

VCCI Technical Explanatory Meeting Fiscal Year 2005

Technical Subcommittee

The subject meeting was held as outlined below to introduce activities in fiscal year 2005 of the Technical Subcommittee and five working groups under the subcommittee, revisions of the Agreement of VCCI to be implemented from April 2006, and the Regulations for Voluntary Control Measures and technical requirements for Kit Module—a new system of VCCI.

Date: February 10, 2006 (Friday)

Time: 13:00 – 17:00

Venue: Second basement large hall, Kikai Shinko Kaikan

Total number of attendees: 130

Program

Time	Subject	Speaker
13:00 - 13:15	Opening remarks	Haruyoshi Nagasawa, VCCI Director
13:15 - 13:35	Activities of VCCI Technical Subcommittee and each WG	Shozo Satake, Chairman of VCCI Technical Subcommittee
13:35 - 14:00	“Radiated EMI Measurement Method WG” “Effect of Difference in AC Adapter Layout Method on Test Results of Radiated EMI Measurement”	Seiji Matsuda, Member of the WG
14:00 - 14:25	“Radiated EMI Measurement Method WG” “Survey on Line Impedance Stabilization Network for VHF Band to be Used for Radiated EMI Measurement (2 nd)”	Katsuyuki Tanakajima, Member of the WG
14:25 - 14:40	“Kit Module Measurement Method WG” “Relationship between MP Measurement Method and Radiated EMI”	Toshiki Shimasaki, Convener of the WG
14:40 - 15:00	Break	
15:00 - 15:15	“Agreement of VCCI Revision WG” Revision of Agreement of VCCI - “Incorporation of CISPR 22 Edition 5 and Response to MOU between FCC and VCCI”	Shozo Satake, Chairman of VCCI Technical Subcommittee
15:15 - 15:35	“Engineering Requirements (EUT Configuration, Normative Annex 1-1 Supplementary Test Conditions for Equipment under Test) - Revision based on harmonization with CISPR 22 Edition 5”	Kunihiro Osabe, Vice-Chairman of VCCI Technical Subcommittee
15:35 - 15:55	“Engineering Requirements (Communication Port) Revision of ISN characteristics and other revisions based on CISPR 22 Edition 5 and their application”	Hiroshi Yamane, Convener of Conducted EMI Measurement Method WG
15:55 - 16:10	“Measurement Facility Registration Revision based on MOU between FCC and VCCI”	Seichi Kawashima, Member of Technical Subcommittee
16:10 - 16:20	“Review of the Contents of Kit Module (Engineering Requirements)”	Toshiki Shimasaki, Convener of the WG
16:20 - 16:40	Activities of Market Sampling Test Subcommittee “Revision of regulations for Market Sampling Test Subcommittee”	Shigenori Mizuno, Chairman of Market Sampling Test Subcommittee
16:40 - 17:00	Qs & As	All speakers

The details are to be uploaded to the VCCI Web site.

In the technical explanatory meeting this time, Director Nagasawa explained as opening remarks about the Memorandum of Understanding (MOU) between VCCI and FCC is scheduled to be concluded on April 1 and explained differences between the current conformity verification reporting procedure and the procedure after the conclusion.

Then, the Chairman explained the activities of Technical Subcommittee and WGs. Especially, as the CISPR 22 Edition 5 was issued this time, he explained the technical activities, and told that two of them would be reported.

Conducted EMI Measurement Method WG reported on the influence of the difference of AC adapter's layout method on the test result by using conducted EMI measurement method.

This is the report on the result of experiment to test how the AC adapter location, which is stipulated newly in CISPR 22 Edition 5, influences on measurement results. This experiment was conducted as the case to use AC cord of 80cm or shorter in length, and the case to connect directly with AC outlet were stipulated.

Radiated EMI Measurement Method WG reported as the survey (2nd) on line impedance stabilization network for VHF band to be used for measuring radiated EMI". As a cause of dispersion of radiated EMI measurement results between test sites, it was speculated that the frequency characteristics vary depending on test site due to the lack of specification for source impedance, we used the one for VHF band among the line impedance stabilization networks to keep regular source impedance, and conducted measurements using actual machine. And this is the report on the result.

As a conclusion, we found that maintaining regular source impedance improves the dispersion between the actual measurement results of test sites.

Kit Module Measurement Method WG reported on the relationship between MP measurement method and radiated EMI.

It reported on the experiment to investigate the relationship comparing the result of measuring HDD by MP method and the result of radiated EMI measurement. The result showed the relationship as the frequency that resulted in a high value also resulted in the high value when measuring radiated EMI.

After taking a break, explained the contents of revisions made in the Agreement of VCCI. Then again, the chairman of Technical Subcommittee made a general description about revisions, the vice-chairman of Technical Subcommittee explained the EUT configuration, the revisions in technical requirements and the supplementary test conditions for Equipment Under Test incorporating the contents of CISPR 22 Edition 5, in particular, about the configuration incorporating the latest category of models.

Next, explained the revisions about "communication port" in detail. There were drastic changes in CISPR 22 Edition 5. As we incorporated all the changes, we also made drastic changes in the contents. However, as the application to tolerances is still under consideration, the changes are substantially not compulsory. The application is scheduled to start from April 2008 after setting a 2-year grace period. It is planned to have companies make registrations of measurement facilities such as ISN for that period.

Then, explained the contents of revisions regarding measurement facility registration based on MOU between FCC and VCCI. At the same time, explained the changes in how to fill in forms for measurement facility registration.

Next, explained the revisions made after reviewing the contents of the technical requirements in Kit Module Program.

Lastly, explained the revisions of regulations about market sampling test.

The main changes are: (1) Changed the model to be sampled, from the one selected from the models reported on their conformity verifications to the model stipulated in article 3 of the Regulations for Voluntary Control Measures (that is, changed to ITE (Information Technology Equipment)); (2) Newly specified the contents of actions to be taken when failed and included relevant actions into the handling of test results; and (3) If failed, the member name is also disclosed.

Upon completing all explanations, started Qs and As.

Main contents are as follows:

Q1: In the experiments using LISN for VHF band, the impedance of each test site was measured?

A1: Yes we did.

Q2: The multifunction equipment is subject to VCCI?

A2: The TV with PC functions can be considered as typical multifunction equipment, in this case, however, we consider that only the PC functions are subject to VCCI. That is to say, you can measure the PC functions with TV functions stopped.

Q3: Among display units, what the test conditions for LCD monitors will be?

A3: It had been stipulated as CRT display unit, however, we stipulated this time its test conditions to cope with the largely increasing number of LCD display units. The contents to display will be the pattern to produce the worst case, not limiting to 'H' pattern.

Q4: We would like to know your activity regarding PLC (Power Line Communication).

A4: At present, it is not considered as a subject of VCCI. For the information about PLC itself, visit the web site of Ministry of Internal Affairs and Communications. For your information, its deliberation stage was returned to zero (stage zero) in international meeting of CISPR, however, Japan is working independently as a project.

Q5: There is a testing arrangement to use the ferrite clamp attached to power line. Tell us the characteristics of the ferrite.

A5: VCCI has never issued the testing arrangement to use the ferrite clamp (CISPR 22 Edition 4). VCCI is not covering CISPR 22 Edition 4.

Q6: Tell us about the testing method for digital cameras. The test is also required for the operation modes that need human intervention?

A6: The test is not required for the modes that need manual operation. The test is only required for the cases of uploading to PC or controller by connecting using USB etc.

Q7: Is it acceptable to categorize web cameras and network cameras as LAN equipments?

A7: We assume that the web cameras are those attached to PC body (Notebook PC). So we do not consider them as LAN equipment. There is no problem with categorizing the network cameras as LAN equipment. If there is any similar product or model not included in the category this time, please make a suggestion. It will be discussed in subcommittee meeting or other meeting.

Q8: We learned about the AC adapter location when measuring conducted EMI. The same is true when measuring radiated EMI?

A8: Yes, it's true.

Q9: In Kit Module, the specification for Magnetic Probe is Strip Line 50Ω. Does it become 50Ω if making exactly as specified?

A9: That's true. But we recommend reading the description about the equipment calibration in the latter half of the Technical Requirements for confirmation.

- Q10: I heard that the report of the Telecommunications Council would be published around October. Will the contents of the report be reflected in VCCI's technical requirements?
- A10: That's true. Some changes in contents are possible. In such case, the changes will be informed through our web site and reflected on the Agreement of VCCI. The changes will be reflected on the printed Agreement of VCCI when revising them in April 2007.
- Q11: The MOU with FCC seems to have taken a long time. When did you start?
- A11: We started fairly long time before, but the concrete discussions started about two years ago.
- Q12: When the Equipment Under Test is a peripheral device, the words meaning "shield or other method will do" for other equipments in the system were deleted. When it obviously seems to be the noise of opposing machine, it can be deleted from the measured data?
- A12: It is described in Technical Requirements 6.1.3 (3). Refer to that section.
Reference: The section 6.1.3 (3) in Technical Requirements describes as follows:
(3) In the case of EUT that functionally interacts with other ITE, including ITE whose power is supplied from a host unit, either the actual interfacing ITE or a simulator may be used to provide representative operating conditions, provided the effects of the simulator can be isolated or identified.*
If the ITE is designed to be a host unit to other ITE, it may have to be connected so that the host unit can operate under normal conditions.
*: If the radiation emissions of the EUT and the simulator meet the specified limit, it is not necessary to isolate the simulator from the EU
- Q13: Among the test conditions for the Equipment Under Test, from the conditions for EMI field strength measurement, the words meaning "the portion of surplus length of AC cord may be bundled after folding to make the bundle 30 to 40cm in length" were deleted. Is there any rule for handling of the portion of surplus length?
- A13: In case of EMI field strength measurement, it is specified not to bundle AC cord, and the deleted portion was an obvious error. So, we deleted that portion. However, please note that when measuring conducted EMI (EMI terminal voltage measurement), the portion of surplus length of AC cord is to be bundled after folding to make the bundle 30 to 40cm in length.
- Q14: Regarding the measurement method and connection of interface cable, the description about the cable length was specified as "In case that the manufacturer prepared various lengths of cables, the cable of the length to generate maximum EMI shall be used". When the cable length is unknown depending on the user, which length of cable shall be used? Is it necessary to prepare several lengths of cables and confirm the cable of the length that generates maximum EMI, and use it for final measurement?
- A14: It is preferable to prepare various lengths of cables for measurement, however, you may use the cable of the length determined by the manufacturer. In test site, the measurement according to the instruction of manufacturer is acceptable.
- Q15: For the case to use wideband antenna for site attenuation measurement, do you have a plan to introduce the correction factor GSCF specified by ANSI?
- A15: As described in (Note), we will make revision when CISPR standardizes it.

