

VCCI DAYORI

No.150 2023.10

Contents

On the “Conference on the Future of Health and Medical Information” to Be Launched Mainly for the Fields of Medicine, Industry, and Academia

Director and Secretary General of the Japan Usability Medical Information Promote Conference (JUMP) Kenji Kojima 1

Committee Activities 6

● Council 6

● Board 6

● Steering Committee 7

● Technical Subcommittee 8

● International Relations Subcommittee 9

● Market Sampling Test Subcommittee 10

● Public Relations Subcommittee 11

● Education Subcommittee 12

● Registration Committee for Measurement Facilities 13

34th instalment

EMC-Related Recommendations Created by ITU-T SG5 (Part 1)
Masamitsu Tokuda 14

45th REDCA Business Trip Report 19

Report on the APEMC 2023 Symposium 23

Report on Participation in COMPUTEXTAIPEI 2023 30

Report on the Technical Seminar Jointly Held by BSMI,
CTCA, and VCCI 34

Report on the 2023 Rules Briefing and Technical Symposium 37

Status on FY2022 Market Sampling Tests 39

Status on FY2023 Market Sampling Tests 40

Report from the Secretariat 41

● List of Members (April 2023- June 2023) 41

● FY 2023 schedule of VCCI events and training seminars 43

● Status of Compliance Test Notifications 44

● Registration Status of Measurement and Other Facilities 45

On the “Conference on the Future of Health and Medical Information” to Be Launched Mainly for the Fields of Medicine, Industry, and Academia

Director and Secretary General of the Japan Usability
Medical Information Promote Conference (JUMP)

Kenji Kojima

The Japan Usability Medical Information Promote Conference (hereinafter, “JUMP”) was founded on May 16, 2013, and its activities are based on the following three principles. JUMP has been actively engaged in policy-recommendation and PR activities targeting the public and society at large, fulfilling its role as an organization to promote the realization of these principles.

1. Establishing a national identification number system to promote the informatization of the medical field from the perspective of the public
2. Achieving radical innovation in the national identification number system and ICT
3. Building a society that uses ICT to support the health of local-community residents

These activities are being conducted against the backdrop of Japan’s rapidly declining birthrate and aging population. It is said that the percentage of aged individuals in the population will reach 36% by 2025. As this aging progresses, the number of hospital patients, especially those with lifestyle-related diseases such as cancer and cardiovascular disease, will increase, creating many issues that will need to be addressed. These issues include growing numbers of patients who have difficulty visiting the hospital and the need for coordination between medical and caregiving services. The loss of support from a dwindling working population due to the declining birthrate is also sounding alarm bells regarding the sustainability of the medical and social security systems.

Additionally, in the face of rapid changes in recent years such as the COVID-19 pandemic, large-scale disasters, and the emergence of geopolitical risks, the stable provision of medical services is under threat.

To overcome these issues, further advancements and optimizations must be made in medical care, and medical institutions must cooperate even more closely with each other and with caregiving services to improve the adaptability and efficiency of medical service provision. Digital innovation in the medical field using appropriate applications of medical information will be essential to these improvements.

Regarding advancements in medical care, accurate assessment indicators of treatment efficacy, for example based on RWD (real-world data), could be pinpointed as RWE (real-world evidence), leading to the development of drugs and medical devices better focused on improving treatment

efficacy. RWD and RWE could also potentially be used in clinical trials. Additionally, drugs and medical devices showing high treatment efficacy could cut down on unnecessary treatments, helping alleviate pain in patients and improve the efficiency of medical care itself. This could also enhance the international competitiveness of Japan's drug and medical device industries.

Regarding coordination between medical and caregiving services, the sharing of medical information could enhance teamwork among service providers, helping to deliver optimal, efficient medical care tailored to individual patients' circumstances and environments. This could improve the sustainability of continued provision of medical services, even during disasters.

Digital innovation will also be crucial to solving other future medical issues such as addressing regional characteristics and issues based on health-insurance-claim data, using health-checkup data for prevention purposes, and using hospital work data to reduce workloads at medical facilities.

That said, achieving digital innovation will require more than simply establishing mechanisms and rules such as data-handling legislation. Progress cannot be made without open innovation that fosters cooperation across organizational lines, where matters of life or death are of concern to each of us as individuals. That includes cooperation between patients (and their families) and medical professionals, medical science and clinical practice, research and development, the medical community and the information industry, and medical facilities and regulatory authorities.

In light of these circumstances, JUMP will conduct the following kinds of activities to promote digital innovation in the medical field:

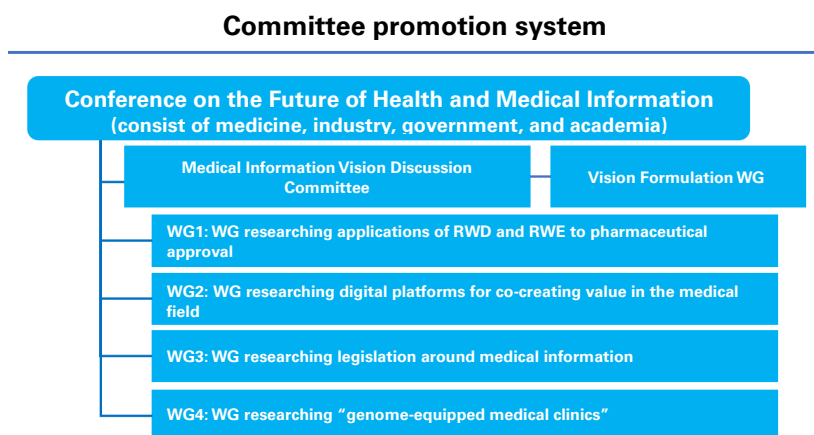
1. Create a new "Conference on the Future of Health and Medical Information" based on the theme of digital innovation in the medical field. Share the ideal vision established by the Vision WG, have the four Theme Research WGs deeply investigate themes, and promote individual innovation in the medical field as a united initiative by coordinating and aligning themes at the Conference.
2. Request the participation of a wide range of experts such as Diet members interested in the medical field, medical institutions, industry, government, academia, other relevant organizations, and the media.
3. To improve the safety, security, and quality of medical care, disseminate information on promoting the use and application of medical information, and conduct public-awareness activities with the aim of building a national consensus.
4. In addition to disseminating information through websites, hold regular symposiums to promote the building of a national consensus.

Accordingly, JUMP is creating the "Conference on the Future of Health and Medical Information" based on the dramatic changes in today's socioeconomic environment and their implications for Japan's future, which will be launched mainly for the medical field, industry, and academia. JUMP will also call for participation from numerous Diet members and officials of relevant government ministries in JUMP's activities.

At this “Conference on the Future of Health and Medical Information”, we will clarify what innovations will be needed from the future-oriented perspective of medical facilities. To work rapidly toward our goals using the power of innovation in digital technology, we will partner with a variety of stakeholders in government, medicine, industry, and academia to conduct initiatives from the following perspectives:

- (i) Establishing legislation for more comprehensive personal protection in a society prone to advancements in information use and application
- (ii) Developing pharmaceuticals and medical devices, disseminating new treatment methods, creating real-world evidence (scientific knowledge) needed for the safe, secure provision of medical care, for example from electronic medical records, and promoting widespread application of that real-world evidence
- (iii) Reducing workloads at medical facilities through overall optimization using the latest digital technologies, improving the accuracy of post-marketing surveillance and work efficiency, implementing work-style reforms for doctors, and promoting better management of medical institutions
- (iv) Promoting the building of a network connecting new medical services and medical research in genomic medicine

Specifically, JUMP has established the Medical Information Vision Discussion Committee and four Theme Research WGs under the Conference on the Future of Health and Medical Information. Each of these organizations will engage in relevant activities going forward.



The Medical Information Vision Discussion Committee will compile recommended “ideal visions for social implementation of medical DX” for Japan both five years and ten years in the future, based on lessons learned from the COVID-19 pandemic. This will consist of proposals for both Japanese and global medical innovations.

Specific overview of the activities of the four Theme Research WGs:

1. WG1: WG researching applications of RWD and RWE to pharmaceutical approval

Speeding up the development and approval of new drugs and treatment methods using data such as electronic medical records, and expanding treatment opportunities through regulatory science

2. WG2: WG researching digital platforms for co-creating value in the medical field

Creating a medical database based on data such as electronic medical records, reducing on-site workloads, for example in the creation of registry records and post-market surveillance, and promoting the safe, secure, and stable provision of medical care

3. WG3: WG researching legislation around medical information

Moving from “entry regulations” that depend on personal consent to introducing “exit regulations” that employ medical processes and re-engineering, for example the establishing of third-party institutions, and achieving integrated reform through various legislation

4. WG4: WG researching “genome-equipped medical clinics”

Building a network connecting new medical services and medical research in genomic medicine:

Diseases are caused by a combination of genetic and environmental factors. Providing medical care without considering genome information (hereditary factors) is no longer an option.

Preparation will be required to transition to more appropriate clinical trials by performing detailed stratification based on genome information. To that end, we must build a network connecting new medical services and medical research in genomic medicine.

We encourage as many of you as possible to participate in and support JUMP’s activities, which we hope will help to sustain these activities into the future.



Kenji Kojima

Director and Secretary General of the Japan Usability Medical Information Promote Conference (JUMP)
Director and Secretary General of the Global RWE Creation Platform Conference (GRWE)

Representative Director of Digital Communities, Inc.

1980: Entered the Japan Electronic Industry Development Association (currently the Japan Electronics and Information Technology Industries Association)

1997: Participated in the Discussion Committee for the 21st-Century Mie Information Society Promotion Plan in Mie Prefecture

2005: Founded Digital Communities, Inc.

2013: Founded the Japan Usability Medical Information Promote Conference (JUMP)

2022: Founded the Global RWE Creation Platform Conference (GRWE)

Major publications:

“Digital Communities: The Key to Reviving the Countryside” TBS Britannica (co-authored)

“The Citizen-Led Transformation of Local Government: E-Government 2.0”

Gyosei Corporation (co-authored)

“My Number Is Coming: Practical Impacts of the National Identification Number System and Measures to Address Them” Nikkei Business Publications, Inc. (co-authored)

“My Number Is Coming, Revised: Practical Impacts of the National Identification Number System and Measures to Address Them” Nikkei Business Publications, Inc. (co-authored)

“The New Social Infrastructure: A Complete Guide to the My Number System, From Compliance Tips to Business and Medical Applications” Nikkei Business Publications, Inc. (co-authored)

Committee Activities

● Council

Date	June 27, 2023	
Agenda items	<ul style="list-style-type: none"> ● Agenda item 1 ● Agenda item 2 ● Agenda item 3 	<ul style="list-style-type: none"> FY 2022 business report FY 2022 budget (draft) Select a director and auditor
Decisions and reported items	<ul style="list-style-type: none"> ● Agenda item 1 ● Agenda item 2 ● Agenda item 3 ● Reported item 1 ● Reported item 2 	<ul style="list-style-type: none"> Approved Approved Approved FY 2023 business plan FY 2023 budget

● Board

Date	June 12 and June 27, 2023	
Agenda items	<ul style="list-style-type: none"> ● Agenda item 1 ● Agenda item 2 ● Agenda item 3 ● Agenda item 4 ● Agenda item 5 	<ul style="list-style-type: none"> FY 2022 business report (draft) FY 2022 settlement of accounts (draft) Selection of the members of the Registration Committee for Measurement Facilities Calling of the ordinary board meeting Select a representative of the board of directors, and others
Decisions and reported items	<ul style="list-style-type: none"> ● Agenda item 1 ● Agenda item 2 ● Agenda item 3 ● Agenda item 4 ● Agenda item 5 	<ul style="list-style-type: none"> Approved Approved Approved Approved Approved

●Steering Committee

Date	May 24 and June 21, 2023	
Agenda items	<ul style="list-style-type: none"> ● Agenda item 1 ● Agenda item 2 	<p>Topics of the 51st board meeting</p> <p>Method of selecting the Chair of the Steering Committee</p>
Decisions and reported items	<ul style="list-style-type: none"> ● Agenda item 1 ● Agenda item 2 ● Reported item 1 ● Reported item 2 ● Reported item 3 ● Reported item 4 ● Reported item 5 ● Reported item 6 	<p>Approved</p> <p>Approved</p> <p>Activities of subcommittees (Technical, International Relations, Market Sampling Test, Public Relations, and Education) in the period from April to June</p> <p>Secretariat work (member entry and withdrawal trends, the number of compliance verification reports, income and expenditure records, etc.)</p> <p>REDCA Business Trip Report</p> <p>Report on the APEMC 2023 Symposium</p> <p>On-demand distribution of the 2023 Rules Briefing and Technical Symposium</p> <p>Report on participation in COMPUTEXTAIPEI 2023 and on the technical seminar jointly held by BSMI, CTCA, and VCCI (quick report)</p>

● Technical Subcommittee

Date	May 9 and July 12, 2023	
Agenda items	<ul style="list-style-type: none"> ● Agenda item 1 ● Agenda item 2 ● Agenda item 3 ● Agenda item 4 ● Agenda item 5 ● Agenda item 6 	<p>Report on Technical Subcommittee's activity results for FY 2022</p> <p>Allowable values and measurement methods for height scans above 1 GHz</p> <p>Assessment of whether the voltage-to-current conversion ratio and EUT impedance affect transformer-type AANs during measurement of conducted emissions</p> <p>Discussing evaluation methods for test sites (18 GHz to 40 GHz)</p> <p>Activities for promoting standardization of mains cable termination conditions</p> <p>On the Technical Subcommittee's planned activities for FY 2023</p>
Continuing agenda items	<ul style="list-style-type: none"> ● Agenda item 	2, 3, 4, 5, and 6
Decisions and reported items	<ul style="list-style-type: none"> ● Agenda item 1 ● Reported item 1 ● Reported item 2 ● Reported item 3 ● Reported item 4 	<p>Confirmation of the Technical Subcommittee's past activities for FY 2022</p> <p>Report on participation and presentation of submitted papers at the 2023 Joint Asia-Pacific Symposium on Electromagnetic Compatibility (APEMC) and International Conference on Electromagnetic Interference & Compatibility (INCEMIC) APEMC (held from May 22 to 25)</p> <p>On-demand distribution of the 2023 rules briefing and technical symposium for overseas members (to 26 viewers from 8 countries and regions from June 26 to 30)</p> <p>Report on the technical seminar jointly held by BSMI, CTCA, and VCCI (on June 2, attended by about 100 visitors)</p> <p>Report on participation by CISPR experts in MT7, MT8, and JTF at the CISPR international conference (Madrid) (held from June 28 to 30)</p>

●International Relations Subcommittee

Date	April 12, May 10, and June 14, 2023	
Agenda items	<ul style="list-style-type: none"> ● Agenda item 1 ● Agenda item 2 ● Agenda item 3 	<p>Survey of trends in EMC regulations</p> <p>Preparation for posting the July survey of trends in world EMC regulations</p> <p>Preparation for the FY 2023 International Forum</p>
Continuing agenda items	● Agenda item	1, 2, and 3
Decisions and reported items	<ul style="list-style-type: none"> ● Reported item 1 ● Reported item 2 	<p>The website was updated with surveys of trends in world EMC regulations on April 12 and May 10.</p> <p>On June 3, speaker responses to participants' questions at the on-demand VCCI International Forum held in March were posted on the website.</p>

●Market Sampling Test Subcommittee

Date	April 13, May 11, and June 8, 2023	
Agenda items	<ul style="list-style-type: none"> ● Agenda item 1 ● Agenda item 2 ● Agenda item 3 ● Agenda item 4 ● Agenda item 5 ● Agenda item 6 	<p>Summary of the FY 2022 market sampling test report</p> <p>Summary of the FY 2022 document inspection report</p> <p>Report on the display of the VCCI mark for FY 2022 and handling</p> <p>Policies on the FY 2023 market sampling test</p> <p>Status of the FY 2023 sampling test and document inspections</p> <p>Notes on performing sampling tests for commissioned testing laboratories</p>
Decisions and reported items	<ul style="list-style-type: none"> ● Agenda item 1 ● Agenda item 2 ● Agenda item 3 ● Agenda item 4 ● Agenda item 5 ● Agenda item 6 	<p>The summary of the FY 2022 market sampling test was reported. Sampling tests were completed for a total of 100 products, and judgments had been finalized for 99 products as of March 31. 98 products were determined as “passed” and one product was judged as “failed”. A report on a further survey of one product that failed the first round of judgments will be given in FY 2023.</p> <p>43 products were selected for the FY 2022 document inspections. Aside from the inspections that were canceled, 39 were completed, and the remaining inspection was found to have inappropriate test conditions. The relevant VCCI member was requested to perform an additional check for this remaining inspection. The results will be reported in FY 2023.</p> <p>The results of the secondary survey on the use of VCCI marks were reported.</p> <p>FY 2023 policies were discussed, and key fields were confirmed to have been adopted from FY 2022.</p> <p>Up to 17 products are currently being selected for sampling tests. Up to 12 products have been selected for document inspections. After a preliminary screening, inspections were completed for 6 products.</p> <p>Additions to some of the notes on performing sampling tests were reported, and approved to be sent to commissioned testing laboratories.</p>

●Public Relations Subcommittee

Date	May 12 and June 16, 2023	
Agenda items	<ul style="list-style-type: none"> ● Agenda item 1 ● Agenda item 2 ● Agenda item 3 ● Agenda item 4 	<p>COMPUTEXTAIPEI 2023 Vision for regional cities TECHNO-FRONTIER 2023 CEATEC 2023</p>
Continuing agenda items	<ul style="list-style-type: none"> ● Agenda item 4 	
Decisions and reported items	<ul style="list-style-type: none"> ● Reported item 1 ● Reported item 2 ● Agenda item 3 	<p>A report was made on participation in COMPUTEXTAIPEI 2023 (see page XX)</p> <p>At Shizuoka ICA VISION held in April, and Sapporo Ekimae Vision held in May, the VCCI Council reported that it broadcast a 30-second PR video for a period of one month at each event. The PR video is also planned to be broadcast in from June 19th to 25th at Machikuru Vision in Sendai.</p> <p>The booth design and distribution of novelty gifts at TECHNO-FRONTIER were discussed. Details are planned to be decided at the subcommittee's July meeting.</p>

●Education Subcommittee

Date	April 19 and June 14, 2023
Agenda items	<ul style="list-style-type: none"> ● Agenda item 1 Status of preparations for FY 2023 education and training ● Agenda item 2 Confirmation of task force progress in FY 2023 ● Agenda item 3 Results of FY 2023 education and training
Continuing agenda items	<ul style="list-style-type: none"> ● Agenda item 2 and 3
Decisions and reported items	<ul style="list-style-type: none"> ● Agenda item 1 - Four lectures were established to be held in FY 2023. <ul style="list-style-type: none"> (i) The basic technique of EMI measurement [planned to be held in October in the first half of the fiscal year] (ii) The basic of electromagnetic waves, EMI measurement technique (planned for revision) [planned to be held in November and December] (iii) The level up of the EMI measurement technique [planned to be held in January 2024] (iv) EMI measurement instrumentation uncertainty (MIU) (planned for revision) [planned to be held in February 2024] ● Agenda item 2 - Promotion of three task forces (TFs) and their introduction in lectures <ul style="list-style-type: none"> TF 1: Discussing the incorporation of “EMI measurement technique above 1 GHz” education and training into “The basic of electromagnetic waves, EMI measurement technique below 1 GHz” education and training TF 2: Discussing the enhancement of calculation exercises and explanations of “EMI measurement instrumentation uncertainty (MIU)” TF 3: Discussing the implementation of comprehension checks in education and training ● Agenda item 3 - “The basic technique of EMI measurement” was held online (via livestream) on May 12 for 14 attendees, who received attendance certificates.

●Registration Committee for Measurement Facilities

Date	April 17, 2023
Agenda items	● Reviewed the results of deliberations by the Measurement Facility Examination WG.
Decisions	<p>Conformity certified (including cases certified with qualification comments after checking of supplementary papers): 17 companies</p> <p>Radiated emission measurement facilities below 1 GHz: 10</p> <p>AC-mains-ports-conducted emission measurement facilities: 11</p> <p>Wired-telecommunication-port-conducted emission measurement facilities: 7</p> <p>Radiated emission measurement facilities above 1 GHz: 8</p> <p>Applications returned with comments: None</p> <p>Applications carried over to the next meeting: None</p>
Date	May 29, 2023
Agenda items	● Reviewed the results of deliberations by the Measurement Facility Examination WG.
Decisions	<p>Conformity certified (including cases certified with qualification comments after checking of supplementary papers): 19 companies</p> <p>Radiated emission measurement facilities below 1 GHz: 10</p> <p>AC-mains-ports-conducted emission measurement facilities: 8</p> <p>Wired-telecommunication-port-conducted emission measurement facilities: 10</p> <p>Radiated emission measurement facilities above 1 GHz: 8</p> <p>Applications returned with comments: None</p> <p>Applications carried over to the next meeting: None</p>
Date	June 26, 2023
Agenda items	● Reviewed the results of deliberations by the Measurement Facility Examination WG.
Decisions	<p>Conformity certified (including cases certified with qualification comments after checking of supplementary papers): 21 companies</p> <p>Radiated emission measurement facilities below 1 GHz: 14</p> <p>AC-mains-ports-conducted emission measurement facilities: 8</p> <p>Wired-telecommunication-port-conducted emission measurement facilities: 10</p> <p>Radiated emission measurement facilities above 1 GHz: 13</p> <p>Applications returned with comments: None</p> <p>Applications carried over to the next meeting: None</p>

EMC-Related Recommendations Created by ITU-T SG5 (Part 1)

Masamitsu Tokuda

1. Foreword

ITU-T (Telecommunication Standardization Sector) is creating recommendations for electronic telecommunication installations. ITU-T is a permanent institution of the ITU (International Telecommunication Union), an organization of the United Nations. WP1 (Working Party) of the SG5 (electromagnetic fields, the environment, addressing climate change, sustainable digitalization, and the circular economy) is creating EMC-related K-series recommendations^{1), 2)}. About 140 K-series recommendations have been created at SG5, and can be classified into the following five categories:

1. Methods of installing communication equipment in a building
2. Overvoltage resistibility in communication equipment and characteristics of overvoltage-resistibility components
3. Lightning protection and overvoltage and overcurrent measures for telecommunication installations and systems
4. EMC in communication and network devices
5. Impacts on communication by particle radiation and system devices
6. Exposure of the human body to electromagnetic fields

Of the preceding categories, this document shows recommendations relating to categories 1 to 3.

2. Methods of installing communication equipment in a building

Table 1 shows recommendations relating to methods of installing communication equipment in a building.

Table 1 ITU-T SG5 recommendations relating to methods of installing communication equipment in a building (as of June 2023)

Recommendation number	Latest edition	Recommendation name
K.27	03/2015	Bonding configurations and earthing in a telecommunication building
K.35	12/2020	Bonding configurations and earthing at remote electronic sites
K.73	11/2019	Shielding and bonding for cables between buildings
K.104	03/2015	Method for identifying the transfer potential of EPR from HV and/or MV to the earthing system or neutral of LV network
K.107	11/2015	Method for determining the impedance to earth of earthing systems

3. Overvoltage resistibility in communication equipment and characteristics of overvoltage-resistibility components

Table 2 shows recommendations relating to specifications and testing methods for overvoltage and overcurrent resistibility in communication equipment and characteristics of overvoltage-resistibility components.

Table 2 ITU-T SG5 recommendations relating to overvoltage resistibility in communication equipment and characteristics of overvoltage-resistibility components (as of June 2023)

Recommendation number	Latest edition	Recommendation name
K.12	05/2010	Characteristics of gas discharge tubes for the protection of telecommunications installations
K.20	11/2022	Resistibility of telecommunication equipment installed in a telecommunication centre to overvoltages and overcurrents
K.21	08/2022	Resistibility of telecommunication equipment installed in customer premises to overvoltages and overcurrents
K.28	05/2012	Parameters of thyristor-based surge protective devices for the protection of telecommunication installations
K.44	10/2019	Resistibility tests for telecommunication equipment exposed to overvoltages and overcurrents- Basic Recommendation
K.45	11/2022	Resistibility of telecommunication equipment installed in the access and trunk networks to overvoltages and overcurrents
K.50	01/2018	Safe limits for operating voltages and currents of telecommunication systems powered over the network
K.51	06/2016	Safety criteria for telecommunication equipment
K.64	06/2020	Safe working practices for outside equipment installed in particular environments
K.69	10/2006	Maintenance of protective measures
K.75	06/2016	Classification of interface for application of standards on resistibility and safety of telecommunication equipment
K.77	07/2019	Characteristics of metal oxide varistors for the protection of telecommunication installations
K.82	05/2010	Characteristics and ratings of solid-state, self-restoring overcurrent protectors for the protection of telecommunications installations
K.95	06/2016	Surge parameters of isolating transformers used in telecommunication devices and equipment
K.96	02/2014	Surge protective components: Overview of surge mitigation functions and technologies
K.98	08/2014	Overvoltage protection guide for telecommunication equipment installed in customer premises
K.99	07/2017	Surge protective component application guide- Gas discharge tubes
K.102	08/2014	Parameters of fixed-voltage thyristor overvoltage protector components used for the protection of telecommunication installations
K.103	03/2015	Surge protective component application guide- Silicon PN junction components

K.117	12/2016	Primary protector parameters for the surge protection of equipment Ethernet ports
K.118	12/2016	Requirements for lightning protection of fibre to the distribution point equipment
K.126	07/2017	Surge protective component application guide- High frequency signal isolation transformers
K.128	01/2018	Surge protective component application guide- metal oxide varistor (MOV) components
K.129	01/2018	Characteristics and ratings of silicon PN junction voltage clamping components used for the protection of telecommunication installations
K.135	11/2018	Technical parameters for residual current operated protective devices with automatic reclosing feature for telecom applications
K.140	07/2019	Surge protective component application guide – Fuses
K.143	11/2019	Guidance on safety relating to the use of surge protective devices and surge protective components in telecommunication terminal equipment
K.144	11/2019	Surge protective component application guide- Self-restoring thermally activated overcurrent protectors
K.147	01/2022	Protection of networked information technology equipment
K.148	12/2020	Multiservice surge protective device application guide
K.151	01/2022	Electrical safety and lightning protection of medium voltage input and up to ± 400 VDC output power system in ICT data centres and telecommunication centres

4. Lightning protection and overvoltage and overcurrent measures for telecommunication installations and systems

Table 3 shows recommendations relating to overvoltage and overcurrent measures for telecommunication installations and systems such as communication center buildings and radio base stations.

Table 3 ITU-T SG5 recommendations relating to overvoltage and overcurrent measures for telecommunication installations and systems (as of June 2023)

Recommendation number	Latest edition	Recommendation name
K.6	11/1988	Precautions at crossings
K.8	11/1988	Separation in the soil between telecommunication cables and earthing system of power facilities
K.9	11/1988	Protection of telecommunication staff and plant against a large earth potential due to a neighbouring electric traction line
K.13	11/1988	Induced voltages in cables with plastic-insulated conductors
K.14	11/1988	Provision of a metallic screen in plastic-sheathed cables
K.19	11/1988	Joint use of trenches and tunnels for telecommunication and power cables
K.26	04/2008	Protection of telecommunication lines against harmful effects from electric power and electrified railway lines
K.39	11/2019	Risk assessment of damages to telecommunication sites due to lightning discharges

K.40	11/2019	Protection against lightning electromagnetic impulses in telecommunication centres
K.46	05/2012	Protection of telecommunication lines using metallic symmetric conductors against lightning-induced surges
K.47	05/2012	Protection of telecommunication lines against direct lightning flashes
K.56	05/2021	Protection of radio base stations against lightning discharges
K.57	06/2016	Protection measures for radio base stations sited on power line towers
K.58	02/2014	EMC, resistibility and safety requirements and guidance for determining responsibility under co-located information and communication technology installations
K.59	12/2015	Electromagnetic compatibility, resistibility and safety requirements and procedures for connection to unbundled cables
K.66	11/2019	Protection of customer premises from overvoltages
K.67	12/2015	Expected surges on telecommunications and signalling networks due to lightning
K.68	04/2008	Operator responsibilities in the management of electromagnetic interference by power systems on telecommunication systems
K.71	06/2011	Protection of customer antenna installations
K.72	06/2011	Protection of telecommunication lines using metallic conductors against lightning- Risk management
K.74	03/2015	Electromagnetic compatibility, resistibility and safety requirements for home network devices
K.85	11/2011	Requirements for the mitigation of lightning effects on home networks installed in customer premises
K.89	05/2012	Protection of persons inside a structure using telecommunication services provided by metallic conductors against lightning- Risk management
K.97	02/2014	Lightning protection of distributed base stations
K.101	12/2014	Shielding factors for lightning protection
K.105	03/2015	Lightning protection of photovoltaic power supply systems feeding radio base stations
K.108	11/2015	Joint use of poles by telecommunication and solidly earthed power lines
K.109	11/2015	Installation of telecommunication equipment on utility poles
K.110	12/2015	Lightning protection of the dedicated transformer for radio base stations
K.111	11/2015	Protection of surrounding structures of telecommunication towers against lightning
K.112	05/2021	Lightning protection, earthing and bonding: Practical procedures for radio base stations
K.119	12/2016	Conformance assessment of radio base stations regarding lightning protection and earthing
K.120	12/2016	Lightning protection and earthing of a miniature base station
K.125	07/2017	Dangerous effects and protective measures against electromagnetic disturbances when an Internet data centre is co-sited with a high-voltage substation
K.134	11/2018	Protection of small-size telecommunication installations with poor earthing conditions
K.142	11/2019	Lightning protection and earthing of video surveillance systems

Acknowledgement

Of the five categories relating to ITU-T SG5's K-series recommendations, "2. Overvoltage resistibility in communication equipment and characteristics of overvoltage-resistibility components" and "3. Lightning protection and overvoltage and overcurrent measures for telecommunication installations and systems" reference a document1), "Handbook on EMC Designs and Measurement Tests (Kagakujyoho Shuppan Co)", in their content. However, the referenced information has been extensively updated based on information provided to us by Mr. Mitsuo Hattori of NTT Advanced Technology Corporation. We would like to express our deepest gratitude to Mr. Hattori, who was Chair of ITU-T SG5WP2 in the 2001 to 2016 sessions.

[References]

- 1) Masamitsu Tokuda: "Handbook on EMC Designs and Measurement Tests", Kagakujyoho Shuppan Co., Ltd., pp. 157-161, July 2021
- 2) Masamitsu Tokuda: "History of ITU-T/SG5 (Environment and Climate Change)", VCCI Dayori, No.124, pp. 9-11, April 2017



Masamitsu Tokuda

- 1967 Graduated from Electronics Engineering Department of Hokkaido University
 - 1969 Completed Electronics Engineering, Faculty of Engineering, Graduate School of Hokkaido University
Joined NTT, assigned to the Electrical Communications Laboratories
 - 1987 Leader of EMC Study Group, NTT Telecommunication Networks Laboratories
 - 1996 Professor of Electric Engineering Department, Kyushu Institute of Technology
 - 2001 Professor of Electronic Communication Department, Musashi Engineering University
 - 2010 Professor emeritus of Tokyo City University
Visiting co-researcher of the Graduate School of Frontier Sciences, The University of Tokyo
- Major prizes received
- 1986 Merit award – IEICE
(on the design theory and evaluation method for optical fiber cables)
 - 1997 Information communication merit award by MPT
(on EMC technology development)
 - 2003 Industrial standard merit award by the minister of METI
 - 2004 IEICE fellow
 - 2007 Promoted to IEEE fellow

45th REDCA Business Trip Report

Steering Committee

- Date and time: May 11, 2023 (Thu) 9:00- 17:00, May 12, 2023 (Fri) 9:00- 12:00
- Venue: The President Brussels Hotel, Belgium
- Attendees: About 70 attendees from Europe, the US, Canada, and Japan (members and observers), attending both in person and online (about 220 attendees in total)
Chairman: Mr. Holger Bentje, Secretariat: Mr. Nick Hooper
- Participants: Yasuhiro Usui, Chair of the Steering Committee (Fujitsu Limited)
Akira Oda (Executive Director of VCCI Council)
- Reference: REDCA members (as of May 1, 2023): 305 organizations (regular members and observers)
Regular members: 297 organizations (of which 18 were Japanese members)
Observers: 8 organizations (of which 2 were from Japan (such as the Ministry of Internal Affairs and Communications))

1. Introduction

REDCA (The Radio Equipment Directive Compliance Association) was formed based on the requirements of Radio Equipment Directive 2014/53/EU, and holds biannual general meetings for members on radio equipment compliance with EEA (European Economic Area) regulations and technical standards. These meetings also address compliance in countries that have signed mutual recognition agreements such as EU countries, the US, Canada, Japan, New Zealand, and Australia.

The VCCI Council is a member of REDCA, and stays abreast of the latest trends in European regulations and market monitoring status. VCCI has been participating in these conferences since 2011 with the aim of spreading the latest news to VCCI members.

2. Overview of operations

A report on the operation of REDCA states that its finances are sound, and that its membership fee is reasonable. The number of members is shown in the preceding section.

3. Reports from each organization

3.1 Update from the EU Commission

- 41 harmonized standards have been published in the OJEU from 2021 to 2022.
- The basic idea is that it is desirable for each requirement to have one test method. Currently, ETSI (European Telecommunications Standards Institute) is reviewing the three test methods

“open site”, “semi-anechoic chamber”, and “fully anechoic chamber”

- Among the Radio Equipment Directive’s target equipment, internet-connectable radio equipment must satisfy the cybersecurity requirements starting from August 1, 2024 (planned).
- Common chargers that can be used by the Radio Equipment Directive’s target equipment are required to use USB Type-C. This will be compulsory for equipment other than laptops starting from December 28, 2024. For laptops, this will be compulsory starting from April 28, 2026.

Relevant standards: EN IEC 62680-1-2:2022, EN IEC 62680-1-3:2022

- An update to the RED guide is planned for 2023.

3.2 Report on CISPR activities

- A face-to-face CISPR plenary meeting will not be held in 2023.
- 15 main items are being considered for CISPR 32 Ed.3.

(Examples include AC mains cable termination, WPT, and in situ.)

3.3 Update on Japan Regulation

- The Electromagnetic Environment Division of the Ministry of Internal Affairs and Communications explained the latest news on Japan’s radio-equipment regulations.
- The Manual for Technical Regulations Conformity Certification System for Specified Radio Equipment based on the Radio Act was revised (spring 2023 edition).

If the radio emissions of the equipment to be registered are even partially non-compliant with Japanese technical standards, that equipment cannot receive a Construction Design Certification. Examples include cases where W53 and W56 are also supported despite the registration being for W52 only.

- Examples of violations in radio equipment
- Certified for the 2.4 GHz band only, but also supports the 5 GHz band
- Does not display a certification number on the Technical Conformity Mark
- A presentation was given on the “MIC MRA Workshop 2023” held in Japan in March 2023.

3.4 Report ADCO (Administrative Co-operation Working Group) RED chairman

- The fact that the required standard for human exposure, EN 50566:2017, references EMF Directive 2013/35/EU (minimum health and safety requirements on the exposure of workers to risks from physical factors (electromagnetic fields)) is being discussed.

- Multimode radio equipment

Radio equipment that functions in different modes, such as a different frequency, transmission output, or channel access protocol, can be operated only in the modes permitted in the region where the equipment is used. Meanwhile, risks must be analyzed and safeguards set up in case of unauthorized operation in prohibited modes.

- In FY 2022, 11,313 products were inspected, of which 6,967 had at least one violation (a failure rate of 61.6%).
- Currently, discussions are underway regarding the handling of second-hand (repaired) goods, for

example on measurement uncertainty and standardized limits.

3.5 CEN/CENELEC RED Standardization Request

- The European Commission Delegated Regulation 2022/30 was issued on January 12, 2022, and standardization work was commenced by CENELEC. At the time, the regulation was expected to come into effect in August 2024, but as of now, this might not happen until August 2025. When the standard is in effect, the following conditions will need to be satisfied.

The scope of cybersecurity according to the European Radio Equipment Directive Article 3(3):

- Internet-connected radio equipment must not cause damage to networks or network functions, must not abuse network resources, and must not cause service degradation outside tolerable limits.
- Internet-connected radio equipment must have built-in measures to ensure the protection of users and subscribers' personal information and privacy.
- Internet-connected radio equipment must support specified functions protecting against unauthorized acts.

3.6 Update on USTEL MRA Activities

- The latest versions have been released for the following documents:
 - "NIST Instructions for Adding ERs and Product Categories", 2023/2/6
 - "NIST Mandatory and Optional content for the NB ISO/IEC 17065 Scope of Accreditation", 2023/1/30Cf. ISO/IEC 17065 (Conformity assessment- Requirements for bodies certifying products, processes and services)
- The US has 19 RED NBs (Notified Bodies), which issued about 5,000 type certifications in 2022.
- The US will develop a cybersecurity label for IoT products.
"2023 National Cybersecurity Strategy", White House, 2023/3/2



Example from Singapore

3.7 Summary TCB Council updates and associated topics

- ISED, FCC

A test report contained the following errors:

- All variations of hardware were supposed to be tested, but were not.
- Photos (internal and external) of all application models were needed, but some were missing.
- Declaration that equipment was "identical" were not always actually correct.

4. Next conference

The next conference is planned to be held in the week of November 6, 2023.

Report on the APEMC 2023 Symposium

Technical Subcommittee

The following is a report on our participation in APEMC 2023:

- Venue: Sheraton-Grand Bangalore Hotel at Brigade Gateway, India
- Trip duration (participation in the symposium): May 23 (Tue) to 25 (Thu), 2023
- Academic conference period: May 22 (Mon) to 25 (Thu), 2023
- Participants: Shinichi Okuyama, member of the Technical Subcommittee (NEC Platforms, Ltd.)
Hirohito Shigemitsu (Secretariat of the VCCI Council)

1. Introduction

The symposium was held face-to-face format, just like last year (2022 APEMC BEIJING).

This time, we took part in the symposium to make an oral presentation of a paper submitted by the VCCI Council and to collect information from technical sessions. There were 152 participants, and the symposium consisted of 6 workshop sessions, 5 plenary talks, 13 invited talks, 69 presented papers, 1 keynote talk, and 1 panel discussion.

93 papers were submitted; 50.2% from India, 14.5% from China, 9.4% from the US, and 3.7% from Japan. A paper submitted by the VCCI Council was presented at "Session M3" in the afternoon of May 23 (Tue).

2. Presentation of paper

Session: Session M3

- Title: Investigation of Influence on Radiated Emission Measurement by Unbalanced VHF-LISN
- Authors: Shinichi Okuyama (VCCI Council / NEC Platforms, Ltd.), Nobuo Kuwabara (Kyushu Institute of Technology), Kunihiro Osabe (VCCI Council), Toshiki Shimasaki (VCCI Council) Hidenori Muramatsu (VCCI Council)
- Presenter: Mr. Shinichi Okuyama (VCCI Council / NEC Platforms, Ltd.)
- Overview: The current standards do not specify termination conditions for power outlets supplying power to EUTs. For this reason, emission levels radiated from mains cables vary across testing laboratories measuring radiated emissions, causing poor reproducibility. VHF-LISN has been proposed as a solution to this problem. There are currently two types of VHF-LISN, balanced and unbalanced. Of these two types, unbalanced VHF-LISN was investigated using actual measurements to check the effect of the direction in which to connect the mains plug. That is, a deviation was found between measurement results when the mains plug was connected to a three-wire mains cable in one direction versus

the opposite direction (switching between L and N). In these tests, a maximum deviation of 11 dB was observed. This result showed that when using unbalanced VHF-LISN, the direction in which to connect the mains plug would need to be changed and two measurements would be required to observe the maximum emission level.

- Q&A

Q: You explained that four types of termination devices are used in past round-robin tests. Are these different from the currently proposed devices?

A: Past round-robin tests used two types of devices based on balanced VHF-LISN, CMAD, and CDNE. While the currently proposed balanced VHF-LISN has the same specifications as those used in round-robin tests, the new proposal is to also use unbalanced VHF-LISN.

- Impressions: The session's chair commented that they believe this is a good initiative, and recommend publishing technical documents so that this device can be widely used. Additionally, multiple attendees asked for further details after the presentation, showing great interest in VHF-LISN. An additional explanation at the Q&A session stated that rules for multiple mains termination devices were planned for CISPR 16-1-4, and that the inclusion of guidance on how to use each termination device in CISPR 16-2-3 was being discussed. Draft revisions are being considered for CISPR 16-1-4 and CISPR 16-2-3 as CDV and CD documents respectively, so this was a good time to have disseminated information on VHF-LISN.

3. Keynote

(1) Session: Keynote Address

- Title: EMC and Emerging Technologies
- Presenter: Ms. Janet O'Neil
- Country: US
- Affiliation: Marketing Communications, ETS-Lindgren, U.S.A.
- Overview: In this lecture, the presenter introduced cases relating to EMC, and spoke on the state of EMC in the latest new technology.

The latest technologies focused on in this session include electric vehicles, low-orbit satellites, robotics technology applications, unmanned aerial vehicles, wireless communication applications in mines and lunar surface development, and wireless power transfer.

4. Technical Session

(1) Session: Plenary Talk2

- Title: Challenges & Outlook on Electromagnetic integrity for Advanced IC & Heterogeneous Integration
- Presenter: Mr. Er-ping Li

- Country: Singapore
- Affiliation: Zhejiang University
- Overview: The rapid advancement of digital computing and wireless communication has also promoted advances in semiconductor technology. Current electronic systems use heterogeneous integration of more complex components and devices, giving rise to extremely complex electromagnetic field environments.
Electromagnetic completeness, which involves joint design of EMI, signal completeness, and power completeness, is a major issue in heterogeneous integrated circuit design and its packaging.
Also, in semiconductor process technology at scales of 5 nm or smaller, it becomes necessary to separately consider completeness in a computer-science field called "multiphysics", which deals with overall simulations, not simply electromagnetic completeness, mechanical completeness, and thermal completeness.
Issues with completeness in multiphysics in AI-ICs based on heterogeneous integration and electromagnetic completeness were also raised.
- Impressions: Regarding current advancements in semiconductors, the presenter explained that conditions on electromagnetic environments will become stricter to accommodate the variety of physical restrictions accompanying the shift to integrated technologies. The implication was that ample consideration at the IC design stage will become more important than ever.

(2) Session T1: IC & Semiconductor EMC

Invited Talk 4

- Title: EMC tests of transceiver ICs
- Presenter: Mr. Atsushi Tomishima
- Country: Japan
- Affiliation: Toshiba Electronic Devices & Storage Corporation
- Overview: EMC test methods for IC-level emissions and immunity are defined in IEC 62132 (immunity), IEC 61967 (emissions), and IEC 62215 (impulse immunity). An evaluation method for communication transceiver ICs was presented as an illustrative example based on IEC62228 (EMC evaluation of bus transceivers).
- Impressions: This presentation showed that IC-level EMC evaluation methods have been established as an international standard. It was explained that limits are currently under consideration, but that there will likely be a growing need for EMC measures that also consider evaluation at the IC level in future product design.

(3) Session T2: EMC & Antenna

InvitedTalk 5

- Title: Mode Filtered Site VSWR for Above 18 GHz EMC Site Evaluation Using Compressed Sensing
- Presenter: Mr. Zhong Chen
- Country: US
- Affiliation: ETS-Lindgren
- Overview: Site voltage standing wave ratio (SVSWR), which is defined in CISPR 16-1-4 or ANSI C63.25.1, is the established standard for EMC test site evaluation from 1 GHz to 18 GHz. A similar standard must now be developed for the 18-GHz-to-40-GHz range. In response, cylindrical mode filtering SVSWR based on a new method was introduced in recent years, and is now under consideration.
A report was given on this method's development status and its spread to the general public.
(This is a method for evaluating site characteristics through arithmetic processes by measuring basic antenna patterns inside test sites. This is based on the ability to express any given antenna pattern by superimposing orthogonal cylinder modes.)
- Impressions: Current SVSWR measurements are performed on the Front, Center, Left, and Right (and Front h2) of the test volume. However, it is thought that measurement accuracy could be improved by performing position-independent measurements by installing the transmit antenna at the edge of the test volume and rotating the test volume on a turntable, making one complete revolution. Another apparent benefit to this method is eliminating the need for a special positioner, which is used in current measurements to move several steps to a point 40 cm away from the reference point. The antenna calibration and site validation WGs happen to currently be verifying SVSWR measurement from 18 GHz to 40 GHz, and plan to report the results. For this reason, we would like to pay more attention to future trends in deliberations on site validation.

(4) Session T4: EMC & Antenna

InvitedTalk 7

- Title: Recent Advances in Robotic Antenna Measurements
- Presenter: Mr. Dennis Lewis
- Country: US
- Affiliation: Boeing
- Overview: Ordinary antenna testing facilities performing emission measurements relating to aerial vehicles are usually designed with a particular measurement application in mind. As a result, these facilities tend to consist of a single fixed-measurement geometry. The range of the latest antenna measurements using a multi-axis robot positioner provides near-

infinite reconfiguration possibilities in terms of measurement type and scan geometry. The adoption of MBSE/MBD (model-based systems engineering and development) was important to advanced test-system development due to the ability to optimize a variety of measurement configurations and scenarios. MBSE/MBD has been successfully put into practice by using robots to acquire settings data.

The measurement flexibility offered by this approach provides opportunities to ensure safety, improve measurement quality, and reduce measurement uncertainty.

- Impressions: The presentation showed that Boeing can now efficiently conduct EMI measurements of its complex products thanks to measurement systems and new combinations of simulation models that use robots. Our impression was that while measurement facilities will face higher complexity than ever, they can also expect total cost reductions.

(5) Session: PlenaryTalk5

- Title: EMC & Wireless Regulation and Test Methods – An India Scenario (MTCCTE-TEC, BIS)
- Presenter: Dr. Lenin Raja
- Country: India
- Affiliation: AA Electro Magnetic Test Laboratory Private Limited
- Overview: This was a presentation on EMC standards in India. It explained the importance of certifying communication products, commercial EMC standards, wireless standards, test requirements, and global 5G and 3GPP standards.
Of these, commercial EMC standards require particular care in distinguishing between EN, TEC, and CISPR standards.
CISPR 32 Ed. 2.1:2019 has been adopted as the emission standard for TEC. According to the emission standard, electrostatic discharge (IEC61000-4-2) test voltages are specified as 8 kV for air discharge and 4 kV for direct discharge. For radiated electromagnetic fields (IEC61000-4-3), equipment with voice interfaces is limited to 10 V/m for 800 MHz to 960 MHz and 1.4 GHz to 6 GHz. Equipment without voice interfaces is limited to 3 V/m for 1.4 GHz to 6 GHz.
- Impressions: The presenter explained that there were slight deviations in the local standards for products developed for the Indian market. In India, there are still cases of non-compliance with international standards such as the requirements of test results at local testing laboratories, showing what we felt was a need to continue monitoring the status of products developed for India.

(6) Session W5: EMI/EMC Protection & Shielding

- Title: Simulation Modelling for Radiated Emission of USB cable Enabling Shielding Impact

investigations

- Presenter: Mr. Yu Song
- Country: China
- Affiliation: State Key Laboratory of Electrical Insulation and Power Equipment School of Electrical Engineering, Xi'an Jiaotong University
- Overview: In order to predict radiated electromagnetic fields in USB 2.0 systems, a simulation model combining full-wave and transmission-line solvers was developed. This simulation model makes it possible to survey the effects of different cable parameters on radiated electromagnetic fields, and provides guidelines on attenuation of unwanted radiated emissions.
- Impressions: The presentation introduced a simulation model for predicting unwanted radiated emissions from USB cables, of which many kinds are currently in use. It was fascinating to learn that the position of the drain wire in cables could create deviations of up to 8 dB in the low-frequency range. This presentation only gave the simulation results; we felt a comparison with actual measurement values would be even more convincing.

5. Exhibition

The focus was on trends in companies participating in the exhibition. 35 companies had exhibit booths; one more than last year's APEMC 2022. The exhibition largely featured the same companies as last year.

No Japanese companies held exhibits (though we did see an exhibit from a US corporation in the TDK group).

6. Impressions

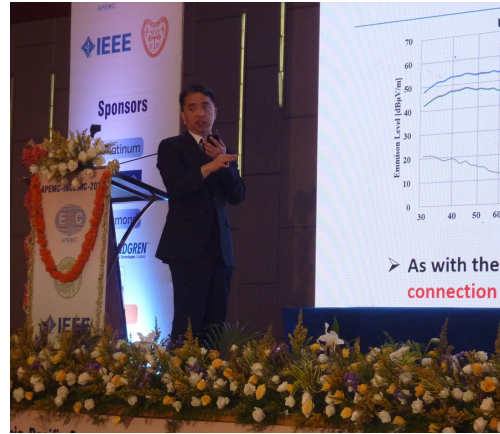
Now that the COVID-19 pandemic is under control, the exhibition was held in face-to-face format. The presentations and Q&A sessions were very lively. While this caused many presentations to run overtime, we could feel the enthusiasm from both the presenters and questioners.

These presentations successfully promoted the VCCI Council's initiatives to improve measurement reproducibility. To contribute to further standardization of VHF-LISN, we would like to conduct further inspections and show the effectiveness of balanced VHF-LISN through presentations in Japan and overseas.

Associate Professor Nishikata of the Tokyo Institute of Technology will also give a presentation at next year's EMC Japan/APEMC Okinawa (May 20 to 24, 2024) in Japan. Pamphlets for the event were distributed to the participants.



Entrance to the venue



Presentation



Exhibition hall

Report on Participation in COMPUTEXTAIPEI 2023

Public Relations Subcommittee

Exhibition name: COMPUTEXTAIPEI 2023

URL: <https://www.computextaipei.com.tw/en/index.html>

Sponsors: TAITRA (Taiwan External Trade Development Council)

TCA (Taipei Computer Association)

Exhibition period: May 30 (Tue) to June 2 (Fri), 2023

Venue: Nangang Exhibition Center Halls 1 and 2, Taipei (TaiNEX 1 & 2) (two venues)

Participants: Jiro Iizuka, Chair of the Public Relations Subcommittee (Oki Electric Industry Co., Ltd.)

Yasushi Hirakawa, Vice Chair of the Public Relations Subcommittee
(NEC Platforms, Ltd.)

Akira Oda, Executive Director of VCCI Council

Masahiro Hoshino, Secretary General of the VCCI Council

Naoko Hori, Secretariat of the VCCI Public Relations Subcommittee

Exhibition size: 1,000 companies, 3,000 booths, 5,500 m²

Overseas buyer registrations: 47,594 (from 150 countries and regions)

1. Purpose of the COMPUTEXTAIPEI exhibition

COMPUTEXTAIPEI is the largest ICT exhibition in Asia, attended by many buyers from overseas. Taiwan's ICT industry occupies an important position in the global supply chain, and this exhibition attracts many buyers and industry officials from around the world. This exhibition was an excellent opportunity to promote and raise awareness of VCCI's role and activities. VCCI held a booth in the InnoVEX area, which mainly featured startups, to conduct PR activities and attract new Taiwanese ICT vendors as members.

2. Exhibit

- Location: InnoVEX area at Nangang Exhibition Center Hall 2, Taipei (TaiNEX 2)
- Period: May 30 to June 2 of the COMPUTEXTAIPEI 2023 exhibition

3. Status of exhibits by the VCCI Council

Two staff members, Angela Lin and Louis Lin, actively assisted VCCI with its PR activities as interpreters and local speakers. The following materials were also provided in Taiwanese, Japanese,

and English, and distributed together with various novelty gifts at booth presentations:

- Guide to the VCCI Council (triple-folded pamphlet)
- Table of VCCI standards
- Japanese electromagnetic regulations
- Applicable range of CISPR32

4. Current activities and results

4.1 Overview of the COMPUTEXTAIPEI 2023 exhibition

This was one of the largest exhibitions in Asia, held in Taipei's Nangang Exhibition Center Halls 1 and 2 (TaiNEX 1 and 2). The exhibition was based on the concept "Together we create," and consisted of the following six themes:

- High Performance Computing
- Artificial Intelligence Application
- Next-Gen Connectivity
- Hyperreality
- Innovations and Startups
- Sustainability

During the four-day exhibition, at least 47,000 ICT buyers and industry officials attended from over 150 countries and regions of the world. The top ten countries and regions for overseas buyers were Japan, the US, South Korea, China, Thailand, Hong Kong, Vietnam, India, the Philippines, and Indonesia. The InnoVEX area, where the VCCI exhibit was held, attracted 300 startups from 15 countries and regions. The National Pavilion featured exhibits from Belgium, Brazil, France, Italy, Japan, the Netherlands, and Poland. Attendees were particularly drawn to the startup exhibits featuring collaborations with startups and universities from around the world.

4.2 VCCI's PR activities

Pamphlets in Taiwanese, English, and Japanese were created and distributed along with materials such as guides to VCCI and tables of standards, for example in mesh pouches containing novelty gifts. An on-site interpreter provided explanations in Taiwanese, helping Taiwanese IT vendors to better understand the VCCI Council. Staff approached attendees asking if they knew about the VCCI mark, and to those who showed interest or approached the booth themselves, provided clear explanations of the contents of the pamphlet. Staff also explained the purpose of the VCCI mark while showing attendees the VCCI mark indicating electromagnetic compliance displayed on digital cameras and smartphones brought to the exhibition. To those who showed active interest, staff handed out business cards in order to follow up on those attendees at a later date.

4.3 Seminars held at the VCCI booth

This year, seminars were held at the VCCI booth as a new attempt to appeal mainly to local startups. Two seminars were held on May 31, the second or third day of the exhibition, and three seminars were held on June 1. This means a total of five seminars were held at the booth for about 40 attendees, presenting VCCI's activities and the meaning of the VCCI mark. Many people attended the seminars, where Mr. Akira Oda, the Executive Director, introduced the EMI regulations in Japan, an overview of VCCI, and the process for having the VCCI mark displayed on products, with consecutive interpreting by Ms. Angela Lin. Novelty bags and bottles of mineral water were distributed to the audience along with promotional materials.

At the Q&A sessions at the end of each seminar, the audience actively asked questions, and we saw great interest from startups and other corporate officials thinking of expanding to the Japanese market. This was the first exhibition in five years, the last one having been held in 2018. Despite this, VCCI's activities still drew much interest, suggesting that the VCCI mark had gained some recognition along with the vigorous activities of exhibiting companies and buyers.

4.4 Trends in visitors to the VCCI booth

Many vendors from Taiwan, Japan, Europe, and the US visited the booth, and we received about ten inquiries from those considering a VCCI membership. There were also visitors from Germany, Spain, Italy, Singapore, Malaysia, India, and Dubai. We felt that the decline of the COVID-19 pandemic had led to the revival of COMPUTEX as a worldwide exhibition. There were also inquiries from Taiwanese ODM/OEM manufacturers about how to become a VCCI member. This is likely because Japanese buyers sometimes ask ODM/OEM manufacturers if they are VCCI members.

4.5 Results achieved on the days of the exhibition

This year, VCCI exhibited its booth on the first floor of Hall 2, across from the highly popular Japan-Taiwan Exchange Association (JTEA) booth. It was likely for this reason that the VCCI booth drew many attendees, and was able to distribute many of its pamphlets and novelty gifts (and received business cards from 86 attendees). The booth also spoke individually with ten companies considering a VCCI membership.

4.6 Other

One wall of the VCCI booth displayed posters advertising the role of the VCCI mark, and posters explaining the VCCI mark in Taiwanese. This was a good opportunity to spread information about VCCI and the VCCI mark. Surprisingly, not many other booths were distributing novelty gifts, so handing out novelty bags and mesh pouches displaying the VCCI mark was effective in attracting many attendees to VCCI's presentations. Visitors to the booth would carry the novelty bags around the exhibition venue, which we believe was also effective PR for VCCI.

5. Impressions

All the latest ICT products were exhibited in one place, including large booths from major Taiwanese companies such as ASUS, Acer, BenQ, and GIGABYTE. Although the venue was a bit far from central Taipei, it was attended by large numbers of officials from relevant buyers and manufacturers from Taiwan and other countries. For the first time, VCCI tried making space in its booth for holding VCCI seminars. This proved to be a more effective form of communication, providing closer interaction with booth visitors and seminar audiences than before. This type of exhibit was an excellent PR move, reaching more people than ever in a short amount of time. We hope to exhibit at even more exhibitions, and continue holding these global PR activities in the future.



Taipei Nangang Exhibition Center



Booth seminar

Report on the Technical Seminar Jointly Held by BSMI, CTCA, and VCCI

Steering Committee

Date and time: June 2, 2023 (Fri) 13:10- 16:30

Venue: Taipei NTUH International Convention Center

Attendees: Mr. K.C. Liu : Director General of CTCA (Chinese Testing and Certification Center):

Mr. H.C.Hsieh : Acting Director General of BSMI

Mr. Chiou : Executive Director of CTCA

Mr. Wu : Executive Director of CTCA

Mr. Wang : Director, 3rd Division of BSMI

Mr. A.Y. Lin : President of ETC ...and more

VCCI Council: Kazuyuki Hori, Chair of the Technical Subcommittee

(Sony Group Corporation)

Fuminori Kanahara, member of the Technical Subcommittee

(Sony Global Manufacturing & Operations Corporation)

Executive Director Akira Oda, Secretary General Masahiro Hoshino,

Technical Advisor Kunihiro Osabe

Minoru Hirata, Hidenori Muramatsu, and Yoko Inagaki (Secretariat)

Participants: 113 participants from Taiwanese manufacturers and testing laboratories

Seminar title: Testing Regulations for Taiwan BSMI and Japan VCCI

Supervisors : Bureau of Standards, Metrology and Inspection (BSMI)

Organizers : Chinese Testing and Certification Center (CTCA), VCCI Council

Co-organizers : Taiwan Testing and Certification Center (ETC),

Taiwanese Society for Electrical and Electronics Studies (TSEES)

A technical seminar for attendees from Taiwanese manufacturers and testing laboratories was held on June 2, 2023 (Fri) in Taipei at the NTUH International Convention Center. This seminar was the result of an arrangement made between BSMI, CTCA, and VCCI in June 2019, during the EMC Sapporo & APEMC 2019, to hold a technical exchange meeting every year. This was a long-anticipated opportunity to hold the technical exchange meeting, which had been postponed since 2020 due to the COVID-19 pandemic. The seminar was a great success, attracting over 100 participants from Taiwanese manufacturers and testing laboratories.

First, there were greetings and acknowledgements regarding the day's seminar from Mr. K.C. Liu

(Director General of CTCA), Mr. H.C.Hsieh (Acting Director General of BSMI), and Mr. Akira Oda (Executive Director of VCCI Council).

Next, BSMI explained that in Taiwan, CNS 15936:2016 (based on CISPR 32 Ed.2.0:2015) would come into effect starting January 2024, and presented the relevant rules on testing laboratories.

VCCI then presented an overview of VCCI, results from market sampling tests, and details on the Technical Subcommittee’s activities. This included an FY 2022 activity report, an FY 2023 activity plan, CISPR standardization initiatives for VHF-LISN, and information on the testing of a radiated emission measurement method for frequencies under 30 MHz being considered for CISPR 32 Ed.3.

After the seminar, BSMI, CTCA, and VCCI confirmed that they would maintain a long-term partnership going forward, and decided to hold technical seminars for each other every year. The next seminar is planned to be held in May 2024, at the same time as APEMC 2024 Okinawa.

Program of the seminar

Agenda	Content	Speaker
Opening Remarks		1. Mr.K.C. Liu, Chairman of CTCA 2. Mr. Akira ODA, Director of VCCI 3. Mr.H.C. Hsieh, Acting Director General of BSMI
Explanation of Relevant Testing Regulations in Response to the Amendment of BSMI’s Mandatory Certification	1. Certificate standard conversion regulations 2. Test report requirements	Mr. Ming-Fong Chen, 6 th Division of BSMI
A brief Introduction of VCCI Council		Mr. Akira Oda, Director of VCCI
Marketing Sampling Test Results		Mr. Minoru Hirata Technical Counselor
FY 2022 Activity Report and FY 2023 Activity Plan		Mr. Kazuyuki Hori, Chair
VHF-LISN Working Group Efforts for CISPR Standardization of VHF-LISN – CISPR 16 Standards/CISPR 32 Revision Deliberation Trends		Mr. Kunihiro Osabe Convener
Radiated Emission Working Group Verification of Radiated Emissions (Below 30 MHz) Measurement Method		Mr. Fuminori Kanahara, Convener
Q&A		Hosted by Mr.Y.C. Tang



Mr.K.K. Liu, Chairman of CTCA



Mr.H.C. Hsieh, Acting Director General of BSMI



Mr. Akira Oda, Director of VCCI



Associates from BSMI, CTCA, and VCCI



Q&A session with presenters



Participants at the venue

Report on the 2023 Rules Briefing and Technical Symposium

Technical Subcommittee

The 2023 Rules Briefing and Technical Symposium was held on demand (as a livestream) as a repeat of the event held in February 2023 for members in Japan, but for mainly overseas members. First, there was the Rules Briefing, where explanations were given on two guidance documents. Then, at the Technical Symposium, speakers reported on trends in standardization relating to CISPR and the FY 2022 activities of the Technical Subcommittee. The event period was from May 26 to May 30, 2023, reaching an audience of 26 people in total. Of these, there were seven from Taiwan, six from China, five from South Korea, two from the US, two from the UK, two from Germany, one from Australia, and one from India. The program of the event was as follows:

The first part of the event, the Rules Briefing, introduced two documents published in FY 2022: "Guidance for Rules for Voluntary Control Measures" (VCCI 32-1-J:2022) and "Guidance for Registration of Product Conformity- How to Input the Model Number" (VCCI 32-1-G:2022).

The second part of the event, the Technical Symposium focused on the FY 2022 activities of the Technical Subcommittee. The Chair of the Technical Subcommittee gave a talk on the FY 2022 activities of the Technical Subcommittee and WGs, and an overview of papers presented at academic conferences. This was followed by reports from the chief convener of each WG on the details of the WG's activities.

2023 Rules Briefing and Technical Symposium Program

	Theme	Presenter
Rules Briefing and Technical Symposium (individual video) Distributed on demand (June 26th to 30th, 2023)		
Rules Briefing	“Guidance for Rules for Voluntary Control Measures” VCCI 32-1-J:2022	Mr. Hiroshi Sawa VCCI Council
	“Guidance for Registration of Product Conformity – How to Input the Model Number –” VCCI 32-1-G:2022	Mr. Minoru Hirata VCCI Council
Technical Symposium	• Technical Subcommittee Opening Considerations for the Technical Symposium	Mr. Kazuyuki Hori Sony Group Corporation Chair, Technical Subcommittee
	• Technical Subcommittee – CISPR Project Working Group Deliberation Efforts for CISPR Standards and Progress of Domestic Endorsement	Mr. Takuya Nakamori Panasonic Operational Excellence Co., Ltd. Convener, CISPR Project WG, Technical Subcommittee
	• Technical Subcommittee – VHF-LISN Working Group Efforts for CISPR Standardization of VHF-LISN – CISPR 16 Standards/CISPR 32 Revision Deliberation Trends and Consideration for Embodying Large-Current 3-Phase VHF-LISN –	Mr. Kunihiro Osabe VCCI Council CISPR SC-A/I JAHG6 Co-Convener Convener, VHF-LISN WG, Technical Subcommittee
	• Technical Subcommittee – Conducted Emission Working Group Additional Verification on Whether Uncertainty Due to Mounting of CMAD at the AE Side Improved by Measurements using CVP and CP	Ms. Nozomi Miyake NEC Corporation Convener, Conducted Emission WG, Technical Subcommittee
	• Technical Subcommittee – Antenna Calibration and Site Validation Working Group Verification of Evaluation Methods for Measurement Site Validity for Measurement of Radiated Emissions Below 30 MHz - In Relation to CISPR 16-1-6 Ed.1.2 and CISPR 16-1-4 (CIS/A/1389/FDIS)-	Mr. Hironari Tanaka Ohtama Calibration Service Co., Ltd. Convener, Antenna Calibration and Site Validation WG, Technical Subcommittee
	• Technical Subcommittee – Radiated Emission Working Group Verification of Radiated Emission Measurement Below 30 MHz	Mr. Fuminori Kanahara Sony Global Manufacturing & Operations Corporation Convener, Radiated Emission WG, Technical Subcommittee

Status on FY2022 Market Sampling Tests

Market Sampling Test Subcommittee

As of April 20, 2023

Planned number of market sampling tests	Loan-based	35	100
	Purchase-based	65	

Terms of sampling tests	Selected samples	Cancelled (Not shipped, etc.)	Testable samples	Test completed (breakdown below)	Judgment			
					Passed	Failed- tentative		
						Finally passed	Finally failed	Pending
Grand total	104	4	100	100	93	5	1	1

Loan-based testing total		39	4	35	35	33	1	1	0
Term (breakdown)	1 st Quarter	9	3	6	6	6	–	–	–
	2 nd Quarter	12	–	12	12	11	–	1	–
	3 rd Quarter	10	–	10	10	9	1	–	–
	4 th Quarter	8	1	7	7	7	–	–	–

Purchase-based testing total		65	0	65	65	60	4	0	1
Term (breakdown)	1 st Quarter	18	–	18	18	14	4	–	–
	2 nd Quarter	10	–	10	10	9	–	–	1
	3 rd Quarter	13	–	13	13	13	–	–	–
	4 th Quarter	24	–	24	24	24	–	–	–

"Failed-tentative" in FY 2021 (*1)	Judgment		
	Passed	Failed	Pending
3	3	0	0

*1: Samples that "Failed - tentative" in FY 2021 were additionally surveyed in FY 2022.

Final result	Passed	Failed	Carry forward (*2)
	101	1	1

*2: Pass/fail decisions will be carried forward to FY2023.

Document inspection	Selected samples	Cancelled (withdrawal, etc.)	Inspectable samples	Pre-check completed	Judgment completed	Judgment		Carry forward (*3)
						Cleared	Problems identified	
	43	3	40	40	39	37	2	1

*3: Pass/fail decisions will be carried forward to FY2023.

Status on FY2023 Market Sampling Tests

Market Sampling Test Subcommittee

As of June 30, 2023

Planned number of market sampling tests	Loan-based	35	100
	Purchase-based	65	

Terms of sampling tests	Selected samples	Cancelled (Not shipped, etc.)	Testable samples	Test completed (breakdown below)	Judgment			
					Passed	Failed- tentative		
						Finally passed	Finally failed	Pending
Grand total	19	2	17	5	4	0	0	1

Loan-based testing total		9	2	7	2	2	0	0	0
Term (breakdown)	1 st Quarter	9	2	7	2	2	–	–	–
	2 nd Quarter	–	–	–	–	–	–	–	–
	3 rd Quarter	–	–	–	–	–	–	–	–
	4 th Quarter	–	–	–	–	–	–	–	–

Purchase-based testing total		10	0	10	3	2	0	0	1
Term (breakdown)	1 st Quarter	10	–	10	3	2	–	–	1
	2 nd Quarter	–	–	–	–	–	–	–	–
	3 rd Quarter	–	–	–	–	–	–	–	–
	4 th Quarter	–	–	–	–	–	–	–	–

Passed	Failed	Pending
4	0	1

Document inspection	Selected	Cancelled (withdrawal, etc.)	Inspectable samples	Pre-check completed	Judgment completed	Judgment	
						Cleared	Problems identified
	12	–	12	12	6	6	–

Report from the Secretariat

● List of Members (April 2023- June 2023)

New members

Membership	Member No.	Company Name	Country
Regular	4299	Hirschmann Automation and Control K.K.	JAPAN
Regular	4302	Silhouette Japan Corporation	JAPAN
Regular	4304	APR JAPAN Co., Ltd.	JAPAN
Regular	4307	TOKYO ELECTRON DEVICE LIMITED	JAPAN
Regular	4310	NTT TechnoCross Corporation	JAPAN
Regular	4291	EXPRESS LUCK INDUSTRIAL (SHENZHEN) LIMITED	CHINA
Regular	4300	TXOne Networks Inc.	CHINESE TAIPEI
Regular	4301	Wuhu Doking Electronic Technology Co., Ltd.	CHINA
Regular	4303	Asia Vital Components Co., Ltd.	CHINA
Regular	4305	Advanced Display Technology Co., Ltd.	KOREA
Regular	4308	Guangdong OPPO Mobile Telecommunications Corp., Ltd.	CHINA
Regular	4309	SD Optics, Inc.	KOREA
Regular	4311	VITURE Inc.	USA
Regular	4312	AIC Inc.	CHINESE TAIPEI
Regular	4313	Alibaba Cloud Computing Co., Ltd.	CHINA
Regular	4316	BYSTAMP	FRANCE
Supporting	4306	SGS-CSTC Standards Technical Services (Suzhou) Co., Ltd.	CHINA

Company name change

Membership	Member No.	Company Name	Country	Old company name
Regular	2867	TOPPAN Edge Inc.	JAPAN	TOPPAN FORMS CO., LTD.
Regular	3516	TKR CORPORATION	JAPAN	TKR CORPORATION
Regular	3797	WORKS MOBILE Japan Corporation	JAPAN	LINE Corporation
Regular	4032	TRaaS On Product Inc.	JAPAN	P3, Inc.
Regular	4088	Panasonic Energy Co., Ltd.	JAPAN	SANYO Electric Co., Ltd.
Regular	359	Matrox Central Services Inc.	CANADA	Matrox Electronic Systems
Regular	2535	Silver Peak Systems, LLC	USA	Silver Peak Systems, Inc.
Regular	3683	KAON Group Co., Ltd.	KOREA	Kaonmedia Co., LTD.
Regular	4180	Pliops LTD	ISRAEL	Pliops Inc.
Regular	4314	Dynaview Technology Corporation	CHINESE TAIPEI	Dynatrong Materials Incorporation
Supporting	821	I.T.L. Product Testing Ltd.	ISRAEL	I.T.L. (PRODUCT TESTING) LTD
Supporting	1062	Eurofins Electrical and Electronic UK Limited	U.K.	Eurofins York
Supporting	1211	NTS Labs LLC	USA	National Technical Systems
Supporting	2783	cetecom advanced GmbH	GERMANY	CETECOM GmbH
Supporting	4201	GRG Metrology & Test Group Co., Ltd.	CHINA	Guangzhou GRG Metrology & Test Co., Ltd.

Note: Please fill out and submit "Form 9 Change Notification" on the website when a company name has been changed.

● FY 2023 schedule of VCCI events and training seminars

<p>April</p>	<p>May The basic technique of EMI measurement COMPUTEXTAIPEI 2023 (from May 30 through June 2)</p>	<p>June Release VCCI Dayori No.149</p>
<p>July TECHNO-FRONTIER 2022</p>	<p>August Release Annual Report</p>	<p>September Release VCCI Dayori No.150</p>
<p>October The basic technique of EMI measurement CEATEC 2023</p>	<p>November The basic of electromagnetic waves, EMI measurement technique</p>	<p>December The basic of electromagnetic waves, EMI measurement technique Release VCCI Dayori No.151</p>
<p>January The level up of the EMI measurement technique</p>	<p>February EMI measurement instrumentation uncertainty (MIU)</p>	<p>March Release VCCI Dayori No.152</p>

● Status of Compliance Test Notifications

April 2023—June 2023 (Product names are examples and are not limiting)

Classification of MME (Product types are not limited to only the following examples.)			Classification code		April 2023			May 2023			June 2023			
			Class A	Class B	Class A	Class B	Total	Class A	Class B	Total	Class A	Class B	Total	
ITE	Computer	Large	Super computer, Server, etc.	A2	a2	25	0	25	26	0	26	22	2	24
		Stationary	Workstation, Desktop PC, etc.	B2	b2	2	16	18	1	13	14	3	16	19
		Portable	Laptop PC, Tablet PC, etc.	C2	c2	2	25	27	0	30	30	1	27	28
		Other computers	Wearable computers, Wearable device, Smart watch, Smart glass, etc.	E2	e2	1	1	2	0	0	0	2	8	10
	Peripheral / Terminal	Memory device	HDD, SSD, USB Memory, Media drive, Disk device, NAS, DAS, SAN, etc.	G2	g2	6	12	18	4	24	28	8	29	37
		Printer device	Printer including multifunction machine, etc. (portable)	H2	h2	3	11	14	8	3	11	2	10	12
		Display device	CRT display, Monitor, Projector, etc.	J2	j2	3	42	45	5	50	55	10	60	70
		Other I/O devices	Image scanner, OCR, Pen tablet, Stylus pen, etc.	M2	m2	1	5	6	2	2	4	1	5	6
		General purpose terminal	Display controller terminal, etc.	N2	n2	1	3	4	0	1	1	0	0	0
		Special purpose terminal	POS, Terminal for finance, insurance, etc.	Q2	q2	1	1	2	9	1	10	5	1	6
		Other peripheral	PCI Card, Graphics Card, Mouse, Keyboard, Cradle, etc.	R2	r2	3	30	33	1	35	36	7	36	43
		Copying machine / Multifunction copying machine	Copying machine, Multifunction copying machine, etc. (Stationary)	S2	s2	0	0	0	2	1	3	0	1	1
	Communications equipment	Terminal equipment	Mobile phone, Smart phone, PHS phone, etc.	T2	t2	0	2	2	0	12	12	0	2	2
			Telephone device such as PBX, FAX, Key telephone systems, Cordless phone, etc.	U2	u2	1	1	2	2	1	3	0	0	0
		Network-related equipment	Communication line connecting device including Modem, Digital transmission unit, DSU, TA, Media converter, etc.	V2	v2	3	0	3	2	1	3	3	0	3
			LAN-related device, including Router, HUB, etc. Local switch, etc.	W2	w2	34	16	50	49	10	59	50	15	65
	Other communication equipment	Other communication equipment	X2	x2	9	9	18	11	7	18	9	6	15	
	Broadcast receiver equipment	TV, Radio, Tuner, Video recorder, Set-top box, etc.		k2			2	2		1	1		0	0
	Audio equipment	Speaker, Amplifier, IC recorder, Digital audio player, Headset, DTM, AI speaker, etc.	L2	l2	0	4	4	0	2	2	1	6	7	
	Video equipment	Video equipment	Digital video camera, Web camera, Network camera, Video player, Photo frame, Digital camera, Drive recorder, etc.	I2	i2	6	12	18	2	7	9	3	4	7
Other video equipment		VR goggles, Scan converter, etc.	P2	p2	2	2	4	0	0	0	0	3	3	
Entertainment lighting control equipment	Entertainment lighting control equipment, etc.	Z2	z2	0	0	0	0	0	0	0	0	0	0	
Other MME	Entertainment / Education	Electronic stationery	Electronic dictionary, e-book reader, Translator, Calculator, etc.	D2	d2	0	0	0	0	1	1	0	0	0
		Electronic toy	Game console, Game pad, toy drone, etc.	Y2	y2	0	0	0	0	3	3	0	3	3
	Other Entertainment / Education equipment	Navigator, AI robot, etc.	F2	f2	0	1	1	0	0	0	0	0	0	
	Other MME	MME other than the above	O2	o2	5	0	5	11	8	19	4	5	9	
Total					108	195	303	135	213	348	131	239	370	

● Registration Status of Measurement and Other Facilities

The following table indicates the status on registration of measuring facilities in the most recent three months.

Facilities listed here are only those made open by registering members in principle. Members with those facilities whose valid period expired are kindly advised to contact VCCI to inform of the status they are in. Status to choose from are, renewal application being filed, new application being filed, waiting for the next issue to carry, or terminating the registration (all facilities are posted in the Web site).

Facilities in Japan are listed in Japanese.

List of newly registered or renewed facilities (April 2023 – June 2023)

R: Radiated EMI measurement facilities below 1GHz C: AC-mains-ports-conducted EMI measurement facilities

T: Telecommunication-port-conducted EMI measurement facilities G: Radiated EMI measurement facilities above 1GHz

Company name	Equipment name	3 m	10 m	30 m	Dark 3m	Dark 10m	Registration number	Effective date	Location	Contact to:
TÜV Rheinland Vietnam Co., Ltd.	Shielded Room	-	-	-	-	-	C-20141	2026/4/16	Plot H-1, RF-7E, Thang Long Industrial Park II, My Hao District, Hung Yen Province, Vietnam	+84-221-3974-560
TÜV Rheinland Vietnam Co., Ltd.	Shielded Room	-	-	-	-	-	T-20141	2026/4/16	Plot H-1, RF-7E, Thang Long Industrial Park II, My Hao District, Hung Yen Province, Vietnam	+84-221-3974-560
TÜV Rheinland Vietnam Co., Ltd.	10 m Semi-Anechoic Chamber	-	-	-	-	-	G-20182	2026/4/16	Plot H-1, RF-7E, Thang Long Industrial Park II, My Hao District, Hung Yen Province, Vietnam	+84-221-3974-560
TÜV Rheinland Vietnam Co., Ltd.	10 m Semi-Anechoic Chamber	-	-	-	-	-	C-20142	2026/4/16	Plot H-1, RF-7E, Thang Long Industrial Park II, My Hao District, Hung Yen Province, Vietnam	+84-221-3974-560
TÜV Rheinland Vietnam Co., Ltd.	10 m Semi-Anechoic Chamber	-	-	-	-	-	T-20142	2026/4/16	Plot H-1, RF-7E, Thang Long Industrial Park II, My Hao District, Hung Yen Province, Vietnam	+84-221-3974-560
TÜV Rheinland Vietnam Co., Ltd.	10 m Semi-Anechoic Chamber	-	-	-	○	○	R-20186	2026/4/16	Plot H-1, RF-7E, Thang Long Industrial Park II, My Hao District, Hung Yen Province, Vietnam	+84-221-3974-560
Gumi University EMC Center	Gumi University EMC Center	-	-	-	-	-	G-20180	2026/4/16	37, Yaeun-ro, Gumi-si, Gyeongsangbuk-do, R.O.K.	+82-54-440-1195
Centre Testing International Group Co., Ltd.	Centre Testing International Group Co., Ltd.	-	-	-	-	-	C-20144	2026/4/16	Hongwei Industrial Zone, 70 Area, Baoan District, Shenzhen, Guangdong, China	+86-186-8862-2762
Sporton International Inc.	KunShan 10 m Semi-anechoic Chamber 10CH01-KS	-	-	-	-	○	R-20185	2026/4/16	No. 1098, Pengxi North Road, Kunshan Economic Development Zone, Jiangsu province, China	+86-0512-5790-0158

Company name	Equipment name	3 m	10 m	30 m	Dark 3m	Dark 10m	Registration number	Effective date	Location	Contact to:
Sporton International Inc.	KunShan 10 m Semi-anechoic Chamber 10CH01-KS	-	-	-	-	-	G-20181	2026/4/16	No. 1098, Pengxi North Road, Kunshan Economic Development Zone, Jiangsu province, China	+86-0512-5790-0158
Sporton International Inc.	Hwa Ya Conducted Test Site CO07-HY	-	-	-	-	-	T-20143	2026/4/16	No.58, Aly. 75, Ln. 564, Wenhua 3rd Rd., Guishan Dist., Taoyuan City 333, Taiwan, R.O.C.	+886-3-327-3456
Sporton International Inc.	Hwa Ya Conducted Test Site CO07-HY	-	-	-	-	-	C-20143	2026/4/16	No.58, Aly. 75, Ln. 564, Wenhua 3rd Rd., Guishan Dist., Taoyuan City 333, Taiwan, R.O.C.	+886-3-327-3456
Sporton International Inc.	Shenzhen 3 m Semi-anechoic Chamber 03CH05-SZ	-	-	-	○	-	R-20187	2026/5/28	101, 1st Floor, Block B, Building 1, No. 2, Tengfeng 4th Road, Fenghuang Community, Fuyong Street, Baoan District, Shenzhen City, Guangdong Province, 518103, People's Republic of China	+86-0755-8606-6985
Sporton International Inc.	Shenzhen 3 m Semi-anechoic Chamber 03CH05-SZ	-	-	-	-	-	G-20183	2026/5/28	101, 1st Floor, Block B, Building 1, No. 2, Tengfeng 4th Road, Fenghuang Community, Fuyong Street, Baoan District, Shenzhen City, Guangdong Province, 518103, People's Republic of China	+86-0755-8606-6985
Sporton International Inc.	CO01-SZ	-	-	-	-	-	C-20145	2026/5/28	1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan, Shenzhen, 518055 People's Republic of China	+86-0755-8606-6985
Sporton International Inc.	CO01-SZ	-	-	-	-	-	T-20144	2026/5/28	1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan, Shenzhen, 518055 People's Republic of China	+86-0755-8606-6985
Centre Testing International Group Co., Ltd.	Centre Testing International Group Co., Ltd.	-	-	-	-	-	T-20145	2026/5/28	Hongwei Industrial Zone, 70 Area, Baoan District, Shenzhen, Guangdong, China	+86-186-8862-2762
Eurofins E&E Wireless Taiwan Co., Ltd.	966 Semi-Anechoic Chamber (96602-BD)	-	-	-	○	-	R-20188	2026/5/28	No.140-1, Changan Street, Bade District, Taoyuan City, 334025, Taiwan	+886-3-271-0188
BUREAU VERITAS ADT (SHANGHAI) CORPORATION	No. 1 Shielded Room	-	-	-	-	-	C-20147	2026/6/25	Building C, No. 829, Xinzhuang Road, Song Jiang District, Shanghai, China	+86-21-6192-7289

Company name	Equipment name	3 m	10 m	30 m	Dark 3m	Dark 10m	Registration number	Effective date	Location	Contact to:
BUREAU VERITAS ADT (SHANGHAI) CORPORATION	No. 1 Shielded Room	-	-	-	-	-	T-20147	2026/6/25	Building C, No. 829, Xinzhuang Road, Song Jiang District, Shanghai, China	+86-21-6192-7289
Shenzhen LCS Compliance Testing Laboratory Ltd.	Shenzhen LCS Compliance Testing Laboratory Ltd.	-	-	-	-	-	T-20146	2026/6/25	1-2F, Building A&3F, Building C, Juji Industrial Park, Shajing Street, Bao'an District, Shenzhen, Guangdong, China	+86-139-2464-0869
Shenzhen LCS Compliance Testing Laboratory Ltd.	Shenzhen LCS Compliance Testing Laboratory Ltd.	-	-	-	-	-	G-20184	2026/6/25	1-2F, Building A&3F, Building C, Juji Industrial Park, Shajing Street, Bao'an District, Shenzhen, Guangdong, China	+86-139-2464-0869
Shenzhen LCS Compliance Testing Laboratory Ltd.	Shenzhen LCS Compliance Testing Laboratory Ltd.	-	-	-	○	-	R-20189	2026/6/25	1-2F, Building A&3F, Building C, Juji Industrial Park, Shajing Street, Bao'an District, Shenzhen, Guangdong, China	+86-139-2464-0869
Shenzhen LCS Compliance Testing Laboratory Ltd.	Shenzhen LCS Compliance Testing Laboratory Ltd.	-	-	-	-	-	C-20146	2026/6/25	1-2F, Building A&3F, Building C, Juji Industrial Park, Shajing Street, Bao'an District, Shenzhen, Guangdong, China	+86-139-2464-0869
BTL Inc.	DG-CB02	-	-	-	-	-	G-20186	2026/6/25	No.3, Jinshagang 1st Road, Dalang, Dongguan, Guangdong, China	+86-769-8318-3000
BTL Inc.	DG-CB02	-	-	-	○	-	R-20192	2026/6/25	No.3, Jinshagang 1st Road, Dalang, Dongguan, Guangdong, China	+86-769-8318-3000
BTL Inc.	SSL-CB01	-	-	-	○	-	R-20193	2026/6/25	Room 108, Building 2, No.1 yile Road, Songshan Lake Park, Dongguan city, Guangdong Province, China	+86-769-8318-3000
BTL Inc.	SSL-CB01	-	-	-	-	-	G-20187	2026/6/25	Room 108, Building 2, No.1 yile Road, Songshan Lake Park, Dongguan city, Guangdong Province, China	+86-769-8318-3000
SAMSUNG ELECTRONICS Co., Ltd.	SAMSUNG SUWON EMCTEST R3 Lab.	-	-	-	-	-	T-20148	2026/6/25	(Maetan dong) 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, Republic of Korea	+82-10-4020-0832
SAMSUNG ELECTRONICS Co., Ltd.	SAMSUNG SUWON EMCTEST R3 Lab.	-	-	-	-	-	G-20185	2026/6/25	(Maetan dong) 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, Republic of Korea	+82-10-4020-0832

Company name	Equipment name	3 m	10 m	30 m	Dark 3m	Dark 10m	Registration number	Effective date	Location	Contact to:
SAMSUNG ELECTRONICS Co., Ltd.	SAMSUNG SUWON EMCTEST R3 Lab.	-	-	-	-	○	R-20191	2026/6/25	(Maetan dong) 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, Republic of Korea	+82-10-4020-0832
SAMSUNG ELECTRONICS Co., Ltd.	SAMSUNG SUWON EMCTEST R3 Lab.	-	-	-	-	-	C-20148	2026/6/25	(Maetan dong) 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, Republic of Korea	+82-10-4020-0832

Watching old video footage

I was recently asked by my older brother to check what was recorded on a video tape at my parents' house, because he was going to throw it out. I dug up the VCR sitting at the back of the shed and plugged it into an old TV; the type with RCA input connectors. On checking the video tape, I was presented with footage of my cousin's wedding ceremony. Memories of the event rushed back as I watched, filling me with nostalgia, but at the same time, I was struck by the datedness of the analog image.

Video tapes have largely fallen out of use as a form of media. This recording had been copied onto a home video tape and sent to us by the cameraman at my cousin's wedding hall. Considering the now-widespread use of digital cameras and smartphones, whose digital recordings are shared instantaneously over the internet, I imagine uncle who dubbed this tape for us must have had a tough time back in the day.

The video of my cousin's wedding had been shot 25 years ago. While the footage had been recorded on a wedding-hall video camera, this was still a video tape,

and a copy at that. It was certainly blurry compared to the digital footage we have nowadays. And perhaps because the tape wasn't stored in a proper environment, it had deteriorated, rendering even the faces of some wedding guests unrecognizable.

However, watching this footage, I couldn't help feeling wistful looking back on that day. I have fond memories of my cousin's wedding, where our entire family got together and had a lovely time. I'm grateful that this memory was left to me in physical form, if only on a video tape, the technology of its time.

These days, even casual recordings on a smartphone are beautifully crisp and clear thanks to their digital format. Still, while this analog footage was blurry, it had a flavor of its own that I truly appreciated. I thought about digitizing the tape and saving it on disk, but I wasn't sure I'd ever have the opportunity to play it again. For now, I'm satisfied just reminiscing on what I saw on that video deck, and holding onto that happy memory. (K.K.)

Unauthorized duplication and republication are prohibited.

	<p>VCCI Dayori No.150 (2023.10) Not for sale</p> <p>Published on: September 20, 2023</p> <p>Edited and published by: VCCI Council</p> <p>Address: NOA Bldg. 7th Floor, 3-5 Azabudai 2-chome, Minato-ku Tokyo 106-0041 TEL +81-3-5575-3138 FAX +81-3-5575-3137 https://www.vcci.jp/</p>
---	--