

# **JTEC Annual Report FY 2018**

April 2018 – March 2019

# **JTEC**

Japan Telecommunications Engineering and Consulting Service

## **JTEC Mission**

Our mission is to contribute to the growth and development of both developing countries and Japan by promoting international cooperation in the ICT sector and assisting the Japanese ICT industry in international business operations.

Since ICT is an indispensable tool in people's lives, JTEC aims to enable as many people as possible in developing countries to enjoy the benefits of ICT.

As a trusted global partner, JTEC plays the role of a bridge between developing countries and Japan to proactively meet the needs and expectations of customers and stakeholders.

JTEC, as a partner, assists the evolution of ICT in developing countries by making good use of its characteristics of being an independent nonprofit organization with an impartial and neutral standpoint.

# Message from the President

JTEC, a nonprofit organization, was established in 1978, under the Government supervision with the initiatives of telecommunications and broadcasting industry and the finance entities, and has conducted international cooperation activities over 40 years.

JTEC conducts activities of public interest through surveys, research, training and human resources development in the telecommunications and broadcasting technology sector in developing countries, while also providing consulting services for communications-related development projects and services to support the overseas business of Japanese companies, in order to achieve JTEC missions to promote the development of the telecommunications and broadcasting sector in developing countries and mutual international understanding as well as to contribute to the development of Japan's telecommunications industry.



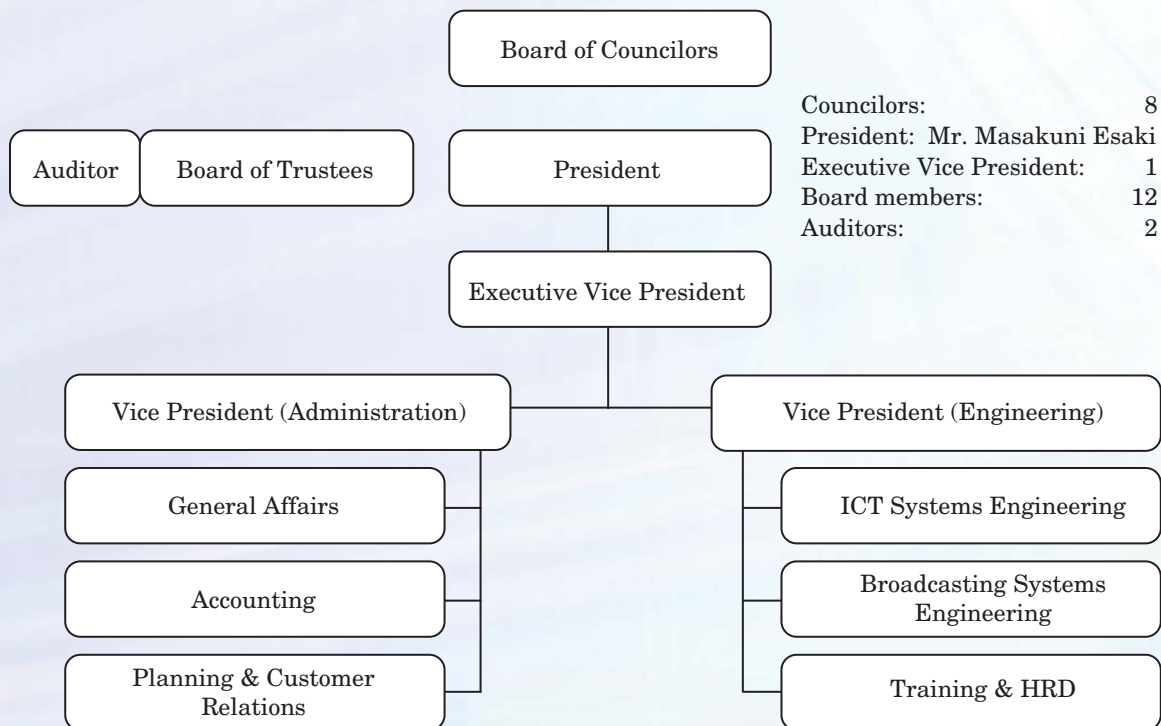
Mr. Masakuni Esaki

In recent years, ICT has developed remarkably. While, in tandem with changes in conditions around the world and the changing global environment, ICT is playing an increasing role in regional development and people's security and safety.

Based on the said circumstances, JTEC intends to continue to strive to meet the expectations of the developing countries and the Japanese telecommunications industry.

# Organization and History

## Organization



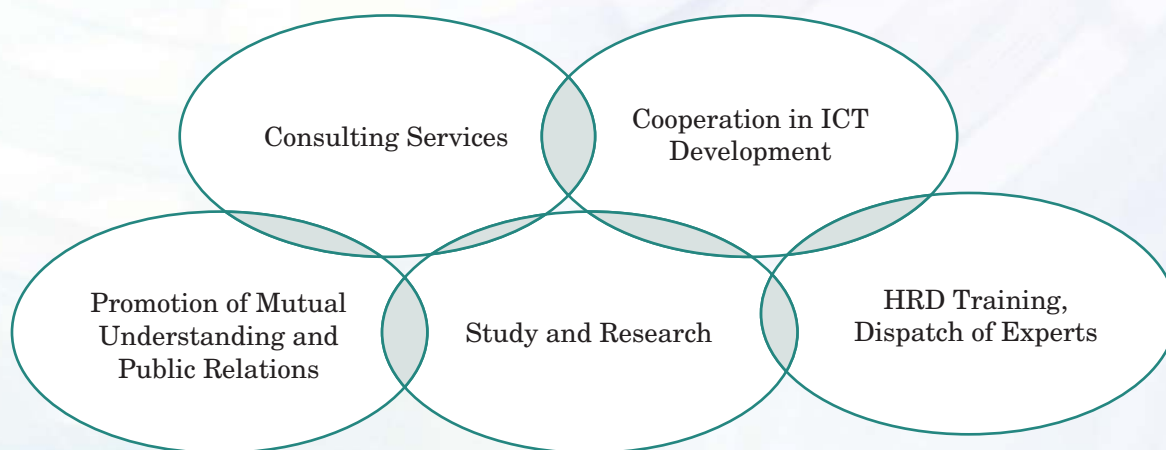
## History

- |           |  |
|-----------|--|
| Mar. 1978 | Established Japan Telecommunications Engineering and Consulting Service (JTEC) as an incorporated foundation.<br>First president: Shigeo Nagano (then President of the Japan Chamber of Commerce and Industries)<br>Office: Azabudai, Minato-ku, Tokyo |
| Nov. 1978 | JTEC representative office in Cairo opened. (until Jun. 2001)  |
| Jun. 1995 | The office moved to Nishi-gotanda, Shinagawa-ku, Tokyo.  |
| Sep. 2000 | Angola project office opened. (until Nov. 2010)  |
| Jan. 2005 | Vietnam project office opened. (until Oct. 2013)   |
| Aug. 2006 | Indonesia project office opened. (until Mar. 2012)   |
| Dec. 2012 | Bangladesh project office opened.  |
| Feb. 2013 | The office moved to current location.  |
| Oct. 2013 | Myanmar liaison office opened.   |
| Apr. 2016 | Myanmar project office opened.   |
| Jun. 2018 | Held official ceremony of JTEC 40 anniversary.   |

# JTEC Businesses and Activities

JTEC has built up substantial business achievements and experience with governments, government-related organizations, telecom operators, broadcasting operators, and other parties in more than 120 nations.

JTEC covers various business activities as described below. JTEC has supported developing countries/emerging countries in establishing telecommunications infrastructure and broadcasting infrastructure, introducing social infrastructure such as e-Government, disaster prevention/mitigation systems, and ICT systems in the fields of health and education. Furthermore, JTEC has provided human resources development programs as well.



## 1. Consultancy services for planning and implementing ICT networks

JTEC provides consultancy services for telecom and broadcasting operators from the planning phase to the operation and maintenance phase. For example, JTEC provides field surveys, preparation of specifications and tender documents as well as assistance with the evaluation of tenders and the procurement process. JTEC also supports supervisory services for construction work by vendors.

## 2. Study and research on telecommunications

JTEC conducts study and research on telecommunications, broadcasting and ICT. For example, JTEC prepares proposals on telecommunications networks with cost effective solutions. These services include feasibility studies (F/S), research on the formulation of relevant master plans, and surveys on the formation of projects. Furthermore, JTEC also conducts study/research on telecommunications/broadcasting markets and international joint study/research on the uses of ICT.

## 3. Human resources development, training, and dispatch of experts

JTEC implements training programs in Japan and on site as well for the overseas government sector and private sector relating to telecommunications, broadcasting and ICT utilization. JTEC also dispatches experts on site to conduct study and training.

## 4. Cooperation with public and private sectors in development of ICT in other countries

JTEC, as a non-profit, neutral and impartial organization, provides intermediary support for overseas customers introducing state-of-the-art Japanese technology and through related suppliers.

## 5. Promotion of mutual understanding and public relations

JTEC promotes mutual understanding of the status of telecommunications and broadcasting among nations to promote international cooperation in the sector by organizing relevant study and lecture meetings as well as seminars in Japan and by visiting agencies concerned in overseas countries. JTEC also disseminates information through special bulletins, its website, and mail magazines for the above purpose.



# Overview of JTEC Businesses and Activities in Fiscal Year 2018

## 1 Consultancy services for planning and implementing ICT networks

### (1) Consulting services for Myanmar Communication Network Improvement Project (yen loan project)

JTEC established a joint venture with two Japanese consulting firms, signed an agreement with Myanma Posts and Telecommunications (MPT) in February 2016, and commenced consulting services in April 2016. In fiscal 2018, continuing activities conducted in the previous fiscal year, JTEC evaluated technical proposals submitted by tenderers, assessed tender prices and provided support for vendor selection and contract negotiations.

### (2) Preparatory survey on the project for introduction of nationwide early warning system and strengthening disaster communication in the Kingdom of Tonga

This survey commissioned by the JICA began the previous fiscal year and continued into fiscal 2018. In fiscal 2018, JTEC performed preparatory surveys and research.

### (3) Feasibility study for the expansion of the Kyrgyz Backbone Network

Commissioned by State Committee of Information Technologies and Communication (hereinafter referred to as “SCITC”) of the Kyrgyz Republic, JTEC conducted the feasibility study on the expansion of Backbone Network in the Kyrgyz Republic as part of the Digital CASA<sup>\*1</sup>-Kyrgyz Republic project, which SCITC is carrying out with support from the World Bank.

<sup>\*1</sup>: Digital CASA (Central Asia South Asia) is a project to establish an optical fiber network connecting China to Europe through Central Asia.

### (4) Consulting services for introduction of nationwide early warning system and strengthening disaster communication in the Kingdom of Tonga (JICA Grant aid)

This project primarily consists of radio systems for early warning covering all of Tonga. JTEC formed a joint venture with a Japanese partner companies and received a commission for consulting on the project from the Tongan government. It is a multi-year project, and in fiscal 2018, JTEC conducted detailed design and other services.

### (5) Consulting services for improvement emergency communication system in Jamaica (JICA Grant aid)

This project involves introduction of an integrated mobile, broadcasting-based wireless disaster prevention system for all of Jamaica. JTEC has been tasked with providing consulting services on wireless technologies as a partner of the Japanese company commissioned by the Jamaican government to provide consulting on this project. It is a multi-year project, and in fiscal 2018, JTEC conducted detailed design and other services.

## **2 Study and research on telecommunications**

### **(1) JKA subsidized the study on promoting the system development for Telemedicine in developing countries**

This study was adopted and funded by “Projects for promoting the machine industry in 2018” conducted by the Japan Keirin Autorace (hereinafter referred to as “JKA”) Foundation. In fiscal 2018, JTEC conducted field surveys on Telemedicine in India, Myanmar, Thailand, Cambodia and Vietnam. The study report was created and distributed to the related organization. In addition, the study report was uploaded in JTEC’s web page and was widely browsed by persons concerned.

Furthermore, “the study on promoting smart village development in developing countries” was adopted in fiscal 2019.

### **(2) APT Publishing Program study**

This study was selected for the APT Publishing Program in fiscal 2017 and covers ICT broadband planning and promotion in the Asia-Pacific region. In fiscal 2018, JTEC conducted a information gathering survey and visiting surveys in Cambodia, Myanmar and Laos. In fiscal 2019, JTEC plans to conduct additional visiting surveys in Indonesia, Thailand, Bangladesh, the Philippines and Malaysia and compile a report of the findings. Another study connected with the APT Publishing Program was commissioned to JTEC in fiscal 2018 and involves surveying the present state of radio policy and frequency management. Preparations were made for conducting the survey in fiscal 2019.

### **(3) APT project for fiscal 2019**

JTEC was commissioned by APT to conduct a Category II project in Tuvalu. The project is to build a broadband network in Tuvalu for the government/public sector with optic fiber and wireless technologies and is planned for implementation in fiscal 2019.

### **(4) Study on trends in ICT infrastructure development assistance in Pacific Island countries**

The Ministry of Internal Affairs and Communications commissioned a study on trends in development assistance in Pacific Island countries provided by major donor nations and international organizations, etc. and on forms of development assistance going forward, and JTEC conducted information gathering survey and visiting surveys (including Samoa, Tonga, Fiji and Vanuatu) and compiled a report of the findings.

### **(5) Basic survey, etc. on emergency warning systems in Central and South America**

JTEC surveyed emergency warning systems compatible with digital terrestrial broadcasting in Argentina, El Salvador, Costa Rica, Chile and Peru on a commission from the Ministry of Internal Affairs and Communications. This same project has been commissioned for fiscal 2019 as well, and JTEC intends to continue the study.

# Overview of JTEC Businesses and Activities in Fiscal Year 2018

## 3 Human resources development, training, and dispatch of experts

### (1) APT training on Latest wireless communications technology trends and planning of effective utilization of frequency spectrum

This training program was conducted on a commission from the APT, and 14 people participated. Efforts were made to increase the effectiveness of the training through incorporating trainee group discussions and other tools. It also involved visiting and observing corporations and research institutions in Japan to deepen trainee knowledge.

FY2018	Training course	Parti- cipants	Countries	Received trainees
18.11.12- 18.11.20	Latest wireless communications technology trends and planning of effective utilization of frequency spectrum	14	Afghanistan, Bangladesh, Bhutan, China, Hong Kong, Iran, Malaysia, Maldives, Mongolia, Nepal, Pakistan, Philippines, Thailand, Vanuatu	MIC, Shiojiri City, Hitachi Kokusai Electric, Dengyo, KDDI, Mitsubishi Electric, NTT Docomo, NHK, NICT, TBS

### (2) APT Training Workshop on Policy Development for High Level Officials

A policy training workshop for high level officials organized by APT was held in Tokyo in March 2019 with the support of the Ministry of Internal Affairs and Communications. High level officials, including executive directors, with policy-making responsibility at telecommunications ministries, etc. from ten countries (Bangladesh, Cambodia, China, Iran, Laos, Malaysia, Myanmar, Nepal, Philippines and Nepal) participated. The training focused on recent issues related to telecommunications policy and was conducted primarily through workshop-style discussion and debate. It received strong marks from participants being highly effective.

### (3) APT local training

On a commission received the previous fiscal year, JTEC conducted local training in countries wanting training related to ICT utilization for disaster preparedness and prevention. The training was specifically held in the Philippines and Vanuatu, drawing 78 and 11 participants respectively. The training received high marks from participants.

### (4) APT expert mission to Bhutan

JTEC's proposal to send a team of experts to Bhutan was accepted by APT, and in Bhutan, the team conducted a visiting survey from the standpoint of utilizing satellite communications and ICT in disaster management. JTEC submitted a report to APT that included a proposal on human resources development for technical personnel.



## **4 Cooperation with public and private sectors in development of ICT in other countries**

### **(1) IoT awareness-raising project (continuing)**

In fiscal 2018, JTEC held seminars and participatory, solutions-based workshops in Cambodia, Thailand and the Philippines to contribute to capacity building. The 179 total participants included officials from telecommunications and other agencies, and the project itself was very well received.

### **(2) Activities for formation of smart cities**

Participating in TAS 2018<sup>\*2</sup>, JTEC collected information related to smart cities in Rwanda. JTEC used this as an opportunity to internally consider feasible cooperation and assistance areas, and in order to verify its conclusions conducted visiting surveys in India, Indonesia and Cambodia.

<sup>\*2</sup>: TAS 2018: Transform Africa Summit 2018. Africa's large ICT event held each year in Rwanda; it is sponsored by Smart Africa (administered in Rwanda).

### **(3) Identification and formation of disaster prevention projects (continuing)**

Using the JICA's grant aid assistance project currently taking place in Tonga as a case study, demand surveys were conducted in the Marshall Islands and Micronesia with the aim of conducting similar projects in other Pacific Island countries. In addition, the results of a joint study on securing emergency communications in disasters utilizing Vanuatu MDRU<sup>\*3</sup>, a project continuing from the previous fiscal year, was introduced to APT member countries at PRFF-11<sup>\*4</sup>/APT (held Nov. 2018 in Samoa), and awareness-raising activities were conducted toward forming disaster preparedness and prevention projects utilizing ICT, which included promoting the importance of utilizing ICT in disaster prevention.

<sup>\*3</sup>: MDRU: Movable and Deployable ICT Resource Unit. Emergency communications system useful in disaster sites, including attaché case type, vehicle-mounted and container modules.

<sup>\*4</sup>: PRFP-11: 11th Policy and Regulation Forum for Pacific

### **(4) Formation of projects for increasing the efficiency of optic access construction and maintenance**

While introducing examples of optic access projects in Japan to Southeast Asian countries, JTEC considered the possibility of collaboration related to increasing construction efficiency and training to raise the skill levels of line engineers and reached out to Thailand and other related countries. In addition, JTEC provided assistance for technical training in collaboration with a Japanese company involved in training optic access network engineers in Vietnam.

### **(5) Overseas development support for emergency warning broadcasting (EWBS<sup>\*5</sup>)**

To support the development of EWBS in countries adopting Japan's system for digital terrestrial broadcasting, JTEC assisted EWBS vendors in applying for the JICA's SME overseas assistance programs. In addition, based on the results of a joint EWBS study for analog radio with Indonesia the previous fiscal year, JTEC announced the findings of a joint survey and study with RRI, a public radio station, at a disaster preparedness conference held in Indonesia.

<sup>\*5</sup>: EWBS: Emergency Warning Broadcast System

# Overview of JTEC Businesses and Activities in Fiscal Year 2018

## 5 Promotion of mutual understanding and public relations

### (1) Conduct of commemorative event of JTEC's 40th Anniversary

In the year 2018, JTEC celebrated its 40th anniversary. Looking back on the 40-year history, JTEC held a reception party with the participation of supporting members and related organizations, and issued a commemorative booklet "JTEC 40-year history". (June, 2018)

### (2) JTEC Annual conference

JTEC implemented annual conference to deepen understanding of latest ICT promotion policy in Japan and recent ICT situations in overseas countries.

Session	2018 Theme	Subject
June, 2018	Aiming for international promotion of high quality ICT infrastructure	1. International ICT trends and promotion strategy in Japan 2. Summary report of JTEC activities (1) New challenge of IoT promotion in overseas countries (2) Reports of survey study on tele-medicine in overseas countries (Subsidy by JKA)

### (3) JTEC Study seminar

JTEC implemented a study seminar for member companies sharing the latest international trends of telecommunication and ICT.

Session	2018 Theme	Subject
October, 2018	Aiming for international promotion of high quality ICT infrastructure	Recent policy of MIC on international promotion of the "Smart City"

### (4) Information disclosure on JTEC publication and website

JTEC also conducted public relations activities through publications and its website by providing relevant news and information.

(Publication)

- Published the 7th issue (October, 2018) of the annual report "JTEC" and distributed it to member companies and stakeholders, etc.
- Published the commemorative booklet "JTEC 40-year history". (June, 2018) *See above (1)*

# Financial Statements

## 1. Balance Sheet\*

Year ended March 31, 2019

(in JPY)

Assets		Liabilities	
Accounts	Amounts	Accounts	Amounts
<b>[Current Assets]</b>	<b>[615,337,222]</b>	<b>[Current Liabilities]</b>	<b>[196,241,263]</b>
Cash in hand and Cash in bank	329,326,715	Accounts payable - other	911,078
Accounts receivable – other	274,817,752	Accrued expenses	98,462,726
Cost of uncompleted contracts	5,931,709	Advance received	92,853,214
Suspense payment	3,139,846	Deposits received	1,782,745
Prepayments	2,024,000	Income taxes payable	70,000
Prepaid expense	97,200	Consumption taxes payable	2,161,500
		<b>[Non-Current Liabilities]</b>	<b>[9,777,125]</b>
<b>[Fixed Assets]</b>	<b>[708,320,524]</b>	Reserve for retirement allowance	5,792,750
(Tangible Assets)	(5,210,867)	Reserve for directors' retirement benefits	3,984,375
Buildings accompanying facilities	3,858,582	<b>Total Liabilities</b>	<b>206,018,388</b>
Tools, furniture & fixtures	1,352,285	Net Assets	
(Intangible Assets)	(56,427)	<b>[Accumulated earnings]</b>	<b>[1,117,639,358]</b>
Software	56,427	(Other Accumulated earnings)	(1,117,639,358)
(Investments and other assets)	(703,053,230)	Earned Surplus	1,117,639,358
Investment securities	686,810,000		
Long-term prepaid expense	7,310,430		
Security deposits	8,932,800	<b>Total Net Assets</b>	<b>1,117,639,358</b>
<b>Total Assets:</b>	<b>1,323,657,746</b>	<b>Total Liabilities and Net Assets</b>	<b>1,323,657,746</b>

\* NB (for 1.BS and 2.P/L): In order to make it easier for the stakeholders to understand the financial statements prepared on the basis of the public interest corporation accounting standards in Japan, these financial statements, which have not been audited by auditors or others, have been converted to a corporate accounting base and provided as reference information.

## 2. Profit and Loss statement\*

Year ended March 31, 2019

(in JPY)

Accounts	Amounts	
<b>[Sales]</b>		
Business income	191,206,574	
Membership fees income	62,285,000	253,491,574
<b>[Cost of Sales]</b>		
Cost of Sales	226,853,500	226,853,500
<b>Gross Profit on Sales</b>		<b>26,638,074</b>
<b>[Selling and General administrative expenses]</b>		15,143,836
<b>Operating Income</b>		<b>11,494,238</b>
<b>[Non-Operating Income]</b>		
Interest income and dividend received	6,392,535	
Subsidy received	2,574,242	
Miscellaneous income	3,088,940	12,055,717
<b>[Non-Operating Expenses]</b>		
Warranty fees	188,387	188,387
<b>Ordinary Income</b>		<b>23,361,568</b>
<b>[Extra ordinary income]</b>		
Unrealized income from investment securities	23,540,000	23,540,000
<b>Profit before taxes</b>		<b>46,901,568</b>
<b>Net Income</b>		<b>46,901,568</b>

### Explanatory notes to financial statements

#### - Significant Accounting Policy -

##### (1) Basis for valuation of securities

- Marketable securities: Stated at market price as of the balance sheet date.
- Non-marketable securities: Stated at cost pursuant to the moving average method.

##### (2) Depreciation methods for fixed assets

- Buildings accompanying facilities, machinery and equipment, Tools, furniture & fixtures:  
Declining-balance method.  
For buildings accompanying facilities and structures acquired after April 1, 2016,  
Straight-line method is used.
- Buildings and Intangible properties: Straight-line method.

##### (3) Basis for reserve provision

- Reserve for retirement allowance: The reserve is stated at the estimated payment amount at the balance sheet date to be prepared for future payments to employees.
- Reserve for directors' retirement benefits: The reserve is stated at the amount which has been incurred at the balance sheet date based on the bylaws of the Association.

##### (4) Basis for revenue and expense recognition

Revenue from long-term consulting (more than 1-year contracting period) is accounted based on the completion of contract activity.

##### (5) Accounting for the consumption tax

The consumption tax is accounted for using the tax inclusion method.



# JTEC Activities Overview

## 1. Cumulative Figures

Classification	Cumulative Figures April 2000 – March 2018		Remarks
	Number of projects	Number of countries	
Consulting services -Consulting -Consigned studies, etc.	11 43	9 35	Funds from World Bank, JICA & other sources
Study and research	76	69	Subsidized projects of Govt. of Japan, and funds from JKA
International cooperation -APT projects* -Dispatch of experts -Others	13 17 10	14 14 -	* Extra-budgetary contribution from Govt. of Japan through APT projects
Training and human resources development	135	76	Funds from Govt. of Japan, APT and other sources In total 979 trainees accepted since 2000
JTEC Study meetings and conferences	21	-	Since 2007

## 2. JTEC' Projects and Countries for which Training, etc. is Offered (Cumulative Total: 122)

### ◆ Asia

Bangladesh, Bhutan, Brunei, Cambodia, China, India, Indonesia, Korea, Laos, Malaysia, Maldives, Mongolia, Myanmar, Nepal, Pakistan, Philippines, Singapore, Sri Lanka, Thailand, Timor-Leste, Vietnam

### ◆ Pacific

Cook Islands, Fiji, Kiribati, Marshall Islands, Micronesia, Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu

### ◆ Middle East

Afghanistan, Bahrain, Iran, Iraq, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Syria, UAE, Yemen

### ◆ Africa

Algeria, Angola, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, Djibouti, Congo, Egypt, Ethiopia, Gabon, Gambia, Ghana, Guinea, Kenya, Lesotho, Liberia, Libya, Madagascar, Malawi, Mali, Mauritania, Morocco, Mozambique, Namibia, Niger, Nigeria, Rwanda, Senegal, Sierra Leone, South Africa, Swaziland, Tanzania, Tunisia, Uganda, Zambia, Zimbabwe

### ◆ Europe & NIS

Czech Republic, Russia, Belgium, Bulgaria, France, Germany, Kazakhstan, Kyrgyzstan, Rumania, Russia, Tajikistan, Turkey, Turkmenistan, Ukraine, Uzbekistan

### ◆ Latin America

Argentina, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Suriname, Uruguay, Venezuela



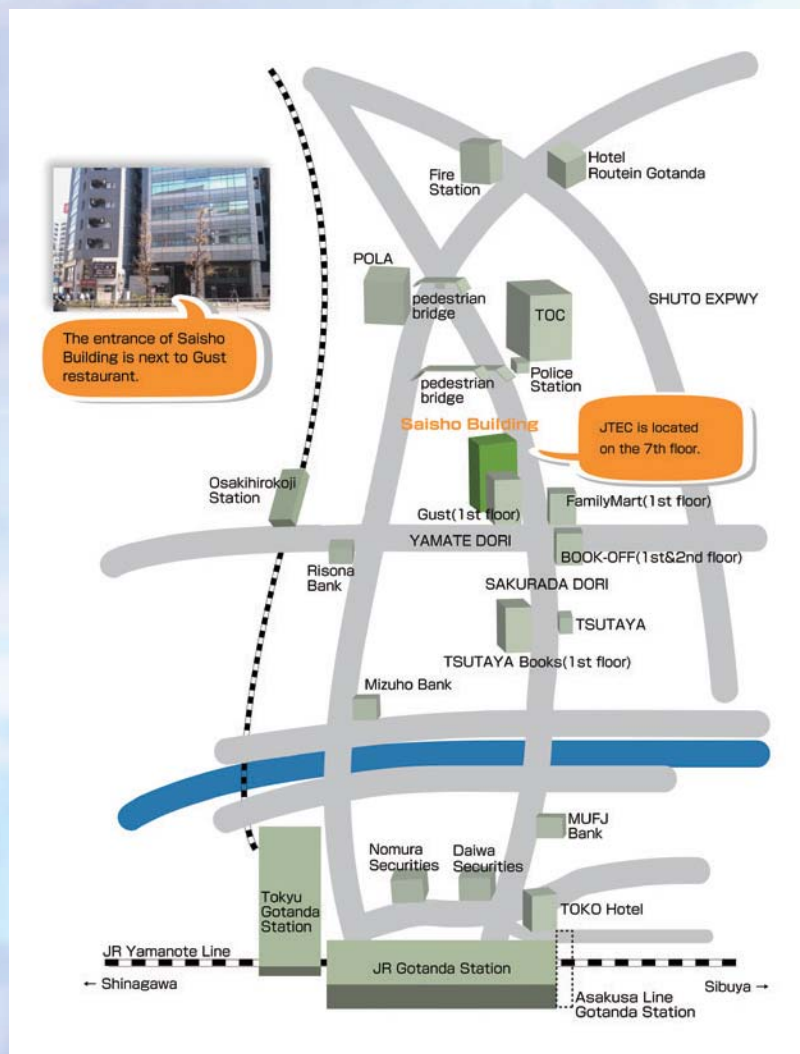
# Activities in Pictures



一般財団法人 海外通信・放送コンサルティング協力  
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