Guidelines for Enhancing Industry-Academia-Government Collaboration Activities (draft)

Provisional Translation

<TARGET> Triple the current investment value from companies to universities and national R&D institutes by FY2025 (The Japan Revitalization Strategy 2016)

Background

- It is important to **promote the collaboration in open innovation** for responding to the environmental change of innovation in Japan.
- **Universities are supposed to create the social value** as knowledge experts in social problems which the government/industry cannot solve.
- **Organizational scaled joint researches** are essential for large-sized joint research projects.
- Universities and national R&D Institutes are expected to manage **with the success factors(right table) of large-sized joint researches.**

the Guidelines compile the issues and the prescriptions to strengthen the Industry-Academia-Government collaboration function from the perspective of the industry side.

Establishment of partnership	・Sharing and understanding of strategy, needs, and skills ・Long-term contract with the clear achievement goal / time ・Clarification of management system (e.g. chain of command)
Management System	・Construction of centralized management system
Budget	・High transparency, cost-effectiveness, and sustainability
Intellectual Property Management	・Maximization of the social and economic value ・Contractual mechanism of IP (e.g. incentive by ownership)
Compliance	・Appropriate risk management (e.g. corporate trade secrets)
Human Resource	・Incentive for researchers
Other	・Expansion of smaller firms' participation, etc.

Expected functions to all universities and national R&D institutes

Strengthening administrative function of Industry-Academia Collaboration office

●**Construction of organized collaboration system** / ●**Establishment of planning and management functions**

<Prescriptions>

・Construction of **a system to plan and manage cross-sectional joint researches** at the office for supporting the collaboration by planning and proposing.

・Recognizing the current issues of the Industry-Academia-Government Collaboration function and formulating the goal and plan to embody the future vision of the collaboration.

Virtuous Cycle of Capital

●**Adjustment of cost burden / Upgrading of management tasks**

<Prescriptions>

- **Joint research expenses can include labor cost or the equivalent to it.**
- **Proper cost calculation including labor cost*, essential indirect cost, and Strategic Industry-Academia Collaboration Cost****
- Effort management **based on the participation hours**
- **Introduction of IR analysis and management system** with the calculation of expense

*e.g. the fixed-rate method, the integration method, the hour rate method, the common unit price setting method

** Investment for development of industry-academia collaborative activities, expenses for supplementing risk etc.

Virtuous Cycle of Knowledge

●**Promoting management for utilization of intellectual properties (IP)**

<Prescriptions>

- Establishment of an IP management policy
- Secure a budget and upgrade the management system involved in IP
- **Flexible treatment of non-implementation compensation**
- **Accumulation of IP of Non competitive area in core institutions**

●**Strengthening of risk management**

<Prescriptions> **5 ways**

※Creating an environment to enhance the collaboration easily

①Establishment of the management system

②With leadership of the president and board members

③Public awareness to researchers ④Developing HR

⑤Collecting practices & sharing of information

Virtuous Cycle of HR

●**Promoting Industry – Academia Cross-Appointments**

<Prescriptions>

- **Formulation and revision of Cross-Appointments rules** for **utilizing with private firms**
- **Providing incentives to participants such as promoting careers and allowances**
- Providing useful information of operating procedures
- Clarification and resolution of issues in operation
- Consideration of the linkage with risk management

Essential view for utilizing the research results in the society

●**Strengthening financial basis of universities and national R&D institutes**

<Prescriptions>

- **Setting various unit labor costs**
- **Strengthening basis of the collaboration with Strategic Industry-Academia Collaboration Cost**
- Diversity of financial resources and fund operation

●**Upgrading of intellectual resources management**

<Prescriptions>

- Mind change for the social implementation* of research results
- Strengthening of the promotion involved in 'the value of research'
- Correspondence to firms' open and close strategies.

*e.g. the incubation of university-originated ventures and the contribution to local society

●**Reform of the performance evaluation system for promoting the collaboration**

<Prescriptions>

- Flexible system design with re-recognition of **the high value of researchers to participate in the collaboration activities**
- **Fair evaluation from the performance in firms and utilizing the results**

Points to construct functions of planning and management

1. Formulate the goal and plan of the collaboration

●Grasping the present situation based on objective and quantitative information

●Formulate management strategies according to the goal and plan

(Approach Cases)

- **Aggregation of information (e.g. the number of joint researches and patents) and analysis of it through the comparison with others**
- **Formulate a strategic roadmap for an ideal joint researches**

2. Planning / administration & performance management

●Aggregation of information of seeds as well as information/control power of joint researches into the collaboration office to increase the proposals

●Resource management and flexible contracts

●Process improvement considering the risk for delay

(Approach Cases)

- **Aggregation of the information and control power by restructuring**
- **Progress management at the office and feedback to the researchers**
- **Proposals based on the centralized seeds information**
- **Clarifying goal and time in proposal/contract/plan of the joint researches**

3. Deployment and development of HR with experts

●Deployment and development of HR with expertise in the specialized areas at the collaboration office

(Approach Cases)

- **Research Administrator (URA), Institutional Researcher (IRer), Coordinator, Deployment of financial and legal staffs**

4. Organizational rules and contract templates

●Setting and arranging the rules for organizational management

●Arranging the templates for the smooth contracts

(Approach Cases)

- **Arranging the rules for IP and risk management, Cross-Appointments**
- **Arranging the templates of joint researches, Non-disclosure Agreement, and Comprehensive framework agreement**

For implementation of the Guidelines

- Industry and universities / national R&D institutes **conduct PDCA cycle that evaluates and improve the Industry-Academia-Government Collaboration Activities based on the guidelines.**
- Universities and national R&D institutes utilize the Guidelines **for setting the goal and the plan of the collaboration along with education and research.**
- **Universities and national R&D institutes state the progress based on the Guidelines in public, while the Industry utilizes the information for matching of joint research.**

Concrete Steps

Industry

1) Improve the function of the collaboration office	➢ **Sharing and understanding the mission, strategy, needs, and skills** with universities and national R&D institutes
2) Capital	➢ **Inclusion of labor cost (including cost for students) and strategic Industry-Academia Collaboration cost** in the joint research cost
3) Knowledge	➢ Consideration of the policy for **the active utilization of patents**
4) HR	➢ Active utilization of **the Cross-Appointments**
5) Promotion of the collaboration	➢ **Direct commitment** of the large scale joint researches by **the executives** ➢ Promoting **the collaboration for the prosperous future of local societies with long term view**

Government

1) Support large-sized joint researches

2) Support HR cultivation for innovation management and operational improvement in universities and national R&D institutes

3) Provide incentives to the improvement of universities and national R&D institutes based on the Guidelines

4) The evaluation of the universities' activities by utilizing the Guidelines