

VCCI DAYORI

No.122 2016.10

Contents

I wish you all would wear Japanese culture	Kazuaki Kameda	1
Committee Activities		3
● Board of Directors		3
● Council		3
● Steering Committee		4
● Technical Subcommittee		4
● International Relations Subcommittee		5
● Market Sampling Test Subcommittee		5
● Education Subcommittee		6
● Communication Subcommittee		7
● Measurement Facility Registration Committee		8
● LIST OF ABBREVIATIONS used in Committee Activities section		9
Serial Article – 6		
The history of IEC/ACEC	Masamitsu Tokuda	11
Report on the Attendance to APEMC Symposium 2016 Shenzhen, China		14
Report on the participation in the exhibition of COMPUTEX TAIPEI 2016		18
Report on Explanatory Meeting on - (1) CISPR 32 based VCCI rules (2) 2015 VCCI Business Results		22
Status on FY2016 Market Sampling Test Operations		24
Report from the Secretariat		25
● List of Members (May 2016 ~ July 2016)		25
● VCCI Events Calendar		26
● State of Conformance Report Submitted		27
● State of Registration of Measurement Facilities (Newly registered or renewed)		28

I wish you all would wear Japanese culture

Kazuaki Kameda
Chairman, Pagong Kamedatomi Co., Ltd.

The origin of our company was a dye works for Kyo Yuzen-zome Factory started up in 1919 (Taisho 8). The current president of the company is the fourth president. The company will celebrate its 100th anniversary of the founding in three years later. The company was a factory for Kyo Yuzen-zome dye works in the Showa era, but later the mainline business was shifted toward dye works for Western clothes.



Unfortunately, however, incoming orders after that rapidly decreased due to competition with overseas competitors. While we were struggling for the business recovery we happened to get an idea to sell aloha shirts



made of Yuzen dyeing cloth. We quickly tailored just one piece of Aloha shirt with the cloth and I went to a festival in that shirt. I was the center of attention of people commenting “How cool!” or asking “Who is the guy in that eccentric shirt!?” I did not know until around that time that Aloha shirt was originally made of Japanese kimono textiles. It was the summer of 2001. After that incident I worked hard to commercialize Aloha shirts with cut and trial and finally opened a small store at the corner of our factory. Our silk Aloha shirts were made of silk hand-dyed by Yuzen craftsmen and ladies’ cut saw with cotton knit. I name the new business “Pagong.”

After that the owner of famous Udon noodle restaurant along the Gion Kiridohshi offered the loan of his restaurant to be closed by saying this place is crowded with people in the season of cherry blossoms. So the loan deal was agreed only in the season of cherry blossoms. In the season the path along the Shirakawa River was crowded with people who dropped in our store till late at night. Our aloha shirts with Japanese flavor sold like hotcakes, so we were busily engaged in dying and selling the shirts even long after the cherry blossoms season was over. This incident made us decide to keep the store opening all year around up until today.

Around the time when we opened the Gion store a man dropped in our store and showed strong interest in the Pagong merchandize. The person who turned out to be a buyer of a top class department store in Japan proposed that our store run a special fair in the Kyoto branch of the department store. I willingly accepted the offer and ran a special sales week in June 2003 which went very well with a lot of enthusiastic customers visiting. This results pushed the Tokyo branch of the department store to hold the similar fair for 2 weeks. It also went so well that merchandize sold out only in 5 days. This way Pagong became a well-known brand. This fact rejoiced our workmen greatly as their skills for Kyoto’s century old yuzen dyeing tradition was proven to be applicable to

Western clothes.

Women sales staff said in unison that it was a great pleasure to them to make aloha shirts to meet their own taste and they were sold like a hotcake. 4 years later we released a new brand of aloha shirts named “Sanjo by Pagong” and opened a new store in the Kyoto-sanjo dohri street for the merchandize of the new brand. In 2006 we had three stores running which were the headquarters store, Gion store and Sanjo store. Today we have four stores running with Tokyo Jiyugaoka store added. After that our outlet is spread Japan-wide if extra sales fairs are counted, which helped increase devotees for the Pagong.

We stick to the traditional “Kata-Yuzen” technique of Japan in our own factory for Pagong which is basically dying the clothes with workmen’s hands. The patterns of aloha shirts come with variety of stories behind them which we explain to the customers.



The pattern of the aloha shirt in the right, for example, is “Flowing waters and Japanese fan (uchiwa in Japanese).” Uchiwa has historically been used in the Imperial court for courtesy and decoration purposes in Japan as symbolizing a breaker of evil spirits. In the later era of Japan the use of uchiwa was approved for common people. It was after the Edo era that Uchiwa design got popular for Kimono. The Japanese patterns are full of Japanese culture and sensibility. We are determined to pass down the traditions and crafts of Kyoto to the future.

Lastly, Pagong means “sea turtle” in Tagalog which is believed to be living only in clean seas and is believed to bring about the happiness. Not to mention, “Why turtle?” is because our company’s Japanese name includes Chinese character “Kame” meaning turtle. We are committed to bring Japanese tradition and happiness to our customers.

Kazuaki Kameda



Chairman of Pagong Kamedatomi Co., Ltd.

Graduated from the crafts department, Oosaka University

Joined Pagong Kamedatomi Co., Ltd. and engaged in hand-written Yuzen for 10 years

2002 Started the Pagong brand

2016 in the current position

Committee Activities

● Board of Directors

Date	June 9, 2016
Agenda items	Convened the 27 th Board of Directors <ul style="list-style-type: none">● Agenda item 1. (Draft) Business report FY2015● Agenda item 2. (Draft) Statement of account FY2015● Agenda item 3. Convening 2016 regular VCCI Council
Decisions made and reports given	<ul style="list-style-type: none">● Agenda items 1 through 3

● Council

Date	June 29, 2016
Agenda items	Convened the 10 th VCCI Council <ul style="list-style-type: none">● Agenda item 1. (Draft) Business report FY2015● Agenda item 2. (Draft) Statement of account FY2015● Agenda item 3. Changes of the council members
Decisions made and reports given	<ul style="list-style-type: none">● All three items approved as proposed

● Steering Committee

Dates	April 28, May 25, June 15 and July 20, 2016
Agenda items	<ul style="list-style-type: none"> ● 1. Proposed business report for FY2015 ● 2. Proposed statement of account for FY2015 ● 3. Admission of new members applied in April to June ● 4. Reviewed the proposed Rules for Voluntary Control Measures based on CISPR 32
Pending business	<ul style="list-style-type: none"> ● Agenda item 4
Decisions made or report given	<ul style="list-style-type: none"> ● Agenda item 1. Approved ● Agenda item 2. Approved ● Agenda item 3. All new members admitted as proposed ● Reporting item 1. Activity report for the months of April through June by subcommittees (Technical Subcommittee, International Relations Subcommittee, Market Sampling Test Subcommittee, Communication Subcommittee and Education Subcommittee) ● Reporting item 2. Secretariat report on membership changes and the number of conformity verification reports filed for the period of April – June ● Reporting item 3. Budgetary execution status (on membership fees and expenditure by project) for the period of April – June ● Reporting item 4. Report on the Board of Directors and Council held in June ● Reporting item 5. Update on the explanatory meeting on the Rules for Voluntary Control Measures based on CISPR 32 and on the summary of FY2015 business report meeting held in July

● Technical Subcommittee

Dates	May 16 and June 13, 2016
Agenda items	<ul style="list-style-type: none"> ● 1. Activities plan for FY2016 of each working group under the Technical Subcommittee ● 2. Interpretation of the proposed VCCI rules based on CISPR 32 ● 3. Materials for explanatory meeting on the revision of the Rules for Voluntary Control Measures ● 4. Influence of material of EUT table on the EMI measurement ● 5. Evaluation method for the test volume size of EUT ● 6. Proposal on the draft CISPR standard on VHF-LISN ● 7. Verification of the reference measurement value of antenna for FAR ● 8. Verification of new functions to be added to CISPR 32
Pending business	<ul style="list-style-type: none"> ● Agenda items 4, 5, 6, 7 and 8
Decisions made or report given	<ul style="list-style-type: none"> ● Contributed VCCI paper for presentation in APEMC 2016 Shenzhen, China and reported on the event

● International Relations Subcommittee

Dates	May 13, June 10 and July 7, 2016
Agenda items	<ul style="list-style-type: none"> ● 1. Preparation for the International Forum ● 2. Update of the table of international standards on EMC ● 3. Creation of the table of ITE related international standards ● 4. The investigation on EMC overseas
Pending business	<ul style="list-style-type: none"> ● Agenda item 1 ● Agenda item 2 ● Agenda item 4
Decisions made or report given	<ul style="list-style-type: none"> ● Agenda item 2 ● Agenda item 3

● Market Sampling Test Subcommittee

Dates	May 13, June 10 and July 22, 2016
Agenda items	<ul style="list-style-type: none"> ● 1. Judgement criteria for the new market sampling test ● 2. Draft letters to the commissioned test laboratories on the request for testing ● 3. Action ① on the judgement “Failed tentative” ● 4. Action ② on the judgement “Failed tentative” ● 5. Document inspections ● 6. Summary report on the market sampling test in FY2015 ● 7. Operation report for FY2015 ● 8. FY2016 policy on the selection of samples in the market ● 9. Materials for education course on “Operations” ● 10. Preparation of materials for the explanation meeting on the new market sampling test based on CISPR 32 ● 11. Policy on the market sampling test for the new technical requirements based on CISPR 32
Pending business	<ul style="list-style-type: none"> ● 4. Waiting for the conformity verification on the improved version of the product found as suspicious ● 11. Several points found as suspicious. Will continue the investigation
Decisions made or report given	<p>Decision made</p> <ul style="list-style-type: none"> ● 1. Keep the same criteria for the judgement without change ● 2. The draft letters were approved with partial changes ● 3. The owner member took back the product judged as the specific problem of the tested product ● 5. Done on the 20 cases. VCCI will stop accepting conformity verification report from the members not have responded. ● 6. The report was approved ● 7. The report was approved ● 8. Wireless terminals and Information Home Appliances were proposed as new category of products subjected to market sampling test. Selection of specific products were confided to the survey company and the secretarial office. ● 9. It was decided to articulate that the responsible party for the test report is VCCI member, which was reflected in the flow chart of the market sampling test.

Decisions made or report given	<ul style="list-style-type: none"> ● 10. Draft contents were approved on the condition that the major point of explanation will be on the new testing items and testing procedures relevant to the new technical requirements. <p>Report given</p> <ul style="list-style-type: none"> ● 1. There was information provided that VCCI mark was conspicuously indicated on a PC awarded the Golden Award in Computex Taipei 2016 ● 2. A VCCI member autonomously reported that they are working on their product caught at airport customs inspection as failing to the noise test.
--------------------------------	---

● Education Subcommittee

Dates	May 11, June 8 and July 13, 2016
Agenda items	<ul style="list-style-type: none"> ● 1. Responses to the questionnaires on the 34th Basic measurement engineers course, 43rd Measurement engineers course and the 12th course on radiated EMI measurement above 1GHz ● 2. Implementation of standardized hands-on training at the three commissioned testing labs ● 3. Heard a basic lecture on the uncertainty of measurement ● 4. Consideration on education programs for the new technical requirements
Pending business	<ul style="list-style-type: none"> ● Agenda item 4: Continue the consideration
Decisions made or report given	<ul style="list-style-type: none"> ● Responses to the questionnaires on the four courses were all positive. ● Commissioned lecturers for the training courses from KEC, TELEC and JQA discussed the consistency to be achieved in the texts used and process of the teaching. ● Basic lecture on the uncertainty of measurement was conducted by Rohde & Schwarz Japan for 23 VCCI committee members ● Started a questionnaire on the education required for the new technical requirements ● 2016 track record on education and training <ul style="list-style-type: none"> • 16 trainees attended the 43rd course for measurement engineers held on May 26 – 27 and June 2 – 3 • 9 trainees attended the 12th course on the measurement of radiated disturbance above 1GHz held on June 16 – 17 • 18 trainees attended the 3rd course on the operation

● Communication Subcommittee

Dates	June 12 and July 15, 2016 (May meeting was skipped due to the attendance to an exhibition)
Agenda items	<ul style="list-style-type: none"> ● 1. Design of a new PR movie for the TV sales floor of Bic Camera ● 2. New design of VCCI Ad sticker in Subway Hibiya-line ● 3. Giveaway calendar for 2017 ● 4. Flyers and brochures to be distributed in exhibitions in 1917
Pending business	<ul style="list-style-type: none"> ● Agenda item 1. The contents were finalized. Will test the motion video. ● Agenda item 3. Use the same type as for this year with renewed cover design. Print “VCCI Anniversary” on the foot of “December 19.” ● Above policy and design to be discussed from the September meeting of the Communication Subcommittee with the target completion by April 2017
Decisions made or report given	<ul style="list-style-type: none"> ● Agenda item 2. The design was determined. Will start using it from August 1.

● Measurement Facility Registration Committee

Date	May 30, 2016
Agenda items	Reviewed the result of deliberations by the Measurement Facility Examination WG and concluded as follows
Decisions made and items completed	<p>Conformity certified (including cases certified with qualification comments after checking of supplementary papers); 23 companies</p> <ul style="list-style-type: none"> • Radiated EMI measuring facilities; 13 • Mains ports conducted EMI measuring facilities; 13 • Telecommunication ports conducted EMI measuring facilities; 7 • Radiated EMI measurement facilities above 1GHz; 11 <p>Applications returned with comments; none Applications carried over to the next meeting; 1</p>
Date	June 27, 2016
Agenda items	Reviewed the result of deliberations by the Measurement Facility Examination WG and concluded as follows
Decisions made and items completed	<p>Conformity certified (including cases certified with qualification comments after extra paper checking); 20 companies</p> <ul style="list-style-type: none"> • Radiated EMI measuring facilities; 13 • Mains ports conducted EMI measuring facilities; 9 • Telecommunication ports conducted EMI measuring facilities; 6 • Radiated EMI measurement facilities above 1GHz; 6 <p>Applications returned with comments; none Applications carried over to the next meeting; none</p>
Date	July 27, 2016
Agenda items	Reviewed the result of deliberations by the Measurement Facility Examination WG and concluded as follows
Decisions made and items completed	<p>Conformity certified (including cases certified with qualification comments after extra paper checking); 18 companies</p> <ul style="list-style-type: none"> • Radiated EMI measuring facilities; 5 • Mains ports conducted EMI measuring facilities; 5 • Telecommunication ports conducted EMI measuring facilities; 6 • Radiated EMI measurement facilities above 1GHz; 5 <p>Applications returned with comments; none Applications carried over to the next meeting; none</p>

● LIST OF ABBREVIATIONS used in Committee Activities section

Abbreviation	Full Name
AAN	Asymmetric Artificial Network
AMN	Artificial Mains Network
ANSI	American National Standards Institute
APD	Amplitude Probability Distribution
APLAC	Asia Pacific Laboratory Accreditation Corporation
AQSIQ	General Administration of Quality Supervision , Inspection and Quarantine of the People's Republic of China
BSMI	Bureau of Standards, Metrology and Inspection
CALTS	Calibration Test Site
CB	Certification Body
CB	Competent Body
CCC	China Compulsory Product Certification
CD	Committee Draft
CDN	Coupling Decoupling Network
CDNE	Coupling Decoupling Network for Emission
CDV	Committee Draft for Vote
CEMC	China Certification Center for Electromagnetic Compatibility
CEN	European Committee for Standardization
CENELEC	European Committee for Electro Technical Standardization
CISPR	International Special Committee on Radio Interference
CMAD	Common Mode Absorbing Device
CQC	China Quality Certification Center
CSA	Classical (Conventional) Site Attenuation
CSA	Canadian Standards Association
DAF	Dual Antenna Factor
DC	Document for Comment
DoC	Declaration of Conformity
DOW	Date of Withdrawal
DTI	Department of Trade and Industry
DUT	Device Under Test
ECANB	EC Association of Notified Bodies
Ecma	European association for standardizing information and communication systems
EICTA	European Information, Communications and Consumer Electronics Technology Industry Association
EMCC	Electro Magnetic Compability Conference
EMCAB	Electromagnetic Compatibility Advisory Bulletin
EMF	Electromagnetic Field
EMF	Electromotive Force
ETSI	European Telecommunication Standards Institute
EUANB	European Union Association of Notified Bodies
EUT	Equipment Under Test
FAR	Fully Anechoic Room
FDIS	Final Draft International Standard
GB	guo jia biao zhun (National Standard of China)
ICES	Interference-Causing Equipment Standards
ICNIRP	International Commission on Non-Ionizing Radiation Protection
IS	International Standard
ISM	Industrial Scientific and Medical
ISN	Impedance Stabilization Network
ITE	Information Technology Equipment
LCL	Longitudinal Conversion Loss
MOU	Memorandum of Understanding
MP	Magnetic Probe
MRA	Mutual Recognition Agreement/Arrangement

Abbreviation	Full Name
NCB	National Certification Body
NICT	National Institute of Information and Communications Technology
NIST	National Institute of Standards and Technology
NP	New Proposal
NSA	Normalized Site Attenuation
NWIP	New Work Item Proposal
OFDM	Orthogonal Frequency Division Multiplex
PAS	Publicly Available Specification
PLT	Power Line Telecommunication
R&TTE	Radio & Telecommunications Terminal Equipment
RBW	Resolution Band Width
REF	Reference
RRA	Radio Research Agency
RRT	Round Robin Test
RSM	Reference Site Method
RVC	Reverberation Chamber
SAC	Semi Anechoic Chamber
SN	Signal to Noise ratio
TF	Task Force
TG	Tracking Generator
UPS	Uninterruptible Power Supply
VBW	Video Band Width
VHF-LISN	Very High Frequency-Line Impedance Stabilization Network
VSWR	Voltage Standing Wave Ratio
WP	Working Party

The history of IEC/ACEC

By Masamitsu Tokuda

1. Introduction

Figure 1 shows EMC related organizations under IEC. Note that ACEC (Advisory Committee on Electromagnetic Compatibility) is organized directly under IEC with the mission to coordinate responsible areas between TC77 (in charge of EMC) and CISPR (International Special Committee on Radio Interference).

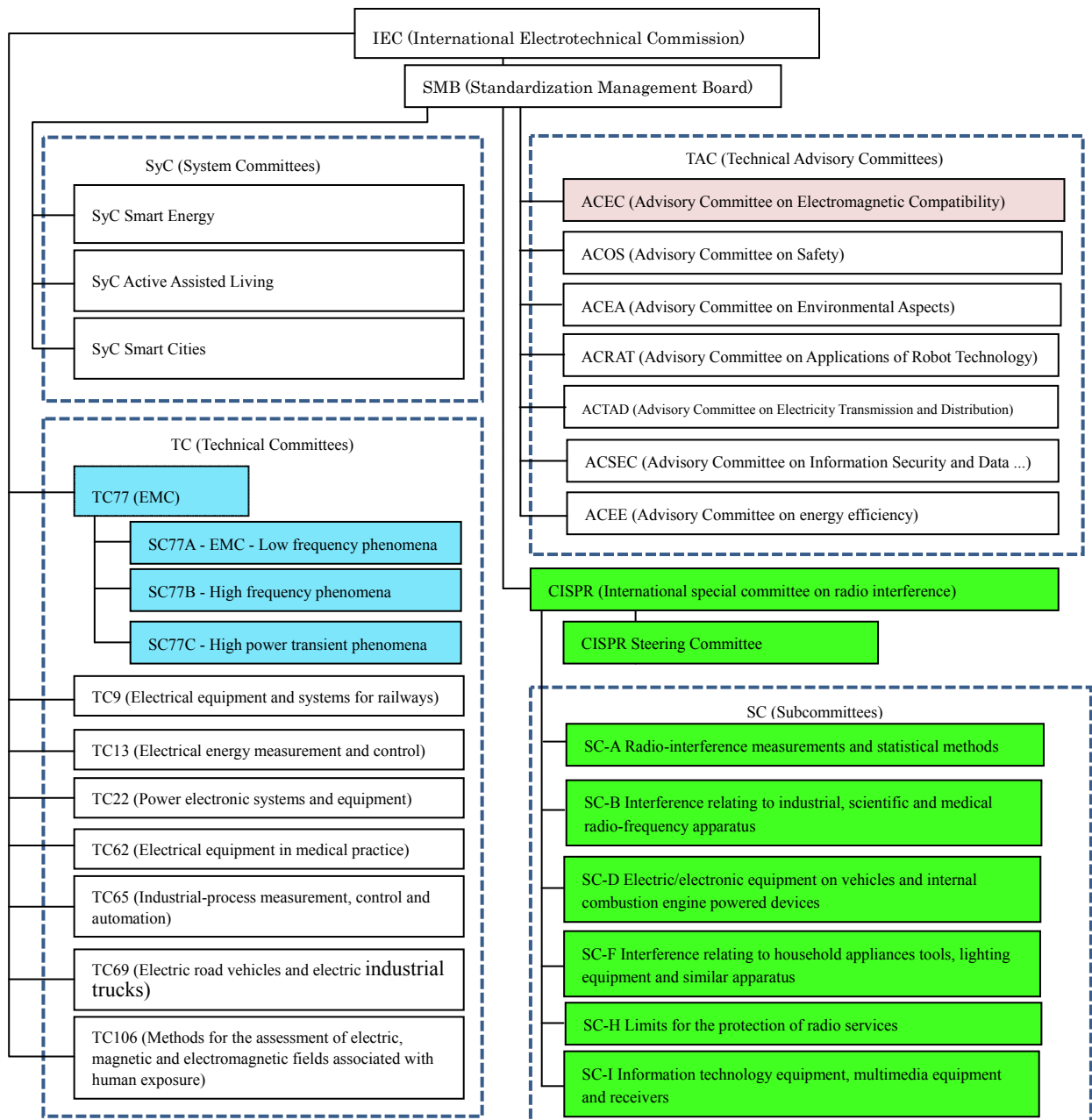


Figure 1 EMC-related standards development organization in the IEC (May 2016)

2. Background of the establishment of ACEC and its effects on the history of CISPR

TC77 to develop EMC related standards was established under IEC in 1973. There occurred the necessity to coordinate the area of responsibility with CISPR established in 1933. In order to achieve this goal the 5-man committee consisted of Chairs and secretaries of the both committees was established with Mr. L. Van Rooji as the chair under the board of directors of IEC. Later this committee was enlarged with the addition of members of the US and UK. For this reason this committee became to be called “Expanded 5-mem Committee” which later grew to the EMC-Coordinating WG. The ACEC established in 1986 was on the extension of that committee. Main responsibilities of the ACEC were ① coordination among TCs on EMC issues, ② the development of IEC Guide 107 to be referred to for product TCs to develop EMC related standards, ③ cooperation with international organizations developing EMC standards and ④ the preparation of reports on EMC to SMB among others.

ACEC was organized initially with the eight core members of TC77 (4 people) and CISPR (4 people), and representatives (4 people) from product TC/SC (endorsed by SMB). Representatives of ISO, ITU-T, CENELEC and other related organizations were treated as guests. Professor Eisuke Masada of the University of Tokyo served as a “board recognized expert” for 9 years starting December 1992. He was succeeded by me (the author) from December 2000. From October 2006 Professor Noboru Shibuya of the Takushoku University succeeded me as I had to step down from the position to serve TC77 chair. After that I became a member of ACEC in January 2009 in accordance with the new rule that went “Chairs of TC77 and CISPR are required to become a member of ACEC.” At that time I was serving Musashi Industrial University (Now Tokyo City University). When the Chair of TC77 was changed to Professor Hiroyuki Ohsaki in June 2011 the position of an ACEC member was changed from me to Professor Hiroyuki Osaki.

3. Framework of Japan to work on ACEC

The committee in Japan to work on ACEC is the ACEC subcommittee established under the IEC activities promotion conference for upper layers. This organization was established in April 1992 with myself as the leader of the group while I work for the EMC group of NTT Laboratory of Integrated Telecommunication Network. This position was transferred to Professor Eisuke Masada of the University of Tokyo in April 1993 as he became an ACEC expert authenticated by the CA. After that this position was transferred to myself (from 2001) and to Professor Noboru Shibuya of Takushoku University (from 2006) followed by Professor Shinobu Ishigami of NICT (from 2015).

References: (omitted as they are papers written in Japanese)



Masamitsu Tokuda

- 1967 Graduated from Electronics Engineering Department of Hokkaido University
- 1969 Joined NTT, assigned to the Electrical Communications Laboratories
- 1987 Leader of EMC study group
- 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 department of new region creation science of the graduate school of Tokyo University

Major prize 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

Report on the Attendance to APEMC Symposium 2016 Shenzhen, China

By Technical Subcommittee

We attended the symposium to make presentations on two VCCI papers.

Venue: Shenzhen, China

Dates: May 19 – 21, 2016

VCCI Participants: Mr. Shinichi Okuyama, VCCI Technical Subcommittee
Mr. Kunihiro Osabe, VCCI Technical Subcommittee
Mr. Hidenori Muramatsu, VCCI Engineering Manager

1. The gist of the symposium

Technical Program was made of Workshop*, Tutorials, Special Sessions*, Topical Symposium, Regular Sessions*, Plenary Talks and Poster Session, of which we attended the program marked with star (*) held in May 20 and 21.

(1) Workshop

Held on May 18 and 20 with 10 sessions and 10 presentations. We were not able to attend sessions on May 18 due to our itinerary. What follows is on sessions of May 20 we attended.

- WS05: Improved EMC Test Methods in Industrial Environment
 - ① Alternative method of emission measurement based on measurement of RF impedance
 - ② Proposal on an alternative method of radiated emission measurement
 - ③ In-situ measurement method of impedance of a live wire in the frequency range 2kHz – 150kHz
 - ④ Improvement of in-situ measurement method for large EUT

WS05 covered technical issues informative for VCCI to improve in-situ testing procedure among others. In ② discussed was the experimental measurement of radiated emission at the distance 1m. In ③ an attempt was discussed in which impedance of equipment in operation is measured with a current probe and conducted emission is calculated from it. In ④ discussed was that a way to further improve the method of in-situ measurement defined in ITU-T K.38 and CISPR 16-2-5 and how it should be reflected in CISPR 32 situation. Also discussed was in-situ testing method for conducted emissions in the future.
- WS06 New Trend in EMC Test, Measurement and Calibration
 - ① Antenna calibration and site validation method (CISPR 16-1-4, 16-1-5 and 16-1-6) for the measurement of radiated emissions above 1GHz
 - ② High speed and high efficiency SVSWR evaluation method based on Time Domain
 - ③ Conditions required for the antenna including hybrid antenna to be used for FCC conformance

testing based on ANSI C63.4-2014

④ Comparison between measurement with and without boresight for the measurement based on ANSI C63.4-2014

In ① what was explained was the result of a round robin test on antenna directivity required for site validation above 1GHz defined in CISPR 16 series. Problems identified include the characteristics of the site used for the testing, table for antenna and measurement distance among others. It provided a good reference in the method of antenna calibration above 1GHz.

In ③ it was explained that ANSI C63.4-2014 clarifies the conditions for the specifications of hybrid antenna used for the measurement as follows. The size of antenna shall be within 1.5m x 1.5m, VSWR in the measurement frequency band shall be lower than 2.5, the symmetry of antenna shall be less than 1.0dB. Calibration laboratory shall be the one accredited with ISO/IEC 17025.

In VCCI facility registration the use of a hybrid antenna has not been allowed in the past but we will have to come back on that point.

In ④ a report was given on the comparison of radiated emissions measurement in 24 sites with boresight (FCC limits value) and without boresight (CISPR 22 limits value). It was reported that the results show tests with the boresight indicate stricter measurements on some EUTs.

(2) Regular sessions

Presentations on papers for regular sessions were given on May 18 through 21, of which we attended sessions on May 20 and 21.

- TC01: EMC Management/Standard

Subjected was current problems in site calibration for 200 – 1000MHz in SAC. Introduced was the results of experiments in which a small size biconical antenna is used for transmission and the position of receive antenna was fixed. This presentation is considered methodologically informative to VCCI.

- TC02: EMC Measurement and EM Environment

Discussed here were a proposal on RMS-average detection based on disturbance to digital equipment in place of QP detection having disturbed analog radio receivers.

The presentation covered the results of the round robin test and status on the deliberation in CISPR. The proposal covered the change in the limits as well as in the detection method. If this proposed scheme is realized it will give a big impact to manufactures of multimedia equipment. We should closely keep watching the movement on this matter.

- TC08: Smart Power and Low Frequency EMC

Presented here was the possible degradation of utility power quality caused by noises from PE converters and related devices in the environment in which the telecommunication network is built over the low voltage power supply networks known as smart grid. The paper shed the light on this problem based on simulations.

(3) VCCI related papers

The VCCI participants made presentations in the latter half session of in the morning of May 21 on their

papers contributed to and adopted in TC01 and TC02. Furthermore, Mr. Okuyama of the Technical Subcommittee served the position of the session chair in the latter half of the morning session (10:40 – 12:20) of May 21.

- ① Mr. Osabe made a presentation titled “Evaluation of Present Limit for Radiated Emission Measurement in FAR Test Site and Proposal for New Limits according to the Polarization Plane”

This paper discusses the evaluation of the present limits in the measurement of radiated emission in FAR and proposes the establishment of allowance per each polarization of the measurement. Major Qs and As are indicated below.

Q1: Test placement is different in SAC and FAR in CISPR 32. What do you think about it?

A1: Our experiment for comparison this time was conducted in the same setup in order to validate the limits in FAR. To evaluate the difference due to the difference in the test setup is one of subjects of our follow-on study.

Q2: You talked about the validity of the allowance as proven in comparison experiments. But as the uncertainty of measurement is large in 3m measurement, so is not it difficult to do the comparison?

A2: We think our experiment this time almost produced the expected results as we set the same conditions for the test configuration and for the cable termination.

- ② Mr. Okuyama made a presentation titled “Improvement in the Reproducibility of Radiated Emission Measurement in a Fully Anechoic Room by Using VHF-LISN to Control the Termination Condition of the AC Mains Cable Leaving the EUT.”

This paper discusses a proposal on the use of VHF-LISN as terminating condition of EUT power cable to improve the reproducibility of measurement of radiated emissions in FAR site.

Qs and As follow below.

Q1: As far as the past results of the RRT in SAC are concerned the difference in the improvement by device above 150MHz is marginal. Please explain about it.

A1: It is not because of the emission from EUT but of high floor noise in the RRT sites.

Q2: We have CDNE to specify terminating impedance of power supply for the testing of lighting fixtures. What is the intention of additionally proposing VHF-LISN?

A2: The intention is to keep the terminating impedance 50Ω by considering the continuity from AMN for the measurement of conducted emission from the mains port.

(4) Tutorial session

Included in the tutorial session was “Writing a Good EMCT paper: My Perspective” which was very informative in terms of the points to write a good treatise.

(5) Exhibitions

Held in the Convention and Exhibition Center participated by 45 companies on EMC related products such as measuring apparatus, antennas and simulators.

2. Impression

Presentations by Mr. Osabe and Mr. Okuyama of VCCI were made in the session titled “EMC Measurement.” The number of attendants was as many as approximately 30 and 50 each, both of which went lively. Both papers discussed the FAR adopted in CISPR 32 Ed.2 and VCCI’s efforts to implement it.

The themes of the technical sessions we attended included problems in building open sites to be used for antenna calibration and its validation, comparison of measurement results between the one with and the other without boresight.

Not to mention, due to the location of the convention, many Chinese booths were conspicuous.

9 people were awarded among 16 proposed candidates for the Best Student Paper Award. One of them is Japanese and others were mostly of China and Singapore.

We felt VCCI will need to get involved more in the EMC problems of those countries.



At the entrance of the venue



Presentation by Mr. Okuyama



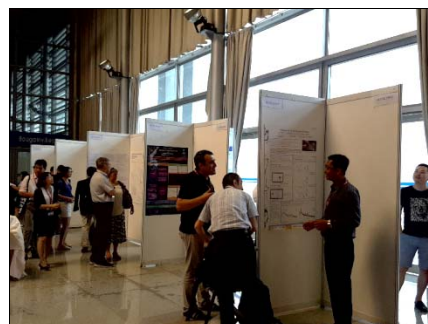
Presentation by Mr. Osabe



Presenters for TC01 session



A scene of the exhibition hall



Poster sessions

Report on the participation in the exhibition of COMPUTEX TAIPEI 2016

By Communication Subcommittee

URL:	http://www.computextaipei.com.tw/ja_JP/index.html
Sponsors:	Taiwan External Trade Development Council (TAITRA) Taipei Computer Association (TCA)
Dates:	May 31 – June 4, 2016
Venue:	Halls 1 and 3 of Taipei World Trade Center Taipei World Trade Center Nangang Exhibition Hall Taipei International Convention Center
VCCI attendants:	Shinji Kuroda, Communication Subcommittee (Hitachi Information Communication Engineering) Yasushi Hirakawa, Communication Subcommittee (NEC Platforms) Akira Oda, Managing director, VCCI Naoyuki Tsurumi, Director, VCCI Yoko Inagaki, VCCI Miki Ichino, VCCI
Exhibit scale:	1,702 companies, 5,042 booths
No. of Visitors:	130,000+
No. of Registered buyers:	39,000 (from 169 countries)

1. Purpose of VCCI participation in the trade show

COMPUTEX TAIPEI is the biggest and world class IT trade show in the Asian crossroad for the IT industry attracting a great deal of buyers from overseas. The show is so influential that it is even said that business for the year is determined by the exhibition here. The majority of computer related products to be exported are exhibited here attracting a great deal of buyers and industry association people. In order to maximize the outreach activities for VCCI we ran our booth in a corner of the Smart Technology & Application area in Hall 1 of TWTC.

2. VCCI booth

- Installed in the Japan Pavilion booth in the Smart Technology Applications & Products area, Hall 1
- May 31 – June 4: Opened for overseas and Taiwanese buyers (VCCI booth opened by June 3)

3. VCCI's exhibition

We had cooperation of Mr. Lin, a contracted local resident as VCCI interpreter and booth attendant. Our

activities included –

- Repeated projection of video to introduce VCCI in English
- Prepared materials for pickup, all gone in the four days
 - VCCI guide (in English) 250 copies
 - Annual report (2014 English version) 100 pieces
 - Table of VCCI standards (in English) 260 copies
 - Fliers in Taiwanese and English 300 copies

4. Remarks and the way forward

4.1 A sketch of the exhibition

COMPUTEX TAIPEI, one of the biggest and most influential information technology exhibition in Asia, was held in the following four exhibition sites.

[TWTC Nangang Exhibition Hall 1]

Media Area, peripherals accessories, communication products,

[TWTC Hall 3]

Smart tech and applications (new category), Handheld Plus Area

[TICC Taipei International Convention Center]

Noted growing companies area

[Taipei World Trade Center Nangang Exhibition Hall]

Components & parts, built-in products, memories, awarded products area, touch application and display products (new), POS related products, computers and system products, pavilions of countries, area for foreign companies and Chinese continent area.

Notable exhibitions of this year included IoT and its applications, wearable devices, smart business solutions and others noted as focused technologies. In “Smart-tech & applications area” (newly added) where VCCI ran its booth, there were many attention getting things including wearable terminals associated with smartphones, eyeglass types, wrist watch type and integrated into sport wares, smart home and smart security to control home appliances and others.

4.2 Public Relations activities

- We made VCCI fliers in Taiwanese and English and distributed them together with VCCI Guide and the Table of VCCI Standards etc.
- We explained VCCI and its significance to Taiwanese IT vendors via an interpreter hired locally
- We asked passing-by exhibition visitors, “Do you know VCCI mark?” as a starter. If the response was positive we explained the content of the flier. We showed visitors the VCCI mark affixed on a digital camera and notebook type PCs we brought so people understand the purpose of the mark.
- Last year we were asked by English speaking visitors if we carry VCCI brochures in English, which we did not, so this year we printed English version in addition to Taiwanese version

- We asked for visitor's card from positive visitors who showed interest in the VCCI mark so we can contact them later.
- Some non-VCCI members as well as members who visited our booth asked us for the process to export ITE to Japan, which indicates that the recognition rate of VCCI is getting improved.
- This time VCCI booth was located in the Japan pavilion where eight Japanese companies were running their booths. This was an advantageous arrangement for VCCI because some visitors dropped in our booth in passing which cannot be much expected in the past cases.

4.3 Trend in VCCI booth visitors

- This year we had relatively many inquiries about the formalities to join VCCI from local vendors of Taiwan (having intention to join VCCI: 20 against 10 in the average year)
- Nationalities of the visitors to our booth were Korea, Indonesia, Singapore, Malaysia (ASEAN region), Italy, US, Mexico (Western countries and Central and South America) and India and Iran among others. This fact indicates this exhibition is reputed as a world class exhibition.
- The location of the VCCI booth this time was advantageous to draw attention of Japanese visitors as well because most of them visit the Japan pavilion.
- There were cases that ODM/OEM manufacture came to the VCCI booth and asked about the process to join VCCI. It is presumably because Japanese buyers ask ODM/OEM suppliers if they are a VCCI members.

4.4 Performance of the day

- All of hand-out material were gone due to the advantageous booth location in the main exhibition area where many visitors dropped in.
- Booth visitors: Approximately 500, Interested in joining VCCI: 20 (against 10 in the average year)

4.5 Others

- Words "What is VCCI?" in the brochure drew the attention of visitors. It caught visitors' curiosities which helped us to start the explanation about the VCCI mark.

4.6 Our impressions

We renewed our recognition that COMPUTEX TAIPEI is the best event for PR on VCCI as the convention is visited by over 130,000 suppliers and buyers in and out of the Chinese Taipei. We are confident that we did whatever we should on the PR of VCCI. We think our continuous and global participation in exhibitions like this is indispensable to the advancement of VCCI.



A scene of the booth (1)



A scene of the booth (2)



Exhibition hall



VCCI attendants

Report on Explanatory Meeting on - (1) CISPR 32 based VCCI rules (2) 2015 VCCI Business Results

By VCCI Secretariat Office

Date/Time: July 8, 2016 10:00 – 17:00

Venue: Large hall, Basement 2nd floor, Kikai Shinko Kaikan

Attendants: Approximately 150

Day's program

Time	Subjects and Speakers
	(Part 1 - Explanation on CISPR 32 based VCCI Rules)
10:00-10:30	Basic philosophy behind the new rules establishment Mr. Oda, VCCI senior managing director
10:30-11:00	The gist of the new rules Mr. Mine, Chair, Steering Committee
11:00-11:45	The gist of the new technical requirements Mr. Hoshi, Chair, Technical Subcommittee
11:45-12:00	Qs & As
12:00-13:00	Lunch break
13:00-13:30	The new rules on measurement facility registration Mr. Enoshima, Chair, Measurement Facility Registration committee
13:30-13:45	The new rule on market sampling test Mr. Kanno, Chair, Market Sampling Test Subcommittee
13:45-14:30	Interpretation of the new rules Mr. Hoshi, Chair, Technical Subcommittee
14:30-14:40	Qs & As
14:40-15:00	Break
	(Part 2 - 2015 VCCI Business Results)
15:00-15:05	Greetings Mr. Kawakami, President of VCCI
15:05-15:20	VCCI Business results Mr. Oda, VCCI Senior Managing Director
15:20-15:35	Steering Committee Mr. Mine, Chair, Steering Committee
15:35-15:50	Activities of subcommittees • Technical Subcommittee Mr. Hoshi, Chair, Technical Subcommittee
15:50-16:05	• International Relations Subcommittee Mr. Uchida, Chair, International Relations Subcommittee
16:05-16:20	• Market Sampling Test Subcommittee Mr. Kanno, Chair, Market Sampling Test Subcommittee
16:20-16:35	• Communication Subcommittee Mr. Kuroda, Chair, Communication Subcommittee
16:35-16:50	• Education and Training subcommittee Mr. Hirata, Chair, Education Subcommittee
16:50-17:00	Qs & As
17:00	Adjourn



Status on FY2016 Market Sampling Test Operations

Market Sampling Test Subcommittee

As of July 31, 2016

Planned number of market sampling tests	Loan-based		45		100					
	Purchase-based		55							
Sampling test Grand total	Selected	Cancelled (unrealized shipment, etc.)	Owner's consent pending	Testable samples	Test completed	Judgment awaited	Judgment			
							Passed	Failed - tentative		
								Finally passed	Finally failed	Pending
Grand total	39	3	4	32	14	9	5	0	0	0
Previous month grand total	0	0	0	0	0	0	0	0	0	0

Loan-based testing total	22	3	3	16	7	3	4	0	0	0
1 st Quarter	22	3	3	16	7	3	4	0	0	0
2 nd Quarter	0	0	0	0	0	0	0	0	0	0
3 rd Quarter	0	0	0	0	0	0	0	0	0	0
4 th Quarter	0	0	0	0	0	0	0	0	0	0

Purchase-based testing total	17	0	1	16	7	6	1	0	0	0
1 st Quarter	17	0	1	16	7	6	1	0	0	0
2 nd Quarter	0	0	0	0	0	0	0	0	0	0
3 rd Quarter	0	0	0	0	0	0	0	0	0	0
4 th Quarter	0	0	0	0	0	0	0	0	0	0

Final Result

Passed	Failed	Pending
5	0	0

Document inspection	Selected	Cancelled (withdrawal, etc.)	Owner's consent pending	Inspectable samples	Inspection Completed	Judgment awaited	Judgment	
							Cleared	Problems identified
	20	0	5	15	12	4	8	0

Report from the Secretariat

● List of Members (May 2016 ~ July 2016)

New Members

Membership	Member No.	Company Name	Country
Regular	3734	Techno Science Japan Co., Ltd.	JAPAN
Regular	3735	FiberLabs Inc.	JAPAN
Regular	3741	Toshiba Client Solutions CO., LTD.	JAPAN
Regular	3748	GLOBAL TAX FREE., CO. LTD	JAPAN
Supporting	3740	AKITA Industrial Technology Center	JAPAN
Regular	3705	Avalue Technology Inc.	CHINESE TAIPEI
Regular	3716	Rubrik International Inc.	USA
Regular	3719	THINKWARE SYSTEMS CORPORATION	KOREA
Regular	3723	dnp denmark as	DENMARK
Regular	3730	Velocloud Networks, Inc.	USA
Regular	3736	HGST Inc.	USA
Regular	3737	Jogtek Corp	CHINESE TAIPEI
Regular	3739	FUJIFILM VisualSonics, Inc.	CANADA
Regular	3742	Beijing Memblaze Technology Co., Ltd.	CHINA
Regular	3743	Genew Technologies Co., Ltd.	CHINA
Regular	3745	Innowireless Co., Ltd.	KOREA
Supporting	3738	Shanghai Inspection and Testing Institute of Instruments and Automatic Systems	CHINA
Supporting	3750	WH Technology Corp.	CHINESE TAIPEI

Change of Company Name

Membership	Member No.	Company Name	Country	Former Company Name
Regular	131	Datalogi ADC Inc.	JAPAN	IDEC AUTO-ID SOLUTIONS Corporation
Regular	908	KONICA MINOLTA JAPAN CO., LTD.	JAPAN	Konica Minolta Business Solutions Japan Co., Ltd.
Regular	2918	NETSCOUT	USA	Fluke Networks, a division of Fluke Electronics Corporation
Regular	2945	Global Scanning Denmark A/S	DENMARK	Contex A/S
Regular	3383	Ciena	USA	CYAN
Regular	3631	SoftBank Robotics Europe	FRANCE	Aldebaran Robotics
Regular	3632	Milestone Systems A/S	Denmark	Milestone Systems Inc.

Request : In case of any change in your company name, please kindly advise VCCI.
Use the "Notice of Change" at VCCI Website.

Withdrawal Members

Membership	Member No.	Company Name	Country
Regular	473	SYSMEX RA CO., LTD.	JAPAN
Regular	902	Imation Corporation Japan	JAPAN
Regular	1680	BITS CO., LTD.	JAPAN
Regular	2864	Carestream Health Japan, Co., Ltd.	JAPAN
Regular	2948	MASA CORPORATION	JAPAN
Regular	3412	Freecom Technologies K.K.	JAPAN
Regular	518	Allied Telesis Inc.	USA
Regular	3521	ZOTAC International (Macao Commercial Offshore) Limited	HONG KONG
Regular	3653	Spacelink Corporation	KOREA
Regular	3697	TYCO ELECTRONICS CORPORATION	USA

● VCCI Events Calendar

FY2016

<p>April</p> <ul style="list-style-type: none"> • VCCI Basic Course for Measurement Engineers • Exhibition at TECHNO FRONTIER 	<p>May</p> <ul style="list-style-type: none"> • VCCI Course for Measurement Engineers • Computex Taipei 	<p>June</p> <ul style="list-style-type: none"> • VCCI Course on Radiated EMI Measurement Above 1GHz • Release VCCI Dayori No.121
<p>July</p> <ul style="list-style-type: none"> • VCCI Business Reporting Meeting • VCCI Course of Rules for Voluntary Control Measures (tentative) • Release Annual Report 	<p>August</p>	<p>September</p> <ul style="list-style-type: none"> • VCCI Basic Course for Measurement Engineers • Release VCCI Dayori No.122
<p>October</p> <ul style="list-style-type: none"> • VCCI Course for Measurement Engineers • Exhibition at CEATEC JAPAN • VCCI International Forum 	<p>November</p> <ul style="list-style-type: none"> • VCCI Course on Radiated EMI Measurement Above 1GHz • VCCI Course on Antenna Calibration and NSA Measurement 	<p>December</p> <ul style="list-style-type: none"> • VCCI Seminar on Automated and Manual Measurement • Release VCCI Dayori No.123
<p>January</p> <ul style="list-style-type: none"> • VCCI Technical Symposium 	<p>February</p>	<p>March</p> <ul style="list-style-type: none"> • Release VCCI Dayori No.124

● State of Conformance Report Submitted (April 2016 ~ June 2016)

					April 2016			May 2016			June 2016		
			Class A	Class B	Class A	Class B	Total	Class A	Class B	Total	Class A	Class B	Total
Computer	Server	Super Computer, Server, etc.	A 2	a 2	28	5	33	16	2	18	24	3	27
	Tabletop type	WS, Desk-top PCs, etc.	B 2	b 2	3	18	21	0	9	9	1	12	13
	Portable type	Note PCs, Tablet PCs, etc.	C 2	c 2	0	31	31	0	23	23	1	59	60
	Others	Office Computer, Wearable computers, etc.	E 2	e 2	4	1	5	2	0	2	1	2	3
Peripherals/Terminals Equipment	Storage Device	HDD, SSD, USB Memory, Media drives, etc. Disk drives, NAS, DAS, SAN, etc.	G 2	g 2	5	21	26	10	28	38	8	21	29
	Printer	Printer (Compound equipment included), etc.	H 2	h 2	15	3	18	6	8	14	6	8	14
	Display	CRT displays, Monitor, projector, etc.	J 2	j 2	19	50	69	7	52	59	24	36	60
	Input/Output Device (excluding Auxiliary Memory, Printer, Display)	Image scanners, OCR, etc.	M 2	m 2	3	15	18	4	21	25	7	17	24
	General Purpose Terminal	Display control terminals, etc.	N 2	n 2	0	0	0	0	2	2	1	0	1
	Exclusive Terminal	POS, Terminal for Financial and Insurance use, etc.	Q 2	q 2	11	1	12	14	2	16	7	3	10
	Other Peripherals Equipment	Others (PCI cards, Graphics cards, Mouse, Keyboard, etc.)	R 2	r 2	9	19	28	4	21	25	5	20	25
Audio visual equipment	Broadcast receivers	Television, Radio, Tuner, Video recorder, Set-top Boxes, etc.	K 2	k 2	0	0	0	0	0	0	0	2	2
	Audio equipment	Speaker, Amplifier, IC recorder, MP3 player, Headsets, etc.	L 2	l 2	0	3	3	0	1	1	0	2	2
	Video/Camera equipment	Digital video cameras, Web cameras, Network cameras, Video players, Photo frames, Digital-camera, etc.	I 2	i 2	1	5	6	9	1	10	6	8	14
	Others	Other Audio visual equipment	P 2	p 2	0	3	3	0	1	1	0	2	2
Copying Machine/Compound equipment	-	Copying Machine/Compound equipment, etc.	S 2	s 2	3	0	3	1	4	5	1	0	1
Communications Equipment	Terminal equipment	Mobilephone, Smartphone, PHS telephones	T 2	t 2	0	3	3	0	0	0	0	5	5
		Telephone Equipment (PBX, FAX, Key Telephone System, etc.), Cordless telephones	U 2	u 2	1	1	2	1	2	3	2	4	6
	Network related equipment	Network Channel Terminating Equipment (Modem, Digital Transmission Equipment, DSU, TA, etc.)	V 2	v 2	4	3	7	1	2	3	3	0	3
		LAN Equipment (Router, HUB, etc.), Switching-node, etc.	W 2	w 2	46	19	65	53	13	66	37	17	54
	Others	Other Communications Equipment	X 2	x 2	10	11	21	17	9	26	23	4	27
Entertainment and educational equipment	Electronic stationeries	Electronic dictionaries, Electronic book readers, etc.	D 2	d 2	0	0	0	0	0	0	0	1	1
	Electronic toys	Game machines, Game pads, Toy drones, etc.	Y 2	y 2	0	1	1	0	3	3	0	2	2
	Lighting control equipment for entertainment	Lighting control equipment for entertainment	Z 2	z 2	0	0	0	0	0	0	0	0	0
	Others	Others (Navigator, etc.)	F 2	f 2	0	0	0	0	0	0	0	1	1
Others		O 2	o 2	4	5	9	2	2	4	5	0	5	
Total				166	218	384	147	206	353	162	229	391	

● State of Registration of Measurement Facilities (Newly registered or renewed)

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 (May 2016 – July 2016)

R: Field strength measuring facility C: Mains Port Conducted interference measuring facility T: Communication Port Conducted interference measuring facility G: Radiated EMI measurement facilities above 1GHz

No	Company name	Equipment name	3 m	10 m	30 m	Dar k 3m	Dar k 10m	Registration number	Effective date	Location	Contact to:
11640	Sporton International Inc.	Zhu-Bei Conducted Test Site CO02-CB	-	-	-	-	-	C-4867	2019/5/29	No.8, Lane 724, Bo-ai Street, Zhubei City, Hsinchu County 302, Taiwan	886-3-327-3456
11641	Sporton International Inc.	Zhu-Bei Conducted Test Site CO02-CB	-	-	-	-	-	T-2356	2019/5/29	No.8, Lane 724, Bo-ai Street, Zhubei City, Hsinchu County 302, Taiwan	886-3-327-3456
11675	Sporton International Inc.	Nei-Hu Open Area Test Site OS03-NH	-	○	-	-	-	R-4377	2019/5/29	No.3, Ln. 238, Kangle St., Neihu Dist., Taipei City 114, Taiwan	886-3-327-3456

Before putting down a pen

Park

Recently renovation was made on a nearby park. Since the existing playground equipment are not so old I wondered what the construction is for. The fact was, it was to install a flowerbed. This relatively small park is not allowed to be used for such plays as soccer and baseball taking up large area for small number of children and possibly injuring other kids. Nevertheless lower year kids were injured by higher year kids playing such ball games from time to time. The purpose of making a flowerbed with large square flower bowl of size 60cm by 60cm here and there is to prevent kids from playing such ball games.

According to the information coming through my wife, this was not the only reason or true reason to get the park renovated. Resident movement seems to be behind the scene. There is a condominium accommodating 30 or so households in the back of the park. Some people there have been claiming to the ward office that the noise kids make in the ball games in the park is irritating, which seems to have moved the ward office.

When I was a kid 30 some years ago people were

more permissive to noises made by kids as it is natural thing occurring in parks. At the same time it is a fact that some people are annoyed with noises made by kids playing in the park around 3 pm. In recent years it has been pointed out that residents connection with neighbors is getting thinner. This fact means it is increasingly necessary to pay attention to the right and feeling of neighbors.

In thinking about merits of letting kids play in a park they are not to be belittled. They can build stronger bodily functions in their physical play. They can also develop the sociality in playing with other kids with various physical and mental grades. This was not at all special things in the old days. On the other hand we should not look away from risks and troubles lie hidden which was not imaginable in the old days. Just recently a man aged 68 was arrested by the police as he drove his car into a line of elementary school kids in revenge to neighborhood people in Kaizu city, Gifu prefecture.

What we parents should do? While keeping old values in mind we should not be arrested by it and accept new views about the world we live in.
(Y.K.)

**No part of this book may be reproduced
in any form without permission.**



VCCI DAYORI No.122 (2016.10) Not for Sale

Issued on **September 20, 2016**

Compiled and issued by:

VCCI Council

NOA Bldg. 7th Floor,

3-5 Azabudai 2-chome, Minato-ku, Tokyo 106-0041

Tel : 03-5575-3138

Fax : 03-5575-3137

<http://www.vcci.jp>