

# Business Report FY2015

## 1. General

During 45 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 2015 concludes the third year of IFENG as a public-interest corporation. Efforts to achieve a capability commensurate with the status of the institute have resulted in 58 researchers (mostly part-timers) from 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, although the current account showed some deficit again, indicating that the management reform is still incomplete. Meanwhile, IFENG obtained the fifth place in the GGTTI think tank ranking in the science and technology area for 2015, following the eighth in 2012 and 2013 and the sixth in 2014.

IFENG's activities include 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 categorized 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 research. For (4) international exchange, N and P activities are not differentiated because of the wide variety of the relevant activities.

A total of 41 projects were implemented in FY2015, including one continued from the preceding year and five to be continued in the next year (of which one was the continued work). Thirty-six were thus concluded within the fiscal year and considered in the account settlement.

#### (1) Commissioned investigations

Of the 36 projects completed in FY2015, four were subventionary and 32 were commissioned.

The subventions were obtained from the Grants-in-Aid for Scientific Research ("Kakenhi", Japan Society for the Promotion of Science) for three projects (including joint investigations) and from Watanabe Memorial Foundation for the Advancement of New Technology for one.

The commissions came from governmental agencies for 11 projects (compared with 13 in the preceding year, the same hereinafter), government-run institutions for 3 (10), local government for 1 (1), universities for 5 (5), and business companies for 12 (5). The commissioning government agencies included the Ministries of Education, Culture, Sports, Science and Technology; Economy, Trade and Industry; Environment; and Land, Infrastructure, Transport and Tourism; as well as Japan Patent Office. Other commissioning parties include National Graduate Institute for Policy Studies, Osaka University, Japan Science and Technology Agency and other national research institutes. Commissions by business companies are clearly increasing.

The five projects to be continued to the next year include two subventionary and three commissioned investigations.

In terms of the business categories, 15 projects belong to nonprofit activities (N1)<sup>1</sup> and

21 for-profit activities (F1).

(2) Independent investigations

The self-financed nonprofit independent investigations (N2) carried out in 2015 included preparatory works for commissioned projects and studies by full-time researchers to expand their knowledge.

The for-profit independent investigations (F2) included preparatory works for commissioned projects and support for business companies' activities related to science and technology.

(3) Interaction with the public (publicity, services, etc.)

(i) Nonprofit interaction with the public (N3)

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

- 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.
- IFENG researchers published their research results or presented their views in a number of conferences, meetings and seminars.
- Research results or views of researchers were also published in general magazines and other media, including IFENG's website.

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

Activities in this category included support of organizations involved in future engineering, training and investigations commissioned by business companies, and publishing (12 copies of the MEXT Report of the 9th Science and Technology Foresight were sold).

#### (4) International exchange

In FY2015, a total of 12 IFENG researchers visited Taiwan, South Korea, USA, Britain, Australia, Canada and Singapore to perform investigations/

In April, the president was invited by Taiwan's Market Intelligence and Consulting Institute for a two-day lecture on "STI Policy formation and implementation" in addition to three lectures in governmental agencies.

An example of international exchange in science and technology is the three-month internship offered to Paveena Lalitnorasate, a Tokyo Institute of Technology student from Thailand, whose research results were presented in an academic conference.