the consignment project to BRAIN

③ Fund transfer to Consortium members (Collaborative Research Institutes)

④ Application for alteration/suspension of consignment contract with BRAIN

⑤ Draft a plan of research related to the consigned research task, progress management and compilation of results

⑥ Ensuring compliance regarding the use of research expenses related to the

project consigned to the Consortium and accurate execution management of research expenses

⑦ Promoting the acquisition of patent rights, etc. to members regarding research outcomes of intellectual property rights

⑧ Research outcome report to BRAIN, application for patent rights (direct implementation by each rights holder after the dissolution of the Consortium) and submission of prior applications and various reports based on the consignment contract such as the prior application related to consent.

⑨ Confirmation of details and collection of performance reports (balance sheets, etc.) submitted by members

⑩ Submission of performance reports (balance sheets, etc.) to BRAIN

⑪ Reports related to follow-up surveys regarding the spread/use status of results from the consigned project

3. In this Project, if recognized by BRAIN as being necessary, in addition to the representative agency, an institution (referred to hereafter as a "research management administrative body") may be established for undertaking subcontracted work and to carry out accountancy tasks for BRAIN.

In the case of multiple Consortium members, the research management administrative body may be subdivided.

［Examples of establishment of research management administrative body］

- In the case that the PM belongs to a local public body and it is deemed as being difficult to perform procedures such as contracts due to special measures including the need for budgetary measures in advance relating to research implementation
- In the case that the PM belongs to an SME or that multiple SMEs are participating in the Consortium and there is deemed to be a risk of a considerable delay to the conclusion of the consignment contract

［Requirements for research management administrative body］

The research management administrative body must fulfill all of the following requirements.

① An agency established in Japan with corporate status (an individual cannot be the Representative Agency.).

② Have the ability and systems to carry out appropriate management and operation in promoting the project. Specifically, having all of the following abilities and systems from A-D.

A The ability and systems to establish a Consortium and to conclude a consignment contract with BRAIN

B The ability and systems to carry out business management for BRAIN related to intellectual property rights

C For the execution of project expenses, the ability and management systems to perform appropriate funding execution including separate accounts processing, the establishment of accounts managers, and funding execution management by multiple persons (including cases where system development can be ensured by the start of research).

D The ability and systems to disseminate research results, liaise and coordinate with members, and to smoothly perform coordination tasks

③ Together with PM, being located in a region that can promote research.

④ Being able to smoothly perform consignment contract procedures such as having a track record of consignment contracts with public institutions. In the case of multiple Study Group members, accounts processing is complex, which is a factor in the delay of payment procedures, so please try to ensure the formation of a simple Study Group.

As this measure is a special measure, please state the reason why it has been requested on Exhibit 5 “Project Plan Proposal” Form 9 “Statement of reason for use of research management administrative body,” and the approval of the accounts manager at the Representative Agency is required.

（Appendix2） 1. Administrative Flow from Application to Establishment of Contract

（Appendix3） 2. Administrative Flow from Establishment of Contract to Determination of Payment Amount (in the Case of Payment by Estimate)

（Appendix4） ○○Consortium Agreement

（Appendix5） 【○○Consortium Agreement】○○Consortium Paperwork Regulations

（Appendix6） 【○○Consortium Agreement】○○Consortium Accounting Regulations

（Appendix7） 【○○Consortium Agreement】○○Consortium Intellectual Property Rights Agreement

（Appendix8） 【○○Consortium Agreement】「○○Consortium 」Participation Agreement

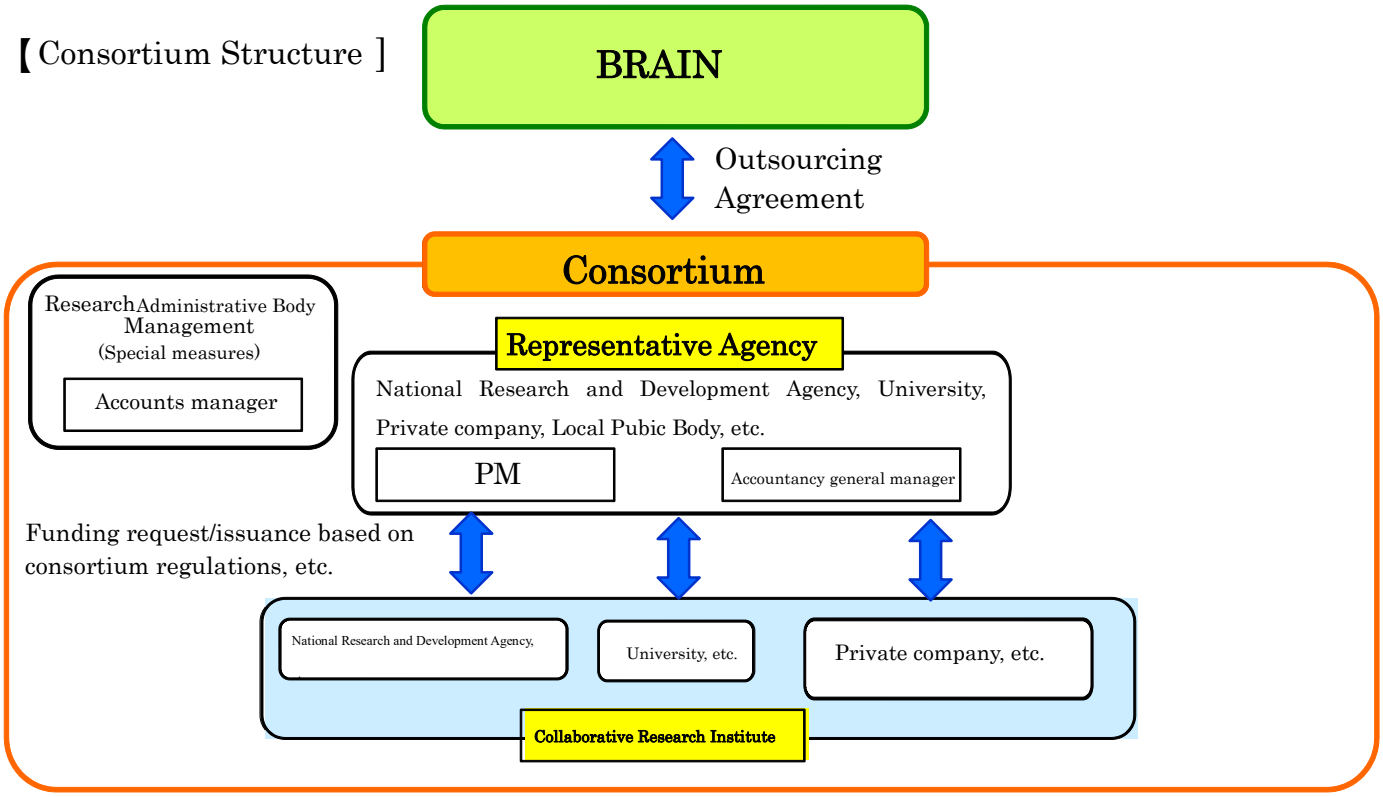
（Appendix9） 【○○Consortium Agreement】「○○Consortium Agreement」Consent Form

（Appendix10） ○○ Joint Research Institute Agreement Form

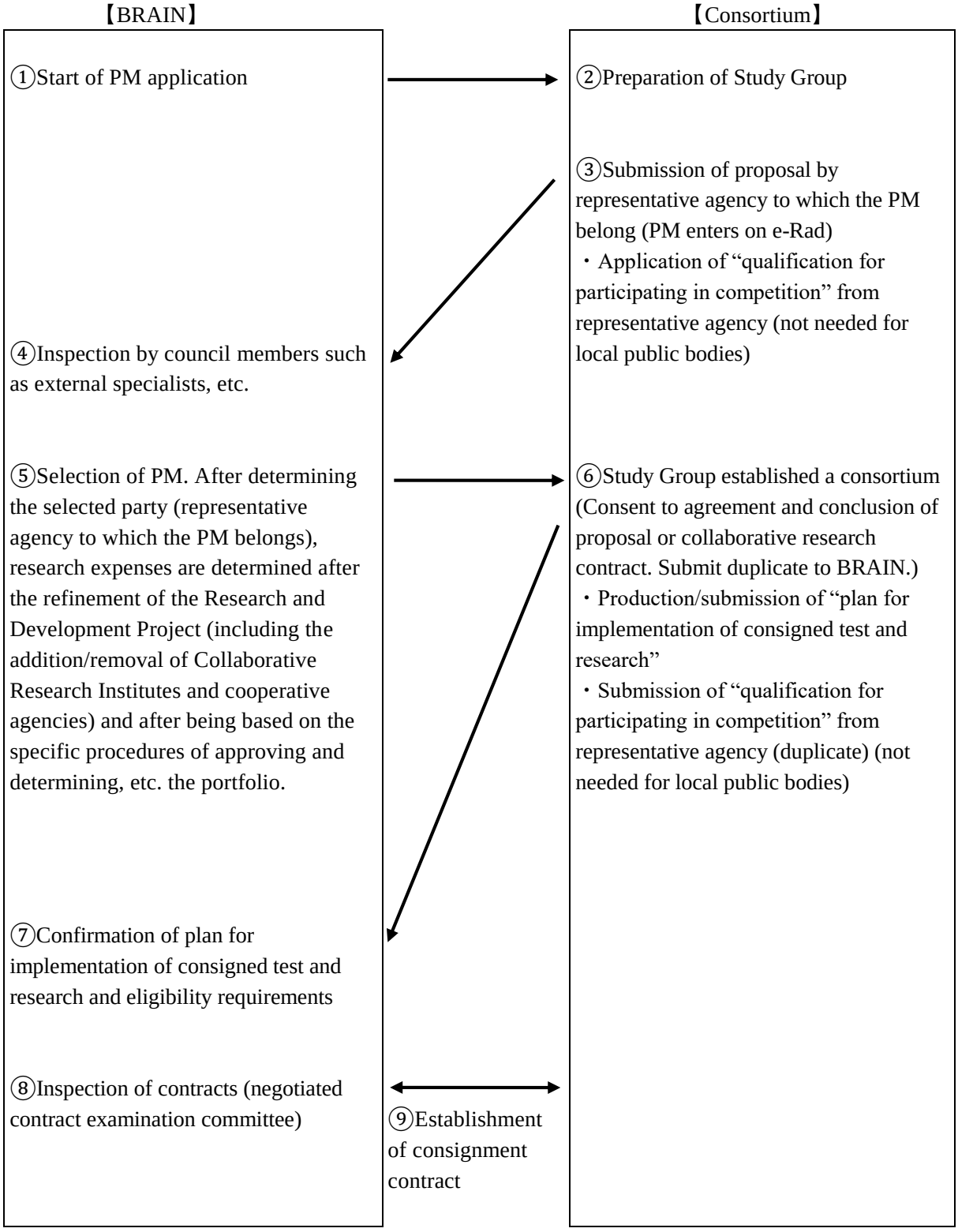
Note：（Appendix 4）～（Appendix 10）are uploaded in Japanese only.

(Appendix 1)

【Consortium Structure ］



1. Administrative Flow from Application to Establishment of Contract



※1. For the contract, an inspection is performed by the "negotiated contract examination committee." The submission of documents required for screening may be requested even after the selection decision, so please promptly submit any documents after being requested to do so by BRAIN.

※2. The target for expenditure of the consignment expenses covers the expenses for the appropriate R&D, etc. that arise on and after the contract conclusion date. Please note that expenses arising before the contract conclusion date are not covered.

2. Administrative Flow from Establishment of Contract to Determination of Payment Amount (in the Case of Payment by Estimate)

*1 BRAIN may visit the site during the research implementation period to conduct an accounting audit in order to confirm the management of expense utilization.

2 “” are administrative procedures conducted in the case of provisional payment.

（別添４）

○○コンソーシアム規約

（和暦）○年○月○日制定

第１章　総則

（名称）

第１条　この団体は、○○コンソーシアム（以下「コンソーシアム」という。）という。

（事務所）

第２条　コンソーシアムは、その主たる事務所を構成員である○○県○○市○○区○○所在の△△研究所内に置く。

（目的）

第３条　コンソーシアムは、××××の開発に向けた研究を行うことを目的とする。

（事業）

第４条　コンソーシアムは、前条の目的を達成するため、ムーンショット型農林水産研究開発事業（以下「本研究事業」という。）に関する業務を行う。

２　各構成員による本研究事業の分担は、コンソーシアムが国立研究開発法人農業・食品産業技術総合研究機構生物系特定産業技術研究支援センター所長（以下「生研支援センター所長」という。）との間で締結した委託契約書別紙の委託研究開発実施計画書の定めるところによる。

第２章　構成員

（構成員）

第５条　コンソーシアムは、次の各号に掲げる構成員をもって組織する。

一　△△研究所

二　○○大学大学院○○研究科

三　株式会社○○研究所

四　○○農業協同組合××部

（書類及び帳簿の備付け）

第６条　コンソーシアムは、第２条の事務所に、次の各号に掲げる書類及び帳簿を備え付けておかなければならない。

一　本規約及び第 18 条各号に掲げる規程

二　構成員の氏名及び住所（構成員が団体の場合には、その名称、所在地及び代表者の氏名）を記載した書面

三　収入及び支出に関する証拠書類及び帳簿

四　その他第 18 条各号に掲げる規程に基づく書類及び帳簿

２　構成員は、その氏名又は住所（構成員が団体の場合には、その名称、所在地又は代表者の氏名）に変更があったときは、遅滞なく代表機関にその旨を届け出なければならない。

（地位の譲渡の制限）

第７条　構成員は、全構成員の同意を得ないで、本研究事業に関して当該構成員の有する権利又は地位の全部又は一部を第三者に譲渡することはできない。

（入会）

第８条　コンソーシアムの構成員となろうとする者は、全構成員の同意を得なければならない。

（脱退）

第９条　構成員は、本研究事業が終了するまでの間は脱退することができない。ただし、次に掲げる場合には、この限りでない。

一　本研究事業のうち当該構成員自らが実施することとなっている部分の全部が中止又は終了となった場合

二　破産手続開始の決定があった場合

三　死亡

四　前各号に掲げる場合のほか、脱退を要するやむを得ない事由があると代表機関が認めた場合

（除名）

第 10 条　コンソーシアムは、構成員が次の各号のいずれかに該当するときは、総会の議決を経て、当該構成員を除名することができる。この場合において、代表機関は、その総会の開催の日の 30 日前までに、当該構成員に対し、その旨を書面をもって通知し、かつ、代表機関に対して弁明する機会を与えるものとする。

一　コンソーシアムの事業を妨げ、又はコンソーシアムの名誉をき損する行為をしたとき。

二　本規約又は総会の決議を無視する行為をしたとき。

２　代表機関は、除名の決議があったときは、その旨を当該構成員に通知するものとする。

第３章　総会

（総会の開催）

第 11 条　コンソーシアムの総会は、通常総会及び臨時総会とする。

２　総会の議長は、総会の出席構成員が互選する。

３　通常総会は、毎年度１回以上開催する。

４　臨時総会は、次に掲げる場合に開催する。

一　構成員現在数の２分の１以上から会議の目的たる事項を示した書面により請求があ

ったとき。
二　その他代表機関が必要と認めたとき。

（総会の招集）
第 12 条　総会の招集は、少なくともその開催の７日前までに、会議の日時、場所、目的及び審議事項を記載した書面をもって構成員に通知しなければならない。
２　前条第４項第１号の規定により請求があったときは、代表機関は、その請求のあった日から 30 日以内に総会を招集しなければならない。

（総会の議決方法等）
第 13 条　総会は、全構成員の出席がなければ開くことができず、総会の議事は、全構成員の同意をもって決定する。
２　構成員（議長を含む。）は、総会において、各１個の議決権を有する。
３　総会においては、前条第１項の規定によりあらかじめ通知された事項についてのみ議決することができる。ただし、緊急を要する事項については、この限りでない。

（総会の権能）
第 14 条　総会は、本規約において別に定めるもののほか、次の各号に掲げる事項を議決する。
一　年度事業実施計画及び収支予算の設定又は変更
二　年度事業成果報告書及び年度事業実績報告書並びに収支決算
三　この規約の変更
四　諸規程の制定及び改廃
五　コンソーシアムの解散
六　構成員の除名
七　本研究事業の実施に関すること
八　前各号に掲げるもののほか、コンソーシアムの運営に関する重要な事項

（書面又は代理人による議決権の行使）
第 15 条　やむを得ない理由により総会に出席できない構成員は、あらかじめ通知された事項につき、書面又は代理人をもって議決権を行使することができる。
２　前項の書面は、総会の開催の日の前日までに代表機関に到達しないときは、無効とする。
３　第１項の代理人は、代理権を証する書面を代表機関に提出しなければならない。
４　第 13 条第１項の規定の適用については、第１項の規定により議決権を行使した者は、総会に出席したものとみなす。

（議事録）
第 16 条　総会の議事については、議事録を作成しなければならない。
２　議事録は、少なくとも次の各号に掲げる事項を記載する。
一　開催日時及び開催場所
二　構成員の現在数、当該総会に出席した構成員数、前条第４項により当該総会に出席

したとみなされた構成員数及び当該総会に出席した構成員の氏名
三　議案
四　議事の経過の概要及びその結果
五　議事録署名人の選任に関する事項
3　議事録は、議長及び当該総会に出席した構成員のうちから、その総会において選任された議事録署名人が署名捺印しなければならない。
4　議事録は、主たる事務所に備え付けておかなければならない。

第4章　代表機関

（代表機関）
第17条　コンソーシアムの業務を執行するため、第2条に定める主たる事務所が置かれる△△研究所をその代表機関とする。
2　代表機関は次条に掲げる業務を行うものとし、同条各号に掲げる業務の執行に当たっては、業務ごとに責任者を置くものとする。
3　代表機関は、本研究事業の実施に関し、コンソーシアムを代表して、生研支援センター所長と契約を締結し、自己の名義をもって委託費の請求、受領を行うとともに、他の構成員から実績報告書の提出を求めるなどの権限を有するものとする。

（業務の執行）
第18条　コンソーシアムの業務の執行の方法については、本規約で定めるもののほか、次の各号に掲げる規程による。
一　○○コンソーシアム事務処理規程
二　○○コンソーシアム会計処理規程
三　○○コンソーシアム知的財産権取扱規程
四　その他総会において議決した規程

第5章　会計

（事業年度）
第19条　コンソーシアムの事業年度は、毎年4月1日に始まり、翌年3月31日に終わる。ただし、コンソーシアムの設立初年度については、コンソーシアムが設立された日から始まり、その日以後の最初の3月31日に終わるものとする。

（資金の取扱い）
第20条　コンソーシアムの資金の取扱方法は、○○コンソーシアム会計処理規程で定めるものとする。

（事務経費支弁の方法等）
第21条　コンソーシアムの事務に要する経費は、本研究事業に係る委託費（構成員からの

負担金）をもって充てるものとする。

（構成員の必要経費の分配）

第 22 条　構成員は、コンソーシアムの代表機関から、本研究事業のうち自らが実施することとなっている部分の実施に必要な経費の分配を受けるものとする。

（年度事業実施計画及び収支予算）

第 23 条　コンソーシアムの年度事業実施計画及び収支予算は、代表機関が作成し、総会の議決を得なければならない。

第 6 章　清算

（解散）

第 24 条　コンソーシアムは、次の各号に掲げる場合に解散するものとする。

一　本研究事業の全部が終了したとき。

二　総会において解散の議決がなされたとき。

三　構成員が一名となったとき。

（清算人）

第 25 条　前条の規定によりコンソーシアムが解散した場合、代表機関が指定する者（代表機関が自己を指定する場合には、代表機関）が清算人となる。

２　清算人は、コンソーシアムの解散後、速やかに清算手続を開始するものとする。

（清算人の権限）

第 26 条　清算人は、次の各号に掲げる事項に関して職務を行い、コンソーシアムを代表する裁判上及び裁判外の一切の権限を有する。

一　現務の結了

二　債権の取立て及び債務の弁済

三　残余財産の処理

四　その他前各号の職務を行うに当たり必要な一切の行為

（清算手続）

第 27 条　清算人は、その着任後遅滞なくコンソーシアムの財産の現況を調査し、財産目録及び貸借対照表を作成し、財産処分の具体を定め、これらに係る書類を各構成員に送付するものとする。

２　その他清算に関する事項は、すべて清算人が独自の判断により適切と考える方法により行うものとする。

（事業終了後の残余財産の取扱い）

第 28 条　本研究事業の全部が終了した場合において、その債務を弁済して、なお残余財産があるときは、当該残余財産の取扱いについては、清算人が生研支援センター所長と協

議の上決定するものとする。

第 7 章　雑則

（委託契約の遵守）

第 29 条　構成員は、代表機関が生研支援センター所長との間で締結した委託契約において、コンソーシアムが課された義務を履行するため、所定の手続を実施するなど、必要な措置を講ずるものとする。

2　構成員が、前項規定による措置を講じず、又は、本研究事業を遂行する場合において悪意又は重大な過失があったときは、当該構成員は、これによってコンソーシアム又は他の構成員に生じた損害を賠償する責任を負う。

（事故の報告）

第 30 条　構成員は、本研究事業において毒物等の滅失や飛散など、人体に影響を及ぼすおそれがある事故が発生した場合には、その内容を直ちに代表機関へ報告しなければならない。

（細則）

第 31 条　本研究事業に関する国の定め及びこの規約に定めるもののほか、コンソーシアムの事務の運営上必要な細則は、代表機関が別に定める。

2　本規約、各規程及び細則の内容等に関し疑義が生じたときは、その都度各構成員間で協議の上、決定するものとする。

附　則

1　本規約は、（和暦）〇年〇月〇日から施行する。

2　コンソーシアムの設立初年度の事業計画及び予算の議決については、第 14 条中「総会」とあるのは、「設立総会」と読み替えるものとする。

（別添５）

○○コンソーシアム事務処理規程

（和暦）○年○月○日制定

第１章　総則

（趣旨）

第１条　○○コンソーシアム（以下「コンソーシアム」という。）の事務処理業務に関しては、国立研究開発法人農業・食品産業技術総合研究機構生物系特定産業技術研究支援センター所長（以下「生研支援センター所長」という。）との間で締結したムーンショット型農林水産研究開発事業（以下「本研究事業」という。）に関する国の定め、本研究事業の委託契約書及び○○コンソーシアム規約（以下「コンソーシアム規約」という。）に定めるもののほか、この規程の定めるところによるものとする。

（目的）

第２条　この規程は、コンソーシアムにおける事務の取扱いについて必要な事項を定め、事務処理を適正かつ能率的に行うことを目的とする。

（事務処理の原則）

第３条　コンソーシアムの事務処理に当たっては、迅速、正確を期し、かつ、機密を重んじ関係者間の連絡に遺漏のないように努め、責任の所在を明らかにしておかなければならない。

（事務処理責任者）

第４条　コンソーシアムの事務処理は、コンソーシアム規約に規定する代表機関（以下「代表機関」という。）に事務処理責任者（以下「事務処理責任者」という。）を置き、これが行うものとする。

２　前項の事務処理責任者は、コンソーシアム会計処理規程に規定する経理責任者を兼務することができる。

（○○事業の実施）

第５条　構成員は、生研支援センター所長との間で締結した本研究事業のうち自らが実施することとなっている部分（以下「構成員実施部分」という。）をコンソーシアム規約に規定する年度事業実施計画（以下「年度事業実施計画」という。）に従って実施しなければならない。当該計画が変更されたときも同様とする。

２　構成員は、構成員実施部分が終了したとき（事業を中止し、又は廃止したときを含む。）は、事業の成果を記載した実績報告書を代表機関に提出するものとする。

３　代表機関は、前項に規定する実績報告書の提出を受けたときは、遅滞なく当該事業の内容が、年度事業実施計画の内容と適合するものであるかどうか検査を行うものとする。なお、必要に応じて、その他関係書類を提出させ、又は実地に検査を行うものとす

る。
４　代表機関は、前項に規定する検査の結果、構成員が実施した事業の内容が年度事業実施計画の内容と適合すると認めたときは、構成員に配分される委託費の額を確定し、構成員に通知するものとする。
５　構成員は、天災地変その他やむを得ない事由により、構成員実施部分の遂行が困難となったときは、事業中止申請書を代表機関に提出し、代表機関は、国立研究開発法人農業・食品産業技術総合研究機構生物系特定産業技術研究支援センターと協議の上、本研究事業に係る契約の変更を行うものとする。
６　構成員は、前項に規定する場合を除き、構成員実施部分の内容又は経費の内訳を変更しようとするときは、事業実施計画変更承認申請書を代表機関に提出し、その承認を受けなければならない。ただし、委託契約書第 11 条のただし書きに定めるものについては、この限りではない。

第２章　文書の取扱い

（文書の処理及び取扱いの原則）
第６条　コンソーシアムにおける事務処理は、軽易なものを除き、すべて文書をもって行わなければならない。
２　文書は、事案の当初から完結までのものを一括して綴ることとし、これによることができない場合には、関連するそれぞれの文書の所在を明らかにする等の措置を講じなければならない。

第７条　文書の取扱いに当たっては、その迅速と正確を期し、かつ、機密を重んじ常に関係者間の連絡に遺漏のないように努め、これを保管する場合は、常にその所在を明確にしておかなければならない。

（文書の発行名義人）
第８条　文書の発行名義人は、代表機関の長とする。ただし、事務連絡等の軽微な文書については、この限りではない。

（文書に関する帳簿）
第９条　事務処理責任者は、文書の件名、差出人、文書番号、接受年月日、登録年月日その他の必要な事項を記載した文書整理簿を作成し、これを事務所に備え付けておかなければならない。

（保存期間）
第 10 条　文書は、これが完結した日から保存し、本研究事業終了の翌年度の４月１日から起算して５年間保存するものとする。

（文書の廃棄）
第 11 条　文書で保存期間を経過したものは、第９条の文書整理簿から削除し、廃棄するも

のとする。ただし、保存期間を経過した後も、なお保存の必要があるものについては、その旨を当該文書整理簿に記入し、事務処理責任者による管理の下、保存しておくことができる。

２　前項において個人情報が記録されている文書を廃棄する場合には、裁断、焼却その他復元不可能な方法により廃棄しなければならない。

第３章　雑則

第 12 条　第１条に定めるもののほか、この規程の実施に関し必要な事項は、代表機関が定めるものとする。

附　則

この規程は、（和暦）〇年〇月〇日から施行する。

（別添６）

○○コンソーシアム会計処理規程

（和暦）○年○月○日制定

第１章　総則

（趣旨）

第１条　○○コンソーシアム（以下「コンソーシアム」という。）の会計業務に関しては、国立研究開発法人農業・食品産業技術総合研究機構生物系特定産業技術研究支援センター所長との間で締結したムーンショット型農林水産研究開発事業（以下「本研究事業」という。）に関する国の定め、本研究事業の委託契約書及び○○コンソーシアム規約（以下「コンソーシアム規約」という。）に定めるもののほか、この規程の定めるところによるものとする。

（目的）

第２条　この規程は、コンソーシアムの会計の処理に関する基準を定め、コンソーシアムの業務の適正かつ能率的な運営と予算の適正な実施を図ることを目的とする。

（会計原則）

第３条　コンソーシアムの会計は、次の各号に掲げる原則に適合するものでなければならない。

一　コンソーシアムの会計処理に関し、真実な内容を明瞭にすること。

二　すべての取引について、正確な記帳整理をすること。

三　会計の処理方法及び手続について、みだりにこれを変更しないこと。

（口座の開設）

第４条　コンソーシアムは、これを名義とする銀行の管理口座を開設するものとする。

（※代表機関名義で既に保有している管理口座でも可能。その場合は、「コンソーシアムの口座は、○○の管理口座とする。」などと規定する。）

（会計年度）

第５条　コンソーシアムの会計年度は、コンソーシアム規約に定める事業年度に従うものとする。

２　コンソーシアムの出納は、翌年度の４月３０日をもって閉鎖する。

（出納責任者）

第６条　出納責任者は、コンソーシアム規約に規定する代表機関（以下「代表機関」という。）の長とする。

（経理責任者）

第７条　コンソーシアムの経理処理は、代表機関に経理責任者（以下「経理責任者」とい

う。）を置き、これが行うものとする。
２　前項の経理責任者は、○○コンソーシアム事務処理規程（以下「事務処理規程」という。）に規定する事務処理責任者を兼務することができる。

第２章　帳簿類

（帳簿）
第８条　経理責任者は、品名、規格、金額、契約相手方、契約年月日、納品年月日、支払年月日を記載した帳簿を作成し、これをコンソーシアム規約に定める主たる事務所に備え付けておかなければならない。

（会計伝票）
第９条　一切の取引に関する記帳整理は、会計伝票により行うものとする。
２　会計伝票は、次の各号に掲げるものとし、その様式は、代表機関が別に定める。
一　入金伝票
二　出金伝票
三　振替伝票
３　会計伝票は、証ひょうに基づいて作成し、証ひょうとともに保存する。
４　会計伝票は、作成者が押印した上で、経理責任者の承認印を受けるものとする。

（帳簿書類の保存及び処分）
第 10 条　会計帳簿、会計伝票その他の会計関係書類の保存期間は、事務処理規程の規定による。
２　前項の会計関係書類を廃棄する場合には、あらかじめ、経理責任者の指示又は承認を受けるものとする。
３　前項において個人情報が記録されている会計関係書類を廃棄する場合には、裁断、焼却その他復元不可能な方法により廃棄しなければならない。

（帳簿の更新）
第 11 条　帳簿は、原則として事業年度ごとに更新する。

第３章　予算

（予算の目的）
第 12 条　予算は、事業年度の事業活動を明確な計数でもって表示することにより収支の合理的規制を行い、事業の円滑適正な運営を図ることを目的とする。

（予算の目的外使用）
第 13 条　予算は、定められた目的以外に使用してはならない。

（予算の執行）

第 14 条　コンソーシアムの運営に係る事務に要する予算の執行については、経理責任者の決裁を受けなければならない。

２　本研究事業に係る構成員自らが実施することとなっている部分に要する予算の執行については、当該構成員の内部規程の定めるところにより決裁を受けなければならない。

第４章　出納

（金銭出納の明確化）

第 15 条　出納の事務を行う者は、金銭の出納及び保管を厳正かつ確実に行い、その事務を記録し、常に金銭の残高を明確にしなければならない。

２　金銭の出納は、会計伝票によって行わなければならない。

（支払方法）

第 16 条　出納の事務を行う者が金銭を支払う場合には、最終受取人からの請求書その他取引を証する書類に基づき、出納責任者の承認を得て行うものとする。

２　支払は、金融機関への振込により行うものとする。ただし、小口払その他これにより難い場合として出納責任者が認めた支払のときには、この限りでない。

（領収証の徴収）

第 17 条　金銭の支払については、最終受取人の領収証を徴収しなければならない。ただし、領収証の徴収が困難な場合には、別に定める支払証明書をもってこれに代えることができる。

２　金融機関への振込の方法により支払を行うときは、取扱金融機関の振込金受取書をもって支払先の領収証に代えることができる。

（金銭の過不足）

第 18 条　出納の事務を行う者は、原則として毎月１回以上、預貯金の残高を証明できる書類によりその残高と帳簿残高との照合を行うとともに、金銭に過不足が生じたときは、遅滞なく第７条第１項の経理責任者に報告し、その指示を受けるものとする。

第５章　物品

（財産管理台帳）

第 19 条　コンソーシアムは、本研究事業により取得した 10 万円以上の機械及び備品の管理に当たり、別紙の財産管理台帳（機械及び備品）を備え、機械及び備品の取得、使用、移動、処分等異動増減の都度それぞれの内容等を記録し、現状を明確に把握しておくものとする。

（物品の善管注意義務）

第 20 条　本研究事業のために購入した機械及び備品の管理については、コンソーシアムはその責任において善良な管理を行い、保全に万全を期するものとする。

２　本研究事業終了後、同種の事業を実施するため引き続き前項の物品を使用する場合は、本研究事業の委託契約書の定めに従うとともに、引き続き前項の注意義務を果たすものとする。

（物品の表示）

第 21 条　機械及び備品の表示は次の管理用銘版による。

物　品　標　示　票	
事　業　名	ムーンショット型農林水産研究開発事業
コンソーシアム名	
品　名	
物品番号	
取得年月日	年　月　日
備考	△△機構　××研究所

第６章　決算

（決算の目的）

第 22 条　決算は、事業年度ごとに会計記録を整理し、当該期間の収支を計算するとともに、当該期末の財政状態を明らかにすることを目的とする。

（決算書の作成）

第 23 条　経理責任者は、事業年度終了後速やかに年度決算に必要な整理を行い、次の各号に掲げる計算書類を作成し、代表機関に報告しなければならない。

一　収支計算書

二　財産目録

（年度決算の確定）

第 24 条　代表機関は前条の計算書類を総会に提出し、その承認を受けて年度決算を確定する。

第７章　雑則

第 25 条　第１条に定めるもののほか、この規程の実施に関し必要な事項は、代表機関が定めるものとする。

附　則

この規程は、　年　月　日から施行する。

財　産　管　理　台　帳（機 械 及 び 備 品）

品目（単位）＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿

年　月　日	整理区分	摘　要	異動高				現在高		処分制限期間		備　考
			増		減				耐用年数	処分制限期限 年　月　日	
			数　量	価　格	数　量	価　格	数　量	価　格			
				円		円		円			

（注）　（１）品目ごとに別葉とする。

（２）整理区分欄には購入等を記入する。

（３）処分制限期間欄には、耐用年数４年を記入し、処分制限期限(取得年月日の４年後の前日(対応日))を記入する。

（４）備考欄には設置場所を記入する。

（別添７）

○○コンソーシアム知財合意書

令和○年○月○日制定

（規約方式の場合は、別紙７の「知財合意書」を参考にして作成してください。）

※知財合意書の名称は、必要に応じて変更しても構いません。また、知財合意書を「○○研究開発コンソーシアム知的財産取扱規程」等の名称とし、コンソーシアムの業務の執行に必要な規程に位置づけ、コンソーシアム規約の第１８条にその旨を規定しても構いません。

（別添８）

「○○コンソーシアム」参加契約書

「××××の開発」委託事業（以下「本委託研究事業」という。）を実施するために、本委託研究事業に参加する法人等（以下「構成員」という。）は、「○○コンソーシアム」（以下「コンソーシアム」という。）の成立にあたり、次の通り契約を締結する。

（定義）
第１条　本契約に用いられる用語で、別紙のコンソーシアム規約（以下「規約」という。）に定義されているものは、その定義どおりとする。

（総則）
第２条　構成員は、国立研究開発法人農業・食品産業技術総合研究機構生物系特定産業技術研究支援センター所長（以下「生研支援センター所長」という。）とコンソーシアムとの委託契約書の規定及び規約に従うことを同意することをここに確認し、コンソーシアムに構成員として参加することに合意する。

（構成員による事業の実施）
第３条　構成員は、生研支援センター所長とコンソーシアムとの委託契約に基づく委託契約書に明記された委託研究開発実施計画を善良なる管理者の注意により実施する。

（有効期間）
第４条　本契約の有効期間は、本契約締結の日より規約に定めるコンソーシアムの解散の日までとする。ただし、規約に定める義務がコンソーシアムの解散後も存続する場合は、その存続期間中、第２条に定める構成員としての規約遵守義務は存続するものとする。

（協議）
第５条　本契約に記載のない事項または解釈上の疑義については、信義誠実の原則に従い、構成員間の協議により決定するものとする。

本契約の成立を証して全ての構成員の記名押印のうえ、各自１通を保有する。

（和暦）○年○月○日

構成員　　住　所
　　名　称
　　代表者氏名　　印

住　所
名　称
代表者氏名　　印

住　所
名　称
代表者氏名　　印

住　所
名　称
代表者氏名　　印

住　所
名　称
代表者氏名　　印

（別添９）

（代表機関）〇〇大学法人　〇〇大学　御中
〇〇コンソーシアム構成員　御中

「〇〇コンソーシアム規約」同意書

当法人、〇〇〇〇は、頭書各位に対して、別紙「〇〇コンソーシアム規約」に同意する契約（以下「本契約」という。）に申し込みます。

当法人は、頭書各位全員が当法人同様本契約の締結を申し込んだ場合、本契約が、当法人及び頭書各位全員との間で締結されたものとみなされることにあらかじめ同意します。

（和暦）〇年〇月〇日

住　所
名　称
代表者氏名　　印

（別添１０）

○○共同研究機関協定書ひな形

（名称）

第１条　この機関は、○○共同研究機関（以下「機関」という。）と称する。

（※　ここでいう「機関」は、新しい契約方式におけるコンソーシアムのことであるが、協定書等において必ず「コンソーシアム」を用いなければならない、ということはない。本条はコンソーシアムという名称を用いない例を示すもの。）

（目的）

第２条　機関は、○○（以下「委託研究」という。）を共同連帯して実施することを目的とする。

（構成員の住所及び名称）

第３条　機関の構成員は、次のとおりとする。

○○県○○市○○○
　○○○研究所
○○県○○市○○町○○番地
　国立大学法人○○大学
○○県○○市○○町○○番地
　○○県○○研究所
○○県○○市○○町○○番地
　株式会社○○

（代表者の名称）

第４条　機関は、○○○法人○○○研究所を代表者とする。

（※　ここでいう「代表者」は、新しい契約方式におけるコンソーシアムの代表機関のことであるが、協定書等において必ず「代表機関」を用いなければならない、ということはない。本条は代表機関という名称を用いない例を示すもの。）

（事務所）

第５条　機関は、主たる事務所を代表者である○○県○○市○○○法人○○○研究所内に置く。

（代表者の権限）

第６条　代表者は、委託研究の実施に関し、機関を代表して、国立研究開発法人農業・食品産業技術総合研究機構生物系特定産業技術研究支援センター所長（以下「生研支援センター所長」という。）と契約を締結し、自己の名義をもって委託費の請求、受領を行うとともに、本協定に基づき他の構成員から実績報告書の提出を求めるなどの権限を有するものとする。

（研究の分担）
第７条　各構成員の研究の分担は、別添委託研究実施計画書のとおりとする。

（運営委員会）
第８条　機関は、構成員全員をもって運営委員会を設け、毎年度、委託研究に関する契約に基づいて年度実施計画を定め、収支決算を審議するなど委託研究の円滑な実施に当たるものとする。

（構成員による研究の実施）
第９条　構成員は、年度実施計画に従って、当該構成員の分担する研究を実施するものとする。

（委託費の配分）
第 10 条　構成員は、その分担する研究のために委託費の配分を受けるものとする。
２　前項に規定する構成員毎の委託費の配分額の限度額及びその内訳は、年度実施計画に定めるところによる。

（実績報告）
第 11 条　構成員は、毎年度、担当する研究が終了したときは、その成果を記載した実績報告書を作成し、代表者に提出するものとする。

（検査）
第 12 条　代表者は、前項に規定する実績報告書の提出を受けたときは、遅滞なく、当該報告書の内容が年度実施計画の内容に適合するものであるかどうか検査を行うものとする。なお、必要に応じて、その他関係書類の提出を求め、又は実地に検査を行うものとする。

（委託費の配分額の確定）
第 13 条　代表者は、前条に規定する検査の結果、構成員が実施した研究の内容が年度実施計画の内容に適合すると認めたときは、構成員に配分される委託費の額を確定し、構成員に通知するものとする。
２　前項の委託費の確定額は、各構成員が分担する委託研究に要した経費の実支出額と第 10 条第２項に規定する配分額の限度額のいずれか低い額とする。

（委託費の支払）
第 14 条　代表者は、前条の規定により委託費の配分額が確定した後、構成員からの適法な請求書を受理した日から３０日以内にその支払を行うものとする。
２　前項の規定にかかわらず、構成員がその分担する委託研究の完了前に必要な経費を受けようとするときには、概算払を請求することができ、代表者は、これを適当と認めたときはこれを支払うことができる。

３　構成員は前二項の規定による委託費の請求をするときは、請求書を代表者に提出するものとする。

（過払金の返還）

第 15 条　構成員は、既に支払を受けた委託費が、第 13 条第１項の委託費の配分の確定額を超えるときは、その超える金額について、代表者の指示に従って返還するものとする。

（委託研究の中止等）

第 16 条　構成員は、天災地変その他やむを得ない事由により、その分担する委託研究の遂行が困難となったときは、委託研究中止（廃止）申請書を代表者に提出し、代表者は、国立研究開発法人農業・食品産業技術総合研究機構生物系特定産業技術研究支援センターと協議の上、委託研究に係る契約の変更を行うものとする。

２　前項の規定により契約を変更するときは、前三条の規定に準じ精算するものとする。

（計画変更の承認）

第 17 条　構成員は、前条に規定する場合を除き、委託研究実施計画書に記載された当該構成員の分担する委託研究の内容又は経費の内訳を変更しようとするときは、委託研究実施計画変更承認申請書を代表者に提出し、その承認を受けなければならない。ただし、委託研究実施計画書の収支予算の支出の部の区分の欄に掲げる費目間（直接経費から間接経費への流用を除く。）における流用については、この限りではない。

（物品管理）

第 18 条　構成員は、委託研究のために購入した物品を、善良なる管理者の注意をもって管理しなければならない。

２　委託研究終了後、前項に規定する物品のうち返還を要する物品を代表者が指定したときは、構成員は、代表者の指示により当該物品を返還するものとする。

（帳簿等）

第 19 条　構成員は、分担する研究に要した経費について、帳簿を作成・整備した上で、他の事業等の経費とは別に、明確に区分して経理しなければならない。

２　構成員は、委託費に関する帳簿への委託費の収入支出の記録は、当該収入支出の都度、これを行うものとする。

３　構成員は、前項の帳簿及び実績報告書に記載する委託費の支払実績を証するための証拠書類又は証拠物（以下「証拠書類等」という。）を、委託研究終了の翌年度の４月１日から起算して５年間、整備、保管しなければならない。

４　構成員は、実績報告書の作成、提出に当たっては、帳簿及び証拠書類等と十分に照合した委託費の支払実績額を記載しなければならない。

５　構成員は、前各項の規定のいずれかに違反し、又はその他不適切な委託費の経理を行ったと代表者が認めた場合には、当該違反等に係る委託費の配分を受けることができず、又は既にその配分を受けている場合には、代表者の指示に従い当該額を返還しなければならない。

（旅費並びに人件費及び賃金）

第 20 条　構成員は、委託費からの旅費並びに人件費及び賃金の支払いについては、いずれも委託研究と直接関係のある出張又は用務に従事した場合に限るものとする。

２　構成員は、前項の規定に違反した不適切な委託費の経理を行ったと代表者が認めた場合には、当該違反等に係る委託費の配分を受けることができず、又は既にその配分を受けている場合には、代表者の指示に従い当該額を返還しなければならない。

（知的財産権の帰属）

第 21 条　この委託研究に関する研究の成果に係る次に掲げる権利等（以下「知的財産権」という。）のうち委託研究に係る契約書に基づき生研支援センター所長が承継しないこととなったものは、当該知的財産権の発生に寄与した構成員に帰属するものとする。なお、構成員相互の共同研究により発生した当該知的財産権については、これに参加した構成員の共有とし、その持分は、当該知的財産権の発生に係る寄与度等に応じ、これらの構成員の間で協議し、決定（※）するものとする。

一　特許法（昭和３４年法律第１２１号）に規定する特許権（以下「特許権」という。）、特許法に規定する特許権を受ける権利、実用新案法（昭和３４年法律第１２３号）に規定する実用新案権（以下「実用新案権」という。）、実用新案法に規定する実用新案登録を受ける権利、意匠法（昭和３４年法律第１２５号）に規定する意匠権（以下「意匠権」という。）、意匠法に規定する意匠登録を受ける権利、半導体集積回路の回路配置に関する法律（昭和６０年法律第４３号）に規定する回路配置利用権（以下「回路配置利用権」という。）、回路配置利用権の設定の登録を受ける権利、種苗法（平成１０年法律第８３号）に規定する育成者権（以下「育成者権」という。）、品種登録を受ける地位又は外国における上記各権利に相当する権利（以下「産業財産権等」と総称する。）

二　著作権（著作権法（昭和４５年法律第４８号）第２１条及び第２８条までに規定するすべての権利を含む。）及び外国におけるこれらの権利に相当する権利

三　事業活動に有用な技術上及び営業上の情報のうち、秘密として管理され、公然と知られていないものであって、不正競争防止法（平成５年法律第 47 号）上保護される権利に係るもの

２　この委託事業に係る知的財産権を伴う成果が得られた場合には、知的財産権の出願又は申請（以下「出願等」という。）を行う前に、遅滞なく代表者にその旨を報告するものとする。

［※　知的財産権の発生に係る貢献割合に応じて持ち分を決定する旨を明示することも可。］

（出願等）

第 22 条　前条により発生する知的財産権の出願等は、その発生に寄与した構成員が行うものとし、当該出願等に要する費用についても、当該構成員が負担するものとする。

２　前項の知的財産権のうち、構成員相互の共同研究により発生するものの出願等に当たっては、これを共有する構成員（以下「知財共有構成員」という。）の間で協議、決定

（※１）の上、当該出願等を行うものとし、当該出願等に要する費用については、知財共有構成員の間で協議し、その負担割合を決定（※２）するものとする。

３　第１項及び第２項により知的財産権の出願等が行われた場合には、遅滞なく代表者に報告するものとする。

［※１　協議、決定する対象は、出願の是非、権利者、手続を行う者（特定の者が一括して行うか否か）等を想定。
※２　「持分比率」や「折半」等により決定する旨をあらかじめ本規定において明示することも可。］

（維持管理）

第 23 条　知的財産権の維持管理に係る手続き及び当該維持管理に要する費用については、前条第１項及び第２項の規定を準用する。

（持分譲渡）

第 24 条　知財共有構成員が自己の持分を他の知財共有構成員以外の第三者へ譲渡しようとするときは、他の知財共有構成員及び代表者の同意を書面により得なければならない。

２　譲渡人である知財共有構成員は、前項による他の知財共有構成員の同意が得られたときは、当該持分に係る権利及び義務を譲受人に承継するものとし、これを書面により他の知財共有構成員及び代表者に通知するものとする。譲受人がこの権利及び義務を履行しない場合は、譲渡人が譲受人と連帯してその責任を負うものとする。

（第三者への実施許諾）

第 25 条　委託研究により発生する知的財産権について、その権利を有する構成員以外の第三者が実施許諾を希望する場合には、当該構成員が許諾申し込みを受け付けるものとする。

２　前項の知的財産権のうち構成員相互の共同研究により発生するものについて、知財共有構成員以外の第三者が実施許諾を希望する場合には、当該知財共有構成員が許諾の申し込みを受け付けるものとする。この場合において、当該申し込みを受けた知財共有構成員はその他の知財共有構成員にその旨を報告し、許諾の可否及び条件につき知財共有構成員全員による協議の上、決定するものとする。

３　第１項の許諾に際し徴収する実施料は、その権利を有する構成員に帰属するものとする。また、第２項の許諾に際し徴収する実施料は、知財共有構成員に帰属するものとし、その配分については知財共有構成員の間で協議し、決定（※）するものとする。

（※「持分比率」等により決定する旨明示することも可。）

（自己実施）

第 26 条　構成員相互の共同研究により発生する知的財産権について、いずれかの知財共有構成員が自ら実施しようとするときは、他の知財共有構成員と実施料の支払い等について定めた実施契約を連名により締結する。

（持分放棄）

第 27 条　知財共有構成員が自己の保有する持分を放棄しようとするときは、あらかじめ、他の知財共有構成員に書面により通知するものとする。

２　前項により知財共有構成員がその持分を放棄した場合、当該持分は、他の知財共有構成員がその寄与度に応じて無償で承継するものとする。

（共同研究に係る発明補償）

第 28 条　知財共有構成員は、知的財産権の発生に寄与した者に対する補償をそれぞれ自己の属する従事者に対してのみ、自己の規定に基づき補償する。

（共同出願契約の締結）

第 29 条　第 22 条第２項の出願等を知財共有構成員が共同で行うときは、あらかじめ、第 21 条から前条までの内容を含む共同出願契約を知財共有構成員間で締結するものとする。

※ 別途「知財合意書」を作成しない場合は、「生研支援センターが実施する委託業務における知財合意書及び知的財産の権利化方針の作成について」（平成 31 年２月事務連絡）の「知財合意書」に盛り込むべき項目及び内容を追加する。

（秘密の保持）

第 30 条　構成員は、本研究事業に関して知り得た業務上の秘密を当該事業の契約期間にかかわらず第三者に漏らしてはならない。ただし、各号のいずれかに該当する情報については、この限りでない。

一　知得した際、既に構成員が保有していたことを証明できる情報

二　知得した後、構成員の責めによらず公知となった情報

三　秘密保持を負うことなく正当な権限を有する第三者から適法に取得したことを証明できる情報

四　構成員が独自に開発して得たことを証明できる情報

五　委託契約書の規定に基づく事前協議により生研支援センター所長の同意を得た著作物及びその二次的著作物その他事前に生研支援センター所長の同意を得た情報

２　構成員は、本研究事業における自己の従業員に対しても前項の秘密保持に関する義務を遵守させなければならない。

（成果の公表）

第 31 条　構成員が、自己の研究成果を外部に公表しようとするときは、当該公表の○○日前までにその内容を他の構成員及び代表者に書面により送付するものとする。

２　前項の内容を含む研究成果が公表されることにより利益を損なう又はそのおそれがあると考える構成員は、当該書面の受領後〇〇日以内に、利益を損なう又はそのおそれがある内容及びその理由を明らかにした上で、当該研究成果の公表を希望する構成員及び代表者に書面により送付するものとする。
３　代表者は、これらの構成員とともに成果の公表に係る合理的な措置を検討するものとする。

（取引金融機関）
第 32 条　機関の取引金融機関は〇〇銀行とし、代表者の名義により設けられた預金口座によって取引するものとする。

（委託契約の遵守）
第 33 条　構成員は、代表者が生研支援センター所長との間で締結した委託契約において、機関に課せられた義務を履行するため、所定の手続きを実施するなど、必要な措置を講ずるものとする。
２　構成員が、前項に規定する措置を講じず、又は、委託研究を遂行する場合において悪意又は重大な過失があったときは、当該構成員は、これによって機関又は他の構成員に生じた損害を賠償する責任を負う。

（事故の報告）
第 34 条　構成員は、委託研究において毒物等の滅失や飛散など、人体に影響を及ぼすおそれがある事故が発生した場合は、その内容を直ちに代表者へ報告しなければならない。

（協定書に定めのない事項）
第 35 条　本協定に定めのない事項については、運営委員会において定めるものとする。

本協定の締結を証するため、協定書〇通を作成し、代表者はその全てに、代表者以外の構成員は各２通に、それぞれ記名押印の上、各自押印のもの１通を保有するものとする。

（和暦）〇年〇月〇日

国立研究開発法人〇〇〇研究所　　理事長　　印

国立大学法人〇〇大学	学長	印
〇〇県〇〇研究所	所長	印
株式会社〇〇	社長	印

（別添）委託研究実施計画書

1　全体計画

研究項目	（和暦）○年度	（和暦）○年度	（和暦）○年度
1.　○○技術の開発	（○○○研、	○○大学）	
(1) ○○の解明	（○○研究所、	○○○研）	
(2) ○○技術の体系化			
2.　○○の開発	（○○大学）		
(1) ○○の解明	（○○研究所、	(株)○○）	
(2) ○○の開発	（○○○研）		
(3) ○○マニュアル作成		（○○○研）	

2　分担計画

構成員名	分担内容	研究担当者
○○○研究所	○○のうち○○、○○	○○
○○大学	○○のうち○○、○○	○○
○○研究所	○○のうち○○、○○	○○
(株)○○	○○のうち○○	○○

(Exhibit 7)

Moonshot Agriculture, Forestry and Fisheries Research and Development Program(name of the project)
Intellectual Property Rights Agreement (draft) (example)

(Purposes)

Article 1. The present Agreement shall set forth the provisions for the treatment of intellectual property necessary for the implementation of the "Moonshot Agriculture, Forestry and Fisheries Research and Development Program (name of the project)" (hereinafter referred to as the "Research Plan") and the use of its results to facilitate the smooth implementation of the Research Plan and the efficient use of its results in project activities.

(Definitions)

Article 2. The following terms used in the present Agreement shall be defined as follows:

i. "Invention, etc." shall include:
   a. Inventions
   b. Ideas
   c. Creation of a design
   d. Creation of a circuit layout as specified in Article 2, Paragraph 2 of the Act on the Circuit Layout of a Semiconductor Integrated Circuits (Act No. 43 of 1985)
   e. Breeding of varieties specified in Article 2, Paragraph 2 of the Plant Variety Protection and Seed Act
   f. Creation of a copyrighted work
   g. Development of privileged technical information of property value (hereinafter referred to as "know-how")

ii. "Inventors, etc." shall refer to those who have developed inventions, etc.

iii. "Intellectual property rights" shall include:
   a. Patent right, the right to obtain a patent, utility model right, the right to the registration of a utility model, design right, the right to the registration of a design, layout-design exploitation right, the right to the registration of the establishment of a layout-design exploitation right, breeder's right, the status to the registration of a breed specified in Article 3 of the Plant Variety Protection and Seed Act (Act No. 83 of 1998), and rights and status equivalent to the above rights and status in foreign countries (hereinafter collectively referred to as "Industrial Property Rights").
   b. Copyrights (including all rights stipulated in Articles 21 to 28 of the Copyright Act (Act No. 48 of 1970)) and rights equivalent to the above rights in foreign countries (hereinafter collectively referred to as "Copyrights").

c. The right to use know-how

iv. The “exercise” of intellectual property rights refers to the actions specified in Article 2, Paragraph 3 of the Patent Act (Act No. 121 of 1959), Article 2, Paragraph 3 of the Utility Model Act (Act No. 123 of 1959), Article 2, Paragraph 3 of the Design Act (Act No. 125 of 1959), Article 2, Paragraph 3 of the Act on the Circuit Layout of a Semiconductor Integrated Circuits, and Article 2, Paragraph 5 of the Plant Variety Protection and Seed Act, and the use of copyrighted works and know-how under all the rights set forth in Articles 21 to 28 of the Copyright Act,

v. “Consortium members” shall refer to those listed in Exhibit who implement the Research Plan.

vi. “Researchers and developers" shall refer to those engaged in research and development conducted under the Research Plan.

(XX Consortium Intellectual Property Steering Committee)

Article 3. The XX Consortium Intellectual Property Steering Committee shall be established to manage intellectual property under the Research Plan in an appropriate manner.

2. The XX Consortium Intellectual Property Steering Committee shall be chaired by the Project Manager and shall consist of joint research institutions related to intellectual property rights subject to consultation. If necessary, external experts may also join as long as they agree to comply with the provisions of confidentiality in the present Agreement.

3. The XX Consortium Intellectual Property Steering Committee shall be responsible for the application for and maintenance of intellectual property, treatment of know-how, and the determination of policies on the granting of rights such as privilege in the Research Plan, as well as the coordination of policies on the use of intellectual property and the licensing of intellectual property rights.

4. The deliberations, voting method, and other matters concerning members and the operation of the XX Consortium Intellectual Property Management Committee shall be determined separately.

(Confidentiality)

Article 4. Consortium members shall keep confidential any technical information disclosed by other consortium members (including their researchers and developers) regarding the Research Plan and clearly indicated as confidential upon disclosure, and shall not disclose or divulge such information to any third party other than researchers and developers without the consent of the party disclosing the information. Consortium members to whom information is disclosed shall not use such information for any purpose other than the implementation of the Research Plan. Provided, however, that this shall not apply when the consortium members to whom information is disclosed is able to prove that the disclosed information falls under

any of the following:

i. Information that is already publicly known when disclosed

ii. Information that is rightfully in the possession of the disclosed party when disclosed

iii. Information that has become publicly known after being disclosed due to grounds not attributable to the disclosed party

iv. Information disclosed by a third party with legitimate rights without any obligation of confidentiality after being disclosed

v. Information that is obtained or created by the disclosed party independently of the disclosed information

2. Consortium members shall ensure that their researchers and developers comply with the same obligations as those stipulated in this and the following articles, including after they cease to be their researchers and developers.

3. In addition to the provisions set forth in the preceding two paragraphs, measures necessary to prevent breach of confidence and leakage of technical information under the Research Plan shall be determined by the XX Consortium Intellectual Property Steering Committee.

(Prior approval for disclosure of the results of the Research Plant to third parties)

Consortium members shall not disclose or divulge the results obtained through the implementation of the Research Plan to any third party other than consortium members without the approval of the Intellectual Property Steering Committee and the BRAIN.

(Procedures for Communication of the Results of Inventions, etc. and Determination of the Policy on Acquisition of Rights, etc.)

Article 6. Consortium members shall, when their researchers and developers create inventions, etc. as a result of the implementation of the Research Plan, immediately report the inventors, etc. and the results of the inventions, etc. to the XX Consortium Intellectual Property Steering Committee.

2. Upon receipt a communication specified in the preceding paragraph, the XX Consortium Intellectual Property Steering Committee shall, in accordance with the managerial regulations established separately by the XX Consortium Intellectual Property Steering Committee, evaluate the necessity of making the inventions, etc. or other results patentable or privileged by filing an application, and deliberate and determine the country in which the application is filed if patentable and the duration of the privilege if privileged.

(Acquisition of Patents by Filing Applications)

Article 7. When consortium members acquire a patent for the results of the Research Project by filing an application, they shall will, in principle, do so in countries where it is deemed necessary to acquire the patent, taking into account the size of the market and the situation

of the competition with other companies, if such results are expected to be developed in overseas markets.

2. The XX Consortium Intellectual Property Steering Committee may, upon consultation with its members, assign other consortium members the right to file an application in a country where a consortium member has decided not to acquire a patent by filing an application.
3. In principle, expenses required for the process from application to registration of the results of the Research Project shall be covered by commission expenses, and other expenses including maintenance shall be borne by the applicant.

(Ownership of Intellectual Property Rights Obtained through the Implementation of the Research Project)

Article 8. Intellectual property rights obtained through the implementation of the Research Project (hereinafter referred to as "Foreground IP") shall be vested in the members of the consortium to which the inventors, etc. belong in accordance with the Regulations for Employee Inventions, etc.

2. When two or more members constitute the consortium to which inventors, etc. belong, the share of each consortium member shall be determined upon consultation between the consortium members concerned.

(Note) In case of foreign institutions, etc., Intellectual property rights shall, in principle, be shared between the BRAIN and foreign institutions, etc., and at least 50% of the total equity of the trustees and the BRAIN shall be vested in the BRAIN.

(Treatment of Shared foreground IP)

Article 9. Consortium members may exercise the right to foreground IP shared with other consortium members without any charge.

(Licensing of Intellectual Property Rights)

Article 10. The consortium members shall not exercise their own intellectual property rights (including intellectual property rights other than Foreground IP; the same shall apply hereinafter in this Article) against the research and development activities of other consortium members under the Research Plan during the commission period, and shall cooperate in the smooth implementation of the Research Plan. Provided, however, this shall not apply when there is a separate agreement between consortium members including paid licensing.

2. The provisions of the preceding paragraph shall not obligate consortium members to disclose their know-how to other consortium members.

(Succession of Obligations to Transferees of Foreground IP)

Article 11. When consortium members transfer foreground IP, they shall ensure that the transferees of the relevant intellectual property rights perform the obligations imposed under Articles 7 to the present Article.

(Treatment of Consortium Members Withdrawing from the Research Plan)

Article 12. Consortium members shall assume the obligations imposed on them under the present Agreement even if they leave the consortium.

(Discussions)

Article 13. When any doubt arises in the interpretation of the present Agreement or any other matter, or matters not included in the present Agreement need to be specified, such matters shall be deliberated and determined by the XX Consortium Intellectual Property Steering Committee.

(Revision of the Present Agreement)

Article 14. The XX Consortium Intellectual Property Steering Committee may revise the present Agreement with the consent of all consortium members.

2. The XX Consortium Intellectual Property Steering Committee shall notify the Government prior to any revision of the present Agreement.

(Term of Validity and Remaining Provisions)

Article 15. The present Agreement shall become effective on DD/MM/YYY, and shall remain in effect for X years after the termination of the project period.

2. Notwithstanding the provisions of the preceding paragraph, the provisions of Article 4 shall be effective during the period of confidentiality specified by the party disclosing information, and the provisions of Articles 7 to 12 shall be effective for persisting Foreground IP for the duration of Foreground IP rights.

(Relationship between the Present Agreement and Other Agreements)

Article 16. Notwithstanding the provisions of the preceding paragraph, if any inconsistency arises between the present Agreement and the Commissioned Experiment and Research Agreement established between the research institute representing the consortium in which relevant organizations participates and the National Agriculture and Food Research Organization Bio-oriented Technology Research Advancement Institution (hereinafter referred to as the “Commissioned Experiment and Research Agreement”) to implement the Research Plan, the provisions of the Commissioned Experiment and Research Agreement specifying the treatment of intellectual property and confidentiality shall prevail.

As proof of the validity of the present Agreement, XX copies of this document shall be prepared and one copy shall be signed and held by each consortium member as a participant in research.

DD/MM/20YY

(Address)
(Company)
(Representative) Signature:

(Address)
(Company)
(Representative) Signature:

* If the intellectual property rights agreement is included in the consortium agreement, etc., the addresses, corporate names, names of representatives, and signatures of the above consortium members are not necessary.

(Exhibit 8)

Information Security Standards for Procurement

1 Purpose

Information Security Standards for Procurement (hereafter, "the Standards") stipulates the countermeasures required by the Bio-oriented Technology Research Advancement Institution (hereafter, "BRAIN") with the aim of the appropriate management of information that is to be protected by the corporation (hereafter, "contractor") that undertakes procurement from BRAIN, and the contractor shall implement information security countermeasures in accordance with the Standards.

In the case that information security countermeasures are already being implemented, in line with the Standards, new additions or enhancements shall be implemented as necessary. Also, regarding the countermeasures shown in the Standards, in the case that there are reasonable grounds, confirmation may be received from BRAIN for exemption from application.

2 (Definitions)

In the Standards, the definitions of the terms listed in the following items are as provided in each item.

(1) Information to be protected refers to information related to the operations of BRAIN that has not been made public but needs to be thoroughly managed especially by the Contractor, as the leakage of such information to parties other than BRAIN employees may interfere with the performance of operations.

(2) Documents that are to be protected, etc. refers to documents (including portable storage mediums on which data that is to protected is stores), images and objects that are pertinent to information that is to be protected.

(3) Data that is to be protected refers to electronic data that is pertinent to information that is to be protected.

(4) Information security refers to maintaining the confidentiality, integrity and applicability of information that is to be protected.

(5) Confidentiality refers to the feature of information only being accessible by those who are permitted to have access.

(6) Integrity refers to the feature of information being neither destroyed, falsified or lost.

(7) Applicability refers to the feature of those who are permitted to access information being able to access the information when needed without interruption.

(8) Information security implementation procedures refers to the stipulated implementation procedures related to information security countermeasures in connection to the business undertaken by the Contractor based on the Standards.

(9) Information security incidents refers to incidents such as the leakage, loss or destruction of information that is to be protected.

(10) information security events refers to situation in which there is a risk of the violation of information security implementation procedures or a situation that may lead to an information security incident.

(11) Manager, etc. refers to a manager or a department head that processes procurement for BRAIN.

(12) Subcontractors refers to all businesses that engage in work related to the accomplishment of the accomplishment of the contract (excluding those who have a direct contractual relationship with BRAIN).

(13) A third party refers to all persons other than those who are in a direct contractual relationship with BRAIN as a corporation or a natural person, including those that carry out guidance, supervision, business support, advice or audits, etc. for parties in a direct contractual relationship with BRAIN such as parent companies, sister companies, local subsidiaries, brand licensers, franchises, and consultants.

(14) A parent company, etc. refers to a parent company as stipulated in Article 2-4 (2) of the Corporation Law (No. 86, 2005).

(15) A sister company refers to a fellow subsidiary to the same parent company, with the relevant subsidiary being a “wholly-owned subsidiary” as stipulated in Article 847-2 (2) of the Corporation Law, a “consolidated subsidiary” as stipulated in Article 2-3 (19) of the Ordinance of Company Accounting (No. 13, 2005) or a “non-consolidated subsidiary” as stipulated in (20) of the same Article.

(16) A portable storage medium refers to portable media or devices that are capable of storing information that are inserted or connected to a computer or a peripheral device.

(17) An information system comprises hardware, software (the program as a whole), a network or a storage medium and that performs business processing as a whole.

(18) A handling facility refers to a facility where information that is to be protected is handled or stored.

(19) A protection system refers to an information system that handles information that is to be protected.

(20) A user refers to a party that uses the information system.

(21) Malicious code refers to a computer virus or spyware, etc. that is a general term for

a program that damages the functions provided by the information system.

(22) Transmission refers to the conveyance of knowledge to another party that is not accompanied by the delivery of a tangible object such as a document.

(23) Delivery refers to the physical transfer of a tangible object such as a document.

(24) E-mail, etc. refers to the transmission and reception of e-mails, sharing files and the transmission and reception of files.

(25) e-Government recommended ciphers, etc. refers to the ciphers, etc. stated on the e-Government recommended ciphers list, or another means of encryption that is as resilient or even more resilient against decipherment than the e-Government recommended ciphers after the evaluation based on the evaluation of e-Government recommended cipher selection.

(26) Encryption refers to the conversion of information in order to conceal the content of the information or the existence of the information.

(27) Manager right refers to rights conferred for the management of information systems (user registration, removal of registration, and user access rights, etc.).

3 Scope

(1) The target information is information that is to be protected that is handled by the contractor.

(2) The subjects are all persons in the contractor that contact information that is to be protected (personnel that come into contact with information that is to be protected (including employees of member companies; same hereafter) executive employees, dispatch personnel, contract employees, part-time workers, and temporary workers, etc. In this case, it is irrespective of whether the relevant parties are aware that the information that is to be protected. Hereafter, “handlers”.).

4 Information security implementation procedures

(1) The contractor that produces the information security implementation procedures shall produce information security implementation procedures that include the content from 5 to 12, and in so doing or in the case of changes, confirmation shall be received from BRAIN regarding consistency with the Standards.

(2) Familiarization of information security implementation procedures

Managers, etc. must familiarize all parties that may handle information that is to be protected with information security implementation procedures (including handlers.). Also, subcontractors that handle information that is to be protected must be familiarized with the procedures.

(3) Review of information security implementation procedures

In order for the information security implementation procedures to be appropriate, effective and valid, the contractor must carry out regular reviews, and in the case of any major changes or information security incidents related to information security, reviews must be implemented each time and the information security implementation procedures must be altered as necessary.

5 Organization security

(1) Internal organization

A Responsibilities of managers, etc. related to information security

Managers, etc. shall endeavor to ensure consistency of information security in the organization through the clear directionality of information security responsibilities, the specification of personal involvement, clear role-division for responsibilities and the awareness, etc. of information security implementation procedures, and within the organization, regarding those officers who are not handlers, management staff and other employees as well as all members, persons who are not handlers must not come into contact with information that is to be protected and such information must not be offered to subordinates in the course of work duties, etc.

B Division of responsibilities

In order to clarify the responsibility for all information security related to information that is to be protected, the Contractor must specify the general responsible parties related to the general management of information that is to be protected, and the responsibly manger for each information that is to be protected (hereafter, “manager”.).

C Duty of confidentiality and prohibition of use other than for intended purpose

The Contractor shall make a contract or an agreement with handlers stating the duty of confidentiality and prohibition of use other than for intended purpose and must carry out regular reviews, and in the case of any changes to the status or information security incidents related to information security, after implementing reviews each time, the requirements must be altered as necessary.

D Investigation of information security implementation status

The contractor must implement an investigation and store the results regularly and in the case of a major change to the implementation of information security in connection to its implementation status. Also, when necessary, corrective measures must be taken.

(2) Subcontractors handling information that is to be protected

With the accomplishment of the contract, the contractor, in the case of consigning the handling of information that is to be protected to subcontractors, must make a contract with the relevant subcontractor for the implementation of information security countermeasures based on the Standards, and, prior to the start of the relevant duties, based on the confirmation items stated by BRAIN, must make a report to BRAIN after confirming that information security will be maintained by the subcontractor.

(3) Prohibition of disclosure to a third party

A Prohibition of disclosure to a third party

The contractor must not disclose or leak information that is to be protected to a third party (unless the other party has been contracted to handled the relevant information that is to be protected.). In the case of unavoidable disclosure of information that is to be protected to a third party (unless the other party has been contracted to handled the relevant information that is to be protected), in advance, based on the confirmation items stipulated by BRAIN, after confirming that information security will be maintained by the target for disclosure, the approval of BRAIN must be received in writing.

B Prohibition of entry into handling facility by third party

The contractor, after clarifying potential risks, must not allow the entry of third parties into the handling facility except in the case of taking countermeasures against such risks.

6 Management of information that is to be protected

(1) Classification guidelines

The Contractor must state a system of information classification so that there is a clear classification of information that is to be protected.

(2) Handling information that is to be protected

A Catalog of information that is to be protected

The Contractor must create and maintain a catalog showing the status of information that is to be protected (storage location, etc.).

B Management policy for handling

(i) The Contractor must record any receipt, creation, production, duplication, removal (including loans), disposal or deletion of the information that is to be protected.

(ii) The Contractor must not handle information that is to be protected on personal information systems or portable storage media, but, in unavoidable cases, in

advance, the permission of BRAIN must be received in writing.

(iii) Unless there are special instructions from BRAIN, the Contractor must return, submit, discard or delete information that is to be protected after the end of the contract. However, in the case that there is a need to continue storing information, a request for a consultation may be made to BRAIN along with the reason.

C Storage of information that is to be protected, etc.

The Contractor must store information that is to be protected in a locked locker, etc., and the key must be managed appropriately. Also, in the case of storing information that is to be protected as data that is to be protected, it is recommended that encryption is used.

D Removal of information that is to be protected

The contractor must not remove information that is to be protected from the handling facility except when it Managers, etc. deem that the risk caused by removal can be avoided.

E Disposal and deletion of information that is to be protected

The contractor shall dispose or delete using a reliable method such as shredding any information that is to be protected that has been received, produced, manufactured or duplicated so that it cannot be retrieved, and shall make a record of that method. The same applies when disposing of portable storage media on which data that is to be protected was stored.

F Specification of corresponding parts

(i) The Contractor, in the case of the production, manufacture or duplication of information that is to be protected, shall take measures to make specifications, such as underlining or opening and closing sentences using parentheses.

(ii) The Contractor, in the case that the deliverables of the contract include information that is to be protected, with regard to any information that is gathered, organized or produced, etc. in connection to the accomplishment of the contract, must not handle the information as information that is to be protected until is has been confirmed that the information does not fall under the scope of information that is to be protected by BRAIN. However, in the case that it is necessary to remove the specification of information that is to be protected, consultation with BRAIN can be requested along with a statement of the reason.

7 Human security

(1) Managers, etc. responsibilities

Managers, etc. must minimize the scope of designated handlers of information that is to be protected as far as possible, assign persons considered to be appropriate, and must enforce information security implementation procedures. Also, approval must not be given to a person who cannot be legally guaranteed to put into practice the right to refuse in the case that there is a request to act in a way that violates the contract with BRAIN.

(2) Designating handlers

The Contractor must produce or renew the registry of handlers (handler's name, date of birth, affiliated post, job title, nationality and other details; Same hereafter), and must notify and receive consent from BRAIN each time before handling information that is to be protected. Also, the Contractor must take the same measure for subcontractors and registering handlers in third parties to whom information that is to be protected is disclosed.

(3) Responsibilities of handlers

The handler must not disclose information that is to be protected to a third party that is known in the accomplishment of the contract while in office or after retirement (unless the other party has been contracted to handled the relevant information that is to be protected.).

(4) Return of information that is to be protected

In the case that the employment contract of the handler ends, or when there is a change to the agreement with the handler, and there is no longer any needs for contact with information that is to be protected, the handler must return stored information that is to be protected to the manager.

8 Physical and environmental security

(1) Handling facility

A Designation of handling facilities

The Contractor must clarify facilities that handle information that is to be protected (limited to within Japan.).

B Physical security limits

The Contractor must use physical security limits in order to protect the boundaries of information that is to be protected and protection systems (for example, barriers, card control entry, and manned reception).

C Physical entry and exit control measures

The Contractor must limit entrance to handling facilities to those who are permitted to do so by means of appropriate entry and exit control measures, and must record and store the entrance of any third parties to handling facilities.

D Work at handling facilities

The Contractor must ensure confidentiality of work related to information that is to be protected. Also, in the case that communications devices (mobile telephones, etc.) and recording equipment (voice recorders and digital cameras, etc.) is used in the handling facility, the permission of a manager, etc. must be obtained.

(2) Physical security countermeasures for protection system

A Protection system installation and protection

The Contractor, in the case of installing a protection system, must take measures to install it using a lockable rack, etc. or to fix it using wire, etc. in order to protection from unjust access or theft.

B Removal of protection system

The contractor must not remove protection systems from the handling facility except when Managers, etc. deem that the risk caused by removal can be avoided.

C Maintenance and inspection of protection system

The Contractor, in the case that a third party conducts maintenance or inspection of the protection system, must take measures such as ensuring that the information that is to be protected cannot be retrieved or removing it, as necessary.

D Disposal or reuse of protection system

The Contractor, in the case of disposing of the protection system, after inspecting that the situation does not allow for the retrieval of data that is to be protected, and after physically destroying the storage medium, must make a record of so doing. Also, in the case of reuse, it must not be reused if, after inspection, the situation is not such that the data that is to be protected cannot be retrieved.

9 Communication and application management

(1) Operation procedure form

The Contractor must produce and maintain protection system operation procedure forms, and must ensure a situation that allows for use by users.

(2) Protection from malicious code

The Contractor must protect the protection system from malicious code using antivirus software that is updated to the most recent status, and by performing scans at least once a week. These measures shall also be taken when turning on the power

to a server or computer (hereafter, “server, etc.”) that has been turned off for one week or more.

(3) Protection system backup management

In the case of backing up the protection system to a portable storage medium, the Contractor must handle the portable storage medium in line with (4) .

(4) Handling of portable storage media

A Management of portable storage media

The Contractor must centrally store a portable storage medium containing data that is to be protected in a locked locker, etc., and the key must be managed appropriately. Also, measures must be taken so that the portable storage medium is easily distinguishable from other information that is to be protected.

B Storage on portable storage medium

The Contractor must use encryption when storing data that is to be protected on a portable storage medium. However, in the case of items to be submitted or presented to BRAIN, the instructions from BRAIN shall be followed.

C Disposal or reuse of portable storage medium

In the case of disposing of a portable storage medium containing data that is to be protected, after inspecting that the situation does not allow for the retrieval of data that is to be protected, and after physically destroying the storage medium, the Contractor must make a record of so doing. Also, in the case of reuse, it must not be reused if, after inspection, the situation is not such that the data that is to be protected cannot be retrieved.

(5) information transmission and delivery

A Transmission of information that is to be protected

In the case of transmitting information that is to be protected using communication device (mobile telephone, etc.), the Contractor must provide protection from risk as necessary based on the judgment of managers, etc. regarding the risks accompanying transmission.

B Agreement regarding transmission and delivery

In the case of the transmission or delivery of information that is to be protected, the Contractor must do so in line with the contract stating the duty of confidentiality or by another agreed means.

C Control measures during delivery

In the case of the delivery of documents that are to be protected, etc. the Contractor must protect against unauthorized access or misuse, etc. during delivery.

D Transmission of data that is to be protected

In the case of transmission of data that is to be protected, the Contractor must protect the data that is to be protected by either storing the data that is to be protected using the existing encryption, using an encryption for the circuit line of the telecommunications carrier, or using an encryption by e-mail, etc. However, in handling facilities in which it is recognized that there is no risk of leakage, this does not apply in the case of wire transmission.

(6) External connection

In the case of permitting an external connection to the protection system (mobile computing, teleworking, etc.), the contractor must perform user authentication and use encryption.

(7) Use of e-Government recommended ciphers, etc.

In the case of using encryption, the Contractor must use e-Government recommended ciphers, etc. In the case that it is difficult to use e-Government recommended ciphers, etc. the information that is to be protected must be protected by using some other encryption technology, etc.

(8) Software introduction management

In the case of installing software on the protection system, the Contract must receive a confirmation of the safety of the software in advance from the system manager.

(9) Use of system utilities

The Contractor must control the use of system utilities that are capable of invalidating control by the OS and software on the protection system.

(10) Management of technical vulnerability

The contractor must acquire information about technical vulnerability without losing time, and make an appropriate response based on the decision of managers, etc.

(11) Monitoring

A Log acquisition

The contractor must acquire a log recording access, etc. to information that is to be protected on the protection system.

B Log storage

The contractor must store the acquired logs for at least three months from the date of the recording, and conduct regular inspections.

C Log protection

The contractor must protect the log from falsification and unauthorized access.

D Corresponding date and time

The contractor must regularly ensure that the date and time of information systems that can access the protection system are matched through the protection system and the network.

E Continuous monitoring

In the case that the protection system is not physically or logically disconnected from the internet or information systems (cloud services, etc.) that share the same internet point, the contract must carry out continuous monitoring.

10 Access rights

(1) User management

A User registration management

In order to permit access to the protection system by handlers and to confer appropriate access rights, the Contractor must perform registration and registration cancellation for protection system users.

B Password assignment

In the case of assigning a short-term or temporary password for protection system users, the Contractor shall assign a password that is not easily guessed, and shall assign the password using a method with consideration for confidentiality. In the case of using or jointly using a more secure means (biometrics authentication, etc.) of password, the adoption of this item may be annulled.

C Management of manager rights

Manager rights for the protection system must be kept to the minimum level.

D Reviewing access rights

The contractor must implement reviews regularly and when needed of the assignment of access rights to users of the protection system.

(2) User responsibilities

A Use of passwords

The contractor must set passwords that are not easily guessed to users of the protection system, must not reuse the same password for multiple devices or services, and must change it immediately after any leakage. In the case of using or jointly using a more secure means (biometrics authentication, etc.) of password, the adoption of this item may be annulled.

B Countermeasures for unmanned protection systems

In the case of leaving a protection system in an unmanned situation, the contractor must take measures with consideration for confidentiality.

(3) Network access rights

A Restriction of functions

The contractor must restrict the usable functions according to the work duties of the users of the protection system.

B Network connection control

The contractor must protect against risks associated with connections to shared networks (internet, etc.) with the protection system.

(4) Operating system access rights

A Login procedures with consideration for security

In the case of a user using a protection system, the Contractor must ensure login is performed by means of procedures with consideration for security.

B User identification and authentication

The Contractor must provide each protection system user with a unique identifier (User ID, Username, etc.).

C Password management system

The protection system must have a function (function to prevent the reuse of passwords, etc.) that prevents the unauthorized use of passwords.

11 Management of information security incidents, etc.

(1) Reporting information security incidents, etc.

A When an information security incident occurs the Contractor must take appropriate measures and must promptly report all of the known details to BRAIN immediately after they are known.

B In the cases stated below, the Contractor must take appropriate measures and must promptly report all of the details immediately after they are known to BRAIN.

(A) In the case that infection by malicious code or unauthorized access to a server, etc. on which information that is to be protected is stored

(B) In the case that there is the risk of infection by “malicious code” or unauthorized access on a server, etc. that stores information that is to be protected when an infection by “malicious code” or unauthorized access is found on a server, etc. that is connected to the same Internet as the server, etc. that stores information that is to be protected

C In the case that there is the risk of an information security incident or a risk that may lead to such an incident, the Contractor must take appropriate measures and report the details immediately to BRAIN.

D In addition to the reports stipulated in A to C, when there is a report either internally

or externally to the Contractor regarding concerns about the possibility that an incident such as the leakage, loss or destruction of information that is to be protected has occurred or will occur, the Contractor must immediately report the factual details to BRAIN with all content that has been understood including the relevant potentiality and the veracity of the risk.

(2) Responding to information security incidents, etc.

A Response systems and procedures

In the case of information security incidents or if such is suspected, and in order to respond to information security events, the Contractor must specify response systems, responsibilities and procedures.

B Collecting evidence

In the case that an information security incident occurs, or if such is suspected, and in the case of (1) B (a), the evidence must be collected and promptly reported to BRAIN.

C Reflection in information security implement procedures

The Contractor must reflect information security incidents, suspected cases, and information security events in revisions to information security implementation procedures, etc.

12 Compliance status, etc.

(1) Confirmation of compliance status, etc.

A Confirmation of compliance status

The Contractor must confirm the compliance status of information security implementation procedures within the scope of responsibilities of the manager.

B Confirmation of technical compliance status

The Contractor must confirm the technical compliance status of information security implementation procedures within the scope of responsibilities of the protection system manager.

(2) Information security record

The Contractor, after specifying the storage period (at least 1 year after contract accomplishment) for important records regarding information that is to be protected (duplication records, removal records, audit records, etc.), must provide strict protection by means of storage in a locked locker, etc. or encryption, and must manage the key appropriately.

(3) Audit tool management

The Contractor must restrict the use of tools used for auditing the protection

system to the minimum level in order to prevent misuse.

(４) Audit by BRAIN

A Acceptance of inspections

The Contractor must accept an inspection regarding information security countermeasures when requested by BRAIN.

B Cooperation with inspections

In the case of an inspection implemented by BRAIN, the Contractor must cooperate as necessary with the request by BRAIN (entrance of staff or persons designated by BRAIN to the handling facility, cooperation in document inspection, etc.).

(Exhibit 9)

Additional Provisions for Ensuring Information Security in Procurement

(Confirmation of information security implementation procedures)

Article 1 After contract conclusion, Party B shall promptly produce an information security implementation procedure (the "information security implementation procedure" provided in Article 2-8 of the "Standards for Information Security in Procurement" (hereafter, "the Standards") as set by Party A. Same below.), which must receive confirmation from Party A in light of the Standards set by Party A. However, in the case that this is the same as the information security implementation procedure that has already been confirmed by Party A, a notification shall be sufficient providing there are no special indications.

2 When Party B wishes to change the information security implementation procedure that has been confirmed by Party A as per the previous item, in advance, the relevant area of change must receive confirmation from Party A in light of the Standards set by Party A.

3 Party A may request from Party B the submission, loan or inspection of the information security implementation procedure and any documents that are quoted.

(Handling information that is to be protected)

Article 2 Based on the information security implementation procedure confirmed by Party A according to the preceding Article, Party B must handle the information that is to be protected in connection to this contract ("information that is to be protected" as provided in Article 2-1 of the Standards set by Party A. Same below).

(Responsibility of Party B regarding the leakage, etc. of information that is to be protected)

Article 3 Party B shall be held responsible according to the contract for any incidents including the leakage, loss or destruction of information that is to be protected either intentionally or due to negligence on the part of employees or subcontractors of Party B (all workers involved in work related to the accomplishment of the contract (except for Party B)).

(Disclosure to a third party and consignment to subcontractors)

Article 4 In the case that information that is to be protected is unavoidably disclosed

to a third party, in advance, Party B must receive consent from Party A in writing after the protection of information security by the target for disclosure is confirmed by means of the confirmation items stated on the attached form.

2 In the case that there is an agreement in a contract with a third party for the transmission, exchange, sharing or any other provision of information that is retained or learned by Party B, Party B must take measures to exclude from the scope the information that is to be protected.

3 In accomplishing the contract, in the case that information that is to be protected is handled by subcontractors, in advance, Party B must confirm that the subcontract shall maintain information security by means of the confirmation items stated on the attached form, and must make notification of the result to Party A. However, this shall not apply in the case of transport or other work that is consigned in which Party B recognizes that information that is to be protected shall not become known.

(Surveys)

Article 5 Party A may perform surveys regarding information security countermeasures stated in the specifications, etc.

2 In order to carry out the surveys provided in the previous item, Party A may dispatch a designated person to the offices, factories or other related sited of Party B.

3 As a result of the survey provided for in Item 1, in the case that the information security countermeasures of Party B are deemed not to fulfil the information security implementation procedures, Party A may request the necessary measures to be taken to make corrections.

4 When the request as per the previous item is made by Party A, Party B must promptly take the necessary corrective measures.

5 When Party A conducts a survey of the subcontractors of Party B, Party B must provide the necessary cooperation in line with the requests of Party A. Also, in the case that the subcontractors of Party B are requested to take corrective measures, Party B must notify Party A of the measures taken.

(Measures when incidents, etc. occur)

Article 6 When an incident occurs such as the leakage, loss or destruction of information that is to be protected, Party B must take appropriate measures and must promptly report all of the details immediately after they are known to Party A.

2 In the cases stated below, Party B must take appropriate measures and must promptly report all of the details immediately after they are known to Party A.

(1) In the case that infection by “malicious code” (as stipulated in Standards Item 2-21; same below) or unauthorized access is found on either a server or computer (hereafter “server, etc.”) that stores information that is to be protected.

(2) In the case that there is the risk of infection by “malicious code” or unauthorized access on a server, etc. that stores information that is to be protected when an infection by “malicious code” or unauthorized access is found on a server, etc. that is connected to the same Internet as the server, etc. that stores information that is to be protected

3 Regarding the incident stipulated in Item 1, in the case that there is the risk of such or a risk that lead may lead to such an incident, Party B must take appropriate measures and report the details immediately to Party A.

4 In addition to the report stipulated in the preceding Item 3, when there is a report either internally or externally to Party B regarding concerns about the possibility that an incident such as the leakage, loss or destruction of information that is to be protected has occurred or will occur, Party B must immediately report the factual details to Party A with all content that has been understood including the relevant potentiality and the veracity of the risk.

5 A survey conducted by Party A after receiving a report stipulated in the preceding items shall conform to the stipulations of the preceding Article.

6 Party B must inspect the influence, etc. of the incident stipulated in Item 1 on the contract and related items, and must consult Party A regarding the measures.

7 In the case that an incident stipulated in Item 1 is found to be the responsibility of Party B, Party B shall be liable for the necessary costs for taking the measures as a result of the consultation stipulated in the preceding item.

8 The stipulations of the preceding item does not affect the right to claim compensation for damages of Party A.

(Cancellation of agreement)

Article 7 In the case that an incident stipulated in Item 1 occurs that is found to be the responsibility of Party B and the purpose of this contract cannot be achieved, Party A may cancel the contract in whole or in part.

2 In the case of the preceding item, the provisions related to the cancellation of the main contractual items shall apply mutatis mutandis.

(Obligations of Party B after the accomplishment of the contract)

Article 8 The provisions in Article 2, Article 3, Article 5 and Article 6 shall

apply mutatis mutandis even after the accomplishment of the contract. However, this does not apply in the case that the concerned information is not information that is to be protected.

2 In the case of the provisions of Item 6-2 (b) of the Standards or if there is not risk of the obstruction of duties, Party A may request the return, submission, destruction or deletion of information that is to be protected by Party B.

3 In the case that the request in the preceding item is made, and there is a need to continue storing information that is to be protected, Party B may request a consultation with Party A along with the reason.