Business Report FY2016

1. General

During 46 years since its establishment, the Institute for Future Engineering (IFENG), a first-generation think tank in Japan, has continuously been trying to gain an insight into the developing tendency of science and technology and into socioeconomic changes, to identify issues and their solutions for a desirable future on the basis of engineering methodologies, and to propose ways how science and technology solve possible problems. The fiscal 2016 concludes the fourth year of IFENG as a public-interest corporation. Efforts to achieve a capability commensurate with the status of the institute have resulted in 61 researchers (mostly part-timers) compared with the initial 34. Synergy of the newly hired part-timers with different backgrounds with the full-time researchers who have got accustomed to the new management system has led to a variety of commissioned works and has provided some possibilities for business expansions to independent nonprofit projects, as reflected in the net profit in the current financial results. Meanwhile, IFENG maintained for 2016 the last year's fifth place in the GGTTI think tank ranking in the science and technology area, following the eighth in 2012 and 2013 and the sixth in 2014. This indicates that IFENG is now ready to pursue its originally intended goal on the stabilized financial basis.

IFENG's articles of incorporation define its activities in three categories¹): investigations in the area of future engineering, interaction with the public related to future engineering (publicity, services, etc.), and international exchange related to future engineering. The activities of a public-interest corporation are to be classified into nonprofit (N) and for-profit (F) ones. The former is intended for the general public, while the latter is for specific parties.

2. Business-related activities

For explanations in this section, the N and P activities are further divided into three each: (1) commissioned investigations (investigations driven by commissions or subventions

by other parties), (2) independent investigations (investigations relying on its own fund), and (3) interactive research²⁾. Individual details are presented below. Activities related to international exchange are described in the last paragraph without differentiating N and P categories.

A total of 56 projects were implemented in FY2016, including four continued from the preceding year and two to be continued in the next year. Fifty-four were thus concluded within the fiscal year and considered in the account settlement.

The current contract-based projects include 21 for N1, 31 for P1 and 2 for P2. In addition, two each of N2, N3 and P3 projects have been performed.

(1) Commissioned investigations

Of the 52 projects completed in FY2016, five were subventionary: one was supported by the private sector and four were subsidized by the Grants-in-Aid for Scientific Research ("Kakenhi", Japan Society for the Promotion of Science) (including joint investigations); the remaining 47 were commissioned projects³⁾.

The subventions came from Watanabe Memorial Foundation for the Advancement of New Technology in addition to Kakenhi.

The commissions came from eight governmental agencies for 12 projects (compared with 11 in the preceding year, the same hereinafter), eight government-run institutions for 14 (3), three universities for 4 (5), and 13 business companies for 17 (12). The commissioning government agencies included the Cabinet Office, the Ministries of Education, Culture, Sports, Science and Technology; of Economy, Trade and Industry; of Environment; of Internal Affairs and Communication; of Land, Infrastructure, Transport and Tourism; of Agriculture, Forestry and Fisheries; and of Defense. Other commissioning parties included National Graduate Institute for Policy Studies, Osaka University, the University of Tokyo, Japan Science and Technology Agency, the National Diet Library, and other national research institutes. Commissions by business companies

continued to increase.

The two projects to be continued to the next year consist of a subventionary and a commissioned project.

In terms of the business categories, 21 projects belong to nonprofit activities $(N1)^1$ and 31 for-profit activities (F1).

(2) Independent investigations

(i) Independent nonprofit investigations (N2)

The self-financed nonprofit independent investigations carried out in 2016 included preparatory works for supporting commissioned projects (original concepts) and studies by full-time researchers to expand their knowledge.

(ii) Independent for-profit investigations (F2)

The independent for-profit investigations included two projects (consulting) to support business companies' activities related to science and technology based on IFENG's existing knowledge.

(3) Interaction with the public

(i) Nonprofit interaction with the public (N3)

The activities below were implemented to feedback the research outcome of IFENG to wide public:

(a) A new SNS-based publicity program was started. Specifically, IFENG's official Twitter account was established along with accounts for individual projects. It is intended to familiarize the public with the research outcome of the institute and to encourage their access to essential issues by inviting the followers of the accounts to visit the official IFENG website, particularly the "Insight" and "Forum" sections. Experiences obtained in the following activities implemented in FY2015-16 were helpful:

- As a publicity measure, Annual Report 2015 was published which summarizes the Institute's activities in the year and contains articles by researchers. The Annual Report

was distributed to parties interested and can be viewed in IFENG's website.

- IFENG supported, or participated in the planning of, several symposia open to the public, and in some cases served as the secretariat.

(b) Publication of Annual Report 2017 and expansion of the English pages in IFENG's website were realized along with individual researchers' publication of their research results and presentation of their views in a number of printed media, conferences, meetings and seminars.

(ii) For-profit interaction with the public (F3)

Activities in this category included support of Aviation Forum and publishing (five copies of the MEXT Report of the 9th Science and Technology Foresight were sold).

(4) International exchange

Three study groups from China and Taiwan visited IFENG in FY2016.

In relation to the commissioned investigations, a total of 17 researchers visited the US, Canada, Britain, Germany, Austria, Belgium, Finland, Singapore, Cuba, China, Hong Kong and Republic of Korea.

Notes

1) Article 4.

2) These categories are hereinafter represented as N1, N2, ..., P1, P2, etc.

3) Investigations supported by subsidization from subventionary funds are called "subventionary"; those based on other financial sources are "commissioned".