

Open Innovation Global Alliance Department

Executive Director Etsuko Nakanishi

As economic and social globalization progresses, international strategy regarding R&D on information and communications technology, and development of the results of that R&D, is being viewed as more important than ever for promoting open innovation and international development and strengthening international competitiveness from a global perspective.

The Global Alliance Department promotes international collaboration in NICT R&D activities and international development of R&D results, and by promoting open innovation with a global perspective, it also contributes to strengthening Japan's international competitiveness in the field of information and communications technology.

Promotion of international research collaboration

We have established 21 Memoranda of Understanding (MOU) with 20 foreign organizations in 12 countries and regions, including the German Research Center for

Artificial Intelligence (DFKI), the Fraunhofer Heinrich Hertz Institute, Karlsruhe Institute of Technology (Germany), and the Ho Chi Minh City Department of Information and Communication (Vietnam), and are working proactively to promote international research collaboration and interna-

tional development of NICT research results (Fig.1).

Promotion of projects in cooperation with foreign governments

We have conducted research in collaboration with Thailand's National Electronics and Computer Technology Center (NECTEC) and others on a disaster resilience dam monitoring network. This was proposed by the Thailand Ministry of Digital Economy and Society in response to an Asia-Pacific Telecommunity (APT) solicitation for international collaborative research and was adopted during FY2016 (Fig.2). Research on a landslide early warning system proposed through the Sri Lanka Telecommunication Regulation Commission was also selected in the same APT solicitation. It was performed in collaboration with the Sri Lanka Disaster Management Centre, etc., and involved a study of the feasibility of applying our disaster-resilient network technology (NerveNet).

Promotion of international joint research with the USA

With the National Science Foundation (NSF) of the USA, we decided on research topics of joint research in the network do-

main for the Japan-US Network Opportunity (JUNO2) program, and in the computational neuroscience domain for the Collaborative Research in Computational Neuroscience (CRCNS) project. We also conducted solicitation and selection of proposals for these.

Promotion of international joint research with Europe

In collaboration with the European Commission and the Ministry of Internal Affairs and Communications, we conducted the final review of the second round of International Joint Research and the first review of the third round International Joint Research, and also decided the topics and conducted solicitation and selection of proposals for the fourth round International Joint Research planned to start in FY2018.

Participation in international conferences and trade shows

In addition to participating proactively in international conferences and forums, presenting research results at events such as Global City Teams Challenge (GCTC) Expo 2017 (August, USA), we also held our own international seminars and exhibited at international trade shows, including a workshop that we held jointly with Thailand's National Electronics and Computer Technology Center (September, Thailand), and exhibits at the ASEAN IVO Forum 2017 (November, Brunei) and CSTB Telecom & Media 2018 (January, Russia).

International personnel exchange

As part of our international personnel exchange in FY2017, we accepted 26 internship students from 22 institutes in 14 countries and regions, including Indonesia, France, China, the Netherlands, the USA, Canada, Belgium, Thailand, South Korea, the UK, Malaysia, Cyprus, Cambodia, and Portugal (in order of acceptance). The trends for number of internship students accepted and number of institutes in the last five years are shown in Table 1. We also supported researchers from overseas by holding Japanese language training



Fig.2 : Demonstrating the dynamic state of the disaster resilience network technology (NerveNet) with power company staff at the dam site (Sept. 12, 2017 in Kanchanaburi Province, Thailand)

	2013	2014	2015	2016	2017
Number of institutes	14	21	20	16	22
Number of internship students	19	25	22	19	26

Table 1 : Five-year internship trends

and translating various materials into English.

Overseas Center activities

The NICT Overseas Centers gather regional information as needed based on NICT internal requests, collecting and analyzing the latest R&D information from a global perspective, and providing feedback to the relevant personnel within NICT. In FY2017, we also conducted systematic surveys of R&D trends in brain-information related technologies, interactive and adaptive machine translation, space weather forecasting, and other topics, to provide support to R&D activities.

We have also conducted our own initiatives, mainly through the Overseas Centers, toward international development of R&D results, such as exhibiting at Black Hat USA 2017 (July, USA), the Thailand National Science and Technology Fair (Au-

gust 2017, Thailand), and Digital Thailand Big Bang (September 2017, Thailand). We conduct studies based on requests from laboratories and other departments within NICT to strengthen collaboration within NICT and have also worked on disseminating information regarding NICT R&D and promoting research exchange and collaboration between NICT and overseas institutes, with efforts such as exhibiting at the Jiji Press London Top Seminar on multilingual speech translation.

Overview of MOU with Foreign Institutes

99 MOUs with 95 institutes in 30 countries and regions
<as of March 31, 2018>

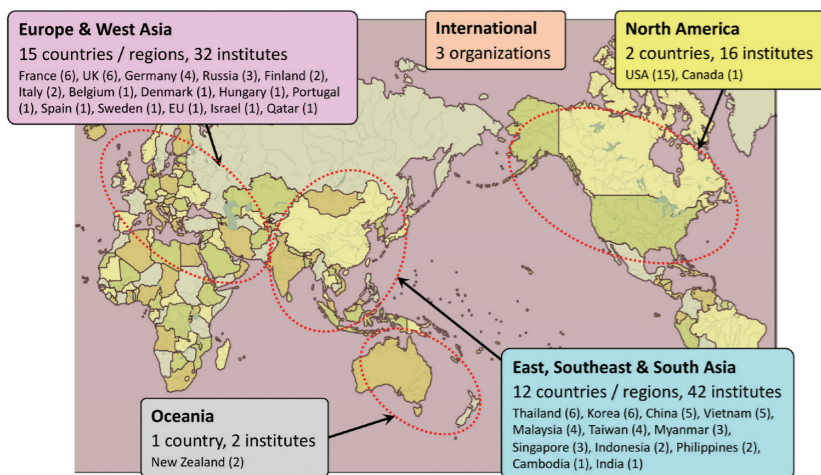


Fig.1 : Universities and research institutes with which we have a Memorandum of Understanding (MOU) (as of end of FY2017)