Business Plan FY2017

1. Recent situations and new direction

The Institute for Future Engineering (IFENG) achieved a business surplus in the fiscal 2013 as a result of management reconstruction efforts after restructuring in the fiscal 2011, including restructuring of the activities and enhancement in the research management after its qualification as a public-interest corporation in 2013. IFENG's position in the GGTTI think tank ranking in the science and technology area has risen to the fifth place in 2015 and 2016 from the eighth in 2012-2013 and the sixth in 2014.

This enabled IFENG to shift its target from management issues back to the mission proper to a think tank and its enhancement. This means, in the fiscal 2017, expansion in research activities and the start of a program for strengthening the manpower, particularly recruiting and fostering young researchers.

IFENG believes that it is now the time to improve the quality of its activities adding to the 45-year performance record.

IFENG's history and feature have been described as follows:

It was more than 40 years ago that "soft science", or science of political decision making, was proposed as a field to study complex and interdisciplinary problems concerning social and political issues, involving interactions of humans, society, nature and technology. IFENG, one of the first-generation think tanks in Japan, was created just in that period, when the country was facing new and universal problems of environmental pollution and limits in resources and energy.

IFENG's activities have been focused on the fields of science and technology as well as research and development, which was a unique feature in Japan.

The institute has thus developed original methodologies for analysis of social trends, identification of essential issues in society, and development of comprehensive strategy to settle them, as well as conception, implementation and evaluation of relevant policies. These methodologies have proven to be effective in application to policy issues and socioeconomic problems.

The purpose of the Institute is summarized as follows:

Our research activities start from gaining insights into the developing tendency of science and technology and into presages of socioeconomic changes in order to predict a likely future and its inherent problems. The goal is to conceive, design and propose measures for solving those problems, such as desirable social systems, policy making, identification of long-term and basic tasks along with development of systems to address them, preferable product development and service systems, research and development systems, or implementation of technologies, by analyzing relevant data with "engineering" methodologies, thus contributing to advances in science and technology as well as socioeconomic development at large.

More specifically, our research tasks and ancillary works are divided into the following units: Research Center for Policy Analysis, Research Center for Information and Telecommunication, Research Center for Social Issues, Programs Related to the Great East Japan Earthquake, and Research Center for Lifence in 22nd Century. Studies are performed by platforms formed by internal researchers, which are networked with external experts. Results are released in forms sharable with the general public as far as possible, for example through social media or on websites, in addition to conferences, lectures and publications. The external networks include Japan Society for Future Research, Japan Society for Research Policy and Innovation Management, and Society for Integrative Medicine Japan, which are closely related to our activities, as well as a number of domestic and overseas specialist groups that have been formed in the course of our technology forecast and other activities.

Specific activities are classified into three categories: Commissioned Investigations, Independent Investigations, and Interactive Research. Within each category, balance is controlled between Nonprofit Activities for the general public and For-Profit Activities for specific parties.

Based on our history and general guidelines for activities described above, IFENG will continue and promote the goals for FY2016. Particularly, the Interactive Research, relatively inactive so far, will be enhanced in order to "create wisdom for society". Furthermore, measures for expanding Independent Investigations, which have been relatively inactive, will start in FY2017. This includes education and training of researchers, mainly of younger generations, along with seeking and securing financial resources for it. We are well aware that the definition of what is "for" society depends on the view on social justice. We are starting from building the fundament for developing wisdom based on our own view and eventually share it with the general public.

2. Business plans for individual categories

(1) Nonprofit Commissioned Investigations (N1)

IFENG performs investigations commissioned by governmental agencies, local authorities, foundations and other organizations. The results are to be shared with the general public including the originators.

"Commission" in this category, usually obtained through open application, may mean either contract or funding. While a contracted investigation is carried out in accordance with the specifications by the commissioning party defining the general framework of the project as well as expected results, a funded investigation allows more discretion of the applicant. Investigation projects are financed either by the commissioning parties or foundations: contracted investigations are compensated for principally by government agencies, local authorities, research institutions, or incorporated foundations, while funded investigations rely on foundations for research promotion.

Activities in think tanks require a great variety of detailed leading-edge knowledge in different disciplines. No single organization could cover this entirely with its internal manpower even for a project fit for its background. We adopt, therefore, a platform-network system where our staff works on the platform for the core activities in a project while peripheral knowledge is provided by networked teams of external specialists. Even non-skilled works such as questionnaire counting may be outsourced to specialized contractors on economic ground.

(2) Nonprofit Independent Investigations (N2)

IFENG also performs self-financed Independent Investigations on subjects attracting much public attention. The results are open to public. The Special Earthquake-Related Project started in FY2011 belongs to this category. Here the process of emergence and recognition of the social impacts of the quake was compared with that of social response in terms of time series, in order to explore appropriate social systems requisite for short- and mid-term response measures.

This category has been enhanced since FY2016: in addition to original works by our staff, a program for training young researchers will start this year, along with efforts to secure financial resources for the program. These measures will be continued throughout this year.

(3) Nonprofit Interactive Research (N3)

Interactive Research aims at sharing the results with society and, for new problems suggested by the results, collaborating with the general public for deepening insights into them or finding solutions through iterative dialogues.

Activities in this category are thus characterized by involvement of the general public in the process towards better understanding of problems by sharing research results and tasks suggested by them, along with continued dialogues, on open platforms such as digital space, public meetings or printed publications. The "Forum" and "Insight" sections in our website typically provide such opportunities for dialogue. While the Forum is intended for

discussion with the public, the Insight is the channel for presenting IFENG's research results as questions to society, and inviting discussions by registered external specialists. The progress of discussions is made accessible to the public by timely disclosure on the website. The "Publication" section of the site provides IFENG's publications in the past as the basis for discussion, complemented by public lectures and printed publications. Following the enhancement plan started in FY2015, this category will further be expanded to a more substantial part of the institute from FY2017 on, for example by combination with other Nonprofit Investigation projects, along with securing financial resources and establishing appropriate organizational measures.

(4) For-Profit Commissioned Investigations (F1)

This category consists of investigations performed for a specific party, mostly business companies and other organizations that order the investigations. Projects assigned through open application may also be categorized here if the outcome is unlikely to be shared publicly.

(5) For-Profit Independent Investigations (F2)

An example of Independent Investigations performed for specific parties is consulting service based on IFENG's knowledge and findings obtained in the past think tank activities.

(6) For-Profit Interactive Research (F3)

This category includes lectures, training courses and publications based on our research results for specific target groups.