

Report on Trip to NIST (National Institute of Standards and Technology)

International Relations Subcommittee • Technical Subcommittee

The following members of VCCI participated in the Workshop on MRAs for Radio Communication Equipment held at NIST of the United States as reported below.

Purposes: To introduce the Kid Module Rule implemented by VCCI beginning 2005.
To obtain latest information on radio/EMC regulations of countries attending the workshop.
To establish personal connections for future with personnel of regulatory authorities of the countries attending the workshop.

Trip Period: Sunday, Oct. 2, to Monday, Oct. 10, 2005

Workshop Participants: About 170 persons from various countries, mainly personnel from test bodies. From Japan, Mr. Tomohiro Nakajima, Radio Inspector, Radio Department, Telecommunications Bureau, Ministry of Internal Affairs and Communications, six persons from VCCI and several other persons participated.

Satoshi Shibata, chairperson, VCCI International Relations Subcommittee
Haruhiko Sugiyama, member, VCCI International Relations Subcommittee
Minoru Harada, member, VCCI International Relations Subcommittee
Haruyoshi Nagasawa, VCCI
Jiro Kawano, Secretariat, VCCI Technical Committee
Yoko Inagaki, Secretariat, VCCI International Committee

Overview

For five days from October 3 through 7, 2005, an international workshop on mutual recognition agreements (MRAs) on communication equipment was held sponsored by the Federal Communication Commission (FCC), CITELE (an American government organization) and Telecommunication Certification Body Council (TCBC) in cooperation with the National Institute of Standards and Technology (NIST).

Befitting its name, the International Workshop on Mutual Recognition Agreements of Communication Equipment was participated by about 170 persons from 19 countries and areas in five continents (Australia, Barbados, Brazil, British West Indies, Canada, Dominica, Finland, Germany, Italy, Japan, Korea, Mexico, Paraguay, Singapore, Sweden, Taiwan, United Kingdom, United States of America and Venezuela). Many countries made presentations on the status of communication laws and regulations and MRAs and useful information could be obtained.

Many personal contacts could be established with personnel in regulatory authorities, test laboratories, certification bodies and other organizations of the countries of the world for use in the future as communication and information channels.

- EMC regulation information that is newer than the information collected by the VCCI International Committee was not available. Regulations of the countries and areas with a long history of regulations such as North America and Europe are well established. It will be important to build a mechanism to catch the

information of countries and areas that will start regulation from now on at appropriate timing.

- Regulations of the countries in Europe and North and Latin America seem to be moving in the direction of 1-1SDoC.
- MRAs are negotiations between countries even if countries are members of regional agreements. One obstacle in promoting MRAs is processing of individual problems while official position is for implementation of MRAs. Examples of large problems for the countries are infrastructure problems such as accreditation test laboratories and levels of test laboratories in addition to laws and ordinances.
- NIST is an American federal government organization started in 1901 with eight physicians and chemists to analyze causes for fires. NIST undertakes a wide range of activities on national standards (study of measurement, collection of reference data, compositions and tests of reference materials and measuring instruments, approval of test laboratories and standardization committee). Another important mission of NIST is research on safety in a wide range. NIST is verifying the collapse of the World Trade Center Buildings and seven adjacent buildings that occurred on Sept. 11, 2001.
- Two technological directions are studied for radio technologies, namely, technologies to enhance data throughput (MIMO: multiple input multiple output) and technologies for use in new fields such as sensor networks enabling simultaneous interconnection with many nodes rather than throughput (ZigBee).
- It was felt that VCCI was known well to the regulatory personnel of the countries of the world.

The details of agenda and presentation materials of the International Workshop on Mutual Recognition Agreements of Communication Equipment can be downloaded from the following URL:

<http://ts.nist.gov/ts/htdocs/210/gsig/mra/Workshop/agenda.htm>

Contents of the Lectures

Lecture Title: Initiation of the Kit Module Program

Lecturer: Haruyoshi Nagasawa, VCCI

The description of the kit module is omitted.

The presentation was one of the few technical presentations made during the workshop. Most likely because many of the participants in the workshop were from test laboratories, there were almost no technical pursuits in depth. During an intermission, one person commented to the writer that the program was a new approach and was of interest.

Question: Does an environmental electromagnetic field affect measurement by the kit module?

Answer: The sensitivity of the probe is low and impact of an environmental electromagnetic field needs not be taken into consideration. A shield room and other facilities are not needed.

Lecture Title: Keynote Address - Conformity Assessment Systems in Transition: A Successful Formula for Mutual Recognition Agreements

Lecturer: Julius Knapp, Deputy Chief Office of Engineering Technology FCC

Mr. Knapp explained approaches to six important measures included in FCC's medium range plan (2006 to 2011)

BROADBAND:

All American citizens should benefit from broadband communication products that are reasonably priced and

are durable and reliable and broadband communication businesses. As an approach to regulations, technological neutrality, competition, investments and reform should be accelerated so that business providers can develop and provide broadband communication products and services with a zest.

COMPETITION:

A competition in communication business inside and outside of the United States pushes the economy of America from behind. A structure that allows competition in communication business will propel a technological reform, and consumers will be able to choose communication services that are reliable and useful from among communication services that are reasonably priced.

SPECTRUM:

Efficient and effective utilization of spectra inside and outside of the United States will grow epochal and efficient communication technologies and businesses, affording them to spread rapidly.

MEDIA:

Medium regulation of a country should spread competition and diversity and should accelerate a change to delivery in the digital mode.

PUBLIC SAFETY AND HOMELAND SECURITY:

Communications in emergencies and critical times must be used by the personnel related to public safety, health, defense and emergencies and to all consumers who need them. The communication infrastructure must be one that is dependable, shared, have a room and quickly resettable.

MODERNIZE THE FCC:

FCC will seriously deal in enhancing its productivity and adaptability and in building a reformist organization and will maximize strengths of stakeholders, employees, management by efficient systems, process, resources and organization culture.

Lecture Title: Introduction to the ASEAN Telecommunication Regulators' Council Mutual Recognition Arrangement (ATRC MRA)

Lecturer: Melinda Tan, International Manager Infocomm Development Authority of Singapore (IDA)

Objectives of ATRC:

To provide opportunities to work together with communication regulatory and supervisory organizations and regulatory authorities in ASEAN based on spirit of cooperation and action.

To efficiently promote growth of communication industry and business, consumer satisfaction and growth and development of industry.

ATRC Functions

To deliberate policies, strategic problems and regulatory problems on communications for mutual benefits of communication control administration of the ASEAN countries. To identify areas in the ASEAN countries in which cooperation in communications is feasible and to carry out cooperation. To promote information exchange in the region through seminars, training and workshop activities.

Major Activities of ATRC:

- Frequency allocation
- Technology conformity process
- Standards of communication equipment Technology conformity process

Accomplishments of ATRC MRA JSC:

- Standard for broadband multimedia networks

Three agreements went into force in 2004 and 2005 among Brunei, Indonesia, Malaysia and Singapore.

Links:

On IDA's MRA, visit:

<http://www.ida.gov.sg/programmes/MRA>

On technical standards, visit:

[http://www.ida.gov.sg/Policy and Regulation/](http://www.ida.gov.sg/Policy%20and%20Regulation/)

On import and export procedures and product HS code list, visit:

<http://www.tradenet.gov.sg>

Lecture Title: Conformity Assessment Systems in Japan

Lecturer: Tomohiro Nakajima, Radio Inspector, Radio Department, Telecommunications Bureau, Ministry of Internal Affairs and Communications

A detailed account of radio administration of Japan controlled by the Ministry of Internal Affairs and Communications was presented on the following topics.

- Radio administration of Japan
- Radio station licenses and equipment certification
- Technical requirements on radio equipment
- Test procedures
- Certification procedures
- Audit of manufacturing process and control after approval
- Radio equipment certification bodies
- MRAs of Japan
- Japan-USA radio MRA

The presentation pertaining to MRAs is reported below.

Stance to MRAs: MRAs, which are considered beneficial to the consumers and industries of Japan based on analysis of cost and benefits, will be promoted actively.

Approach to MRAs on communication equipment:

- Certifying bodies can accept test reports of foreign countries even before signing of MRA in Phase 1.
- Japan already has implemented MRAs between EU and Japan, between Singapore and Japan.
- MRA between Japan and the United States is currently under negotiation.

MRA between Japan and EU:

Overview

- Signed in April 2001 and went into effect in January 2002.
- Countries affected by MRA: EU member countries
- Scope: 1. communication equipment, 2: electric appliances and apparatuses
- Related laws and regulations in EU (communication equipment field): R&TTE directive, low voltage directive, EMC directive
- Status of implementation: Fully implemented
- Two EU bodies undertake certification service

- Several Japanese groups are making preparations to be NBs

MRA between Japan and Singapore

Overview

- Signed in January 2002 and went into effect in November 2002.
- Part of economic partnership agreement (EPA) between Japan and Singapore
- Scope: 1. communication equipment, 2: electric appliances and apparatuses
- Related laws and regulations in Singapore (communication equipment field): IDA Law, Communications Law, guides for approval
- Status of implementation: Making preparations for full implementation

Communication MRA between Japan and USA

Scope: Japan and the United States mutually certify the following matters.

- Certification of radio equipment and terminal equipment
- Test reports on IT equipment*
 - * VCCI will approve test reports of IT equipment.

Related laws and regulations

- USA: FCC rules
- Japan: Radio Law and laws and ordinances related to it (Radio equipment)
- Telecommunications Business Law and laws and ordinances related to it (Terminal equipment)
- VCCI Technical Standard (IT equipment)

Current status

- FCC and Ministry of Internal Affairs and Communications have reached agreement on the core of MRA. A draft MRA is being compiled.
- The two governments have made preparations to start official negotiations.

Target dates

- MRA signing: March 2006 (End of Japanese fiscal year 2005)
- Start of operation: Second half of 2006



Snapshot of VCCI personnel at NIST venue