



EMC Regulations in Japan and VCCI

February 28, 2013

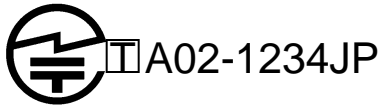
Shozo Satake

VCCI Council

Conformity Labels Required



Wireless LAN is subject to Radio Law (電波法)

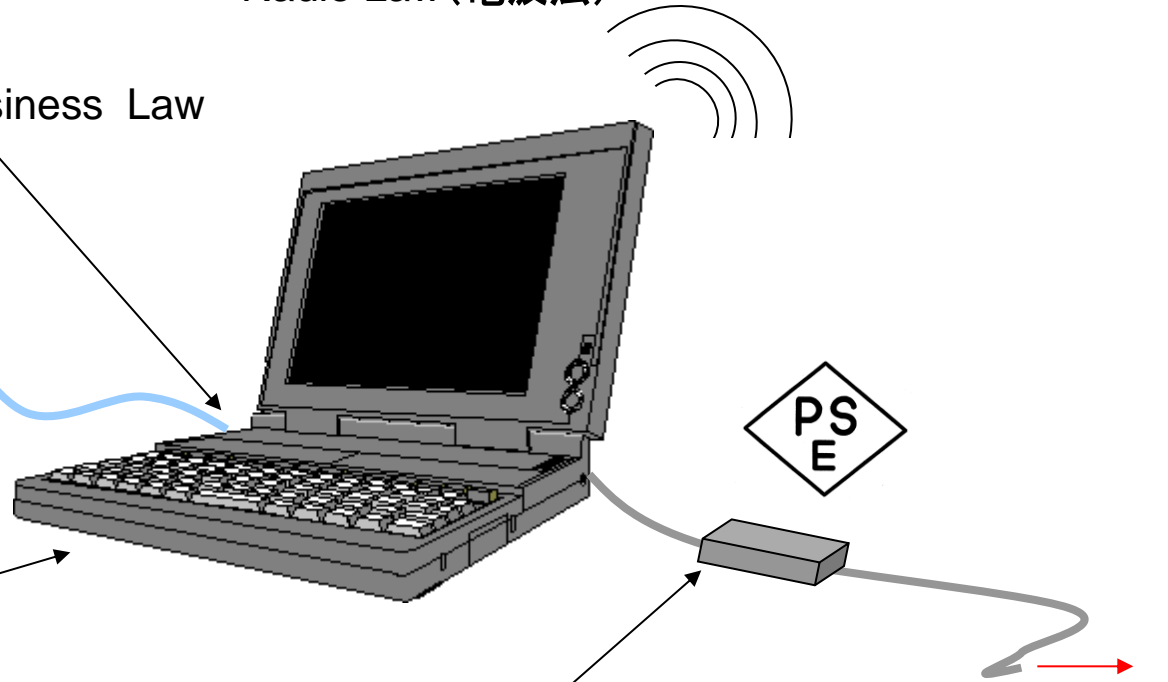


Modem is subject to Telecommunications Business Law (電気通信事業法)

To TEL Line



EMI







AC Adapter (Power Supply) is subject to DEN-AN Law (電気用品安全法)

To AC Power Supply

EMC-related Regulations in Japan



	Emission	Immunity
ITE	<p>VCCI</p> <p>Computer, Tablet PC, Peripherals </p>	Each Industrial Association's Standard
TTE	<p>Facsimiles Modems</p> <p>Radio Law</p> <p>Radio Mobile Phones </p>	
Electrical Appliance	<p>Copiers</p> <p>Microwave Ovens</p> <p>DEN-AN Law</p> <p>TV, VCR, Refrigerators Transformers, Electric Wires Fluorescent Lights, Others</p> <p> </p>	

EMC Regulation Scheme and VCCI

	VCCI	Den-An Law Specified	Den-An Law Non-specified	EU	US (PC etc.)
LEGAL rq't	NO	Legal	Legal	Legal	Legal
Technical STD's	IEC/CISPR	Domestic STD or IEC/CISPR	Domestic STD or IEC/CISPR	IEC/CISPR	IEC/CISPR
TEST rq't	Self-Test	Authorized-Test	Self-Test	Self-Test	Self-Test
LAB rq't	Registration	Designated Third Party	(Non)	(Non)	Accreditation
CONFORMITY	DOC	Certification	DOC	DOC	DOC
LABEL	VCCI mark	◇PSE mark	OPSE mark	CE mark	FCC mark

DOC: Declaration of Conformity

What is VCCI?



A membership organization with the purpose to suppress electromagnetic interference given out from information technology equipment distributed by the members in Japan.

History

- Founded in 1985 as voluntary membership organization jointly by information technology related industry associations in Japan
- Reconstituted as a legal entity “VCCI Council” in April 2009

The Feature of VCCI



➤ Constitution

A not-for-profit membership organization governed by internal council

➤ Scheme to underpin VCCI operations

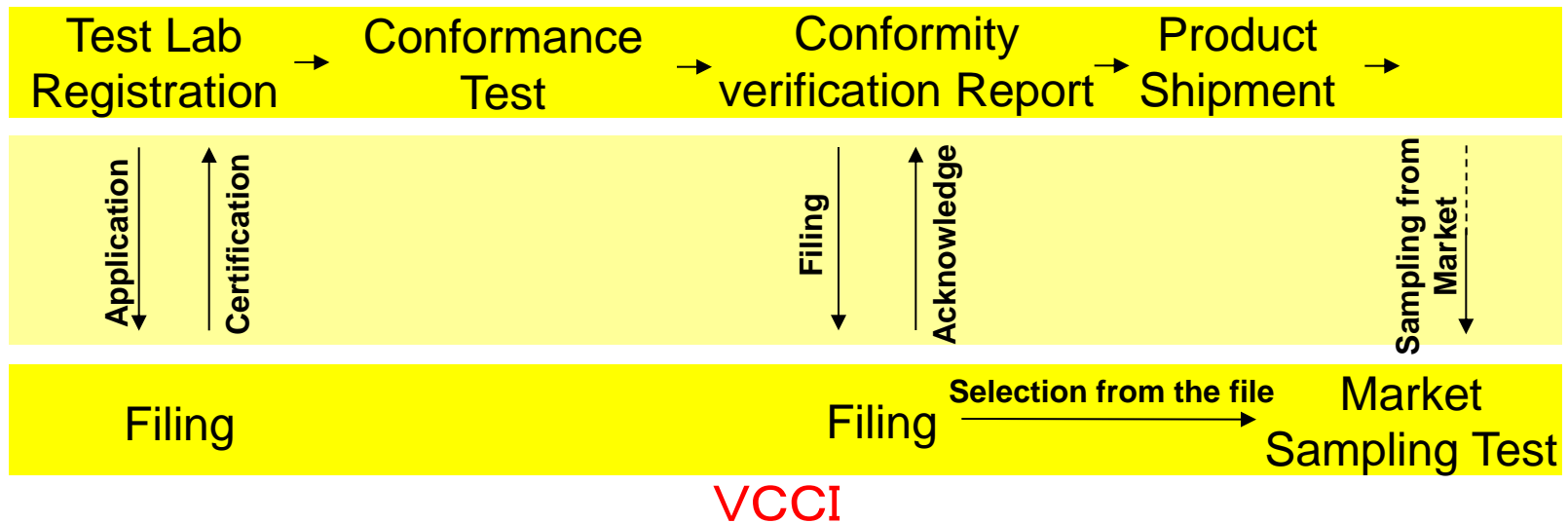
1. **Registration of members' measurement facilities** used for conformity assessment against VCCI requirements for upper limits of EMI emission
2. **Members' own declaration of conformity** in the form of conformity verification report filed to VCCI before the shipment of the product bearing the VCCI mark
3. **Market sampling test** to maintain the confidence in the declared conformity symbolized by the VCCI mark affixed on the product

VCCI Conformity Procedure



- **Measure products** by VCCI registered measurement facility, and **confirm the conformity** with the disturbance limits.
- Submit a **conformity verification report** of the applicable ITE to VCCI prior to placing the ITE into the market.
- Affix the **VCCI mark** on each product, and supply the **warning statement** in instruction manuals.
- Cooperate with VCCI for **market sampling test**.

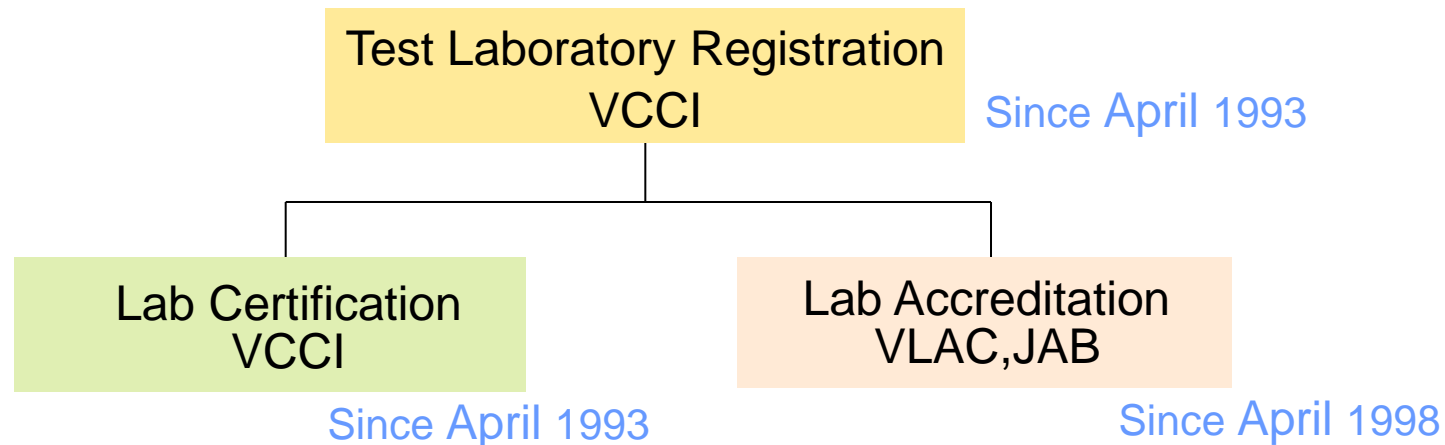
VCCI Members



Test Laboratory Registration



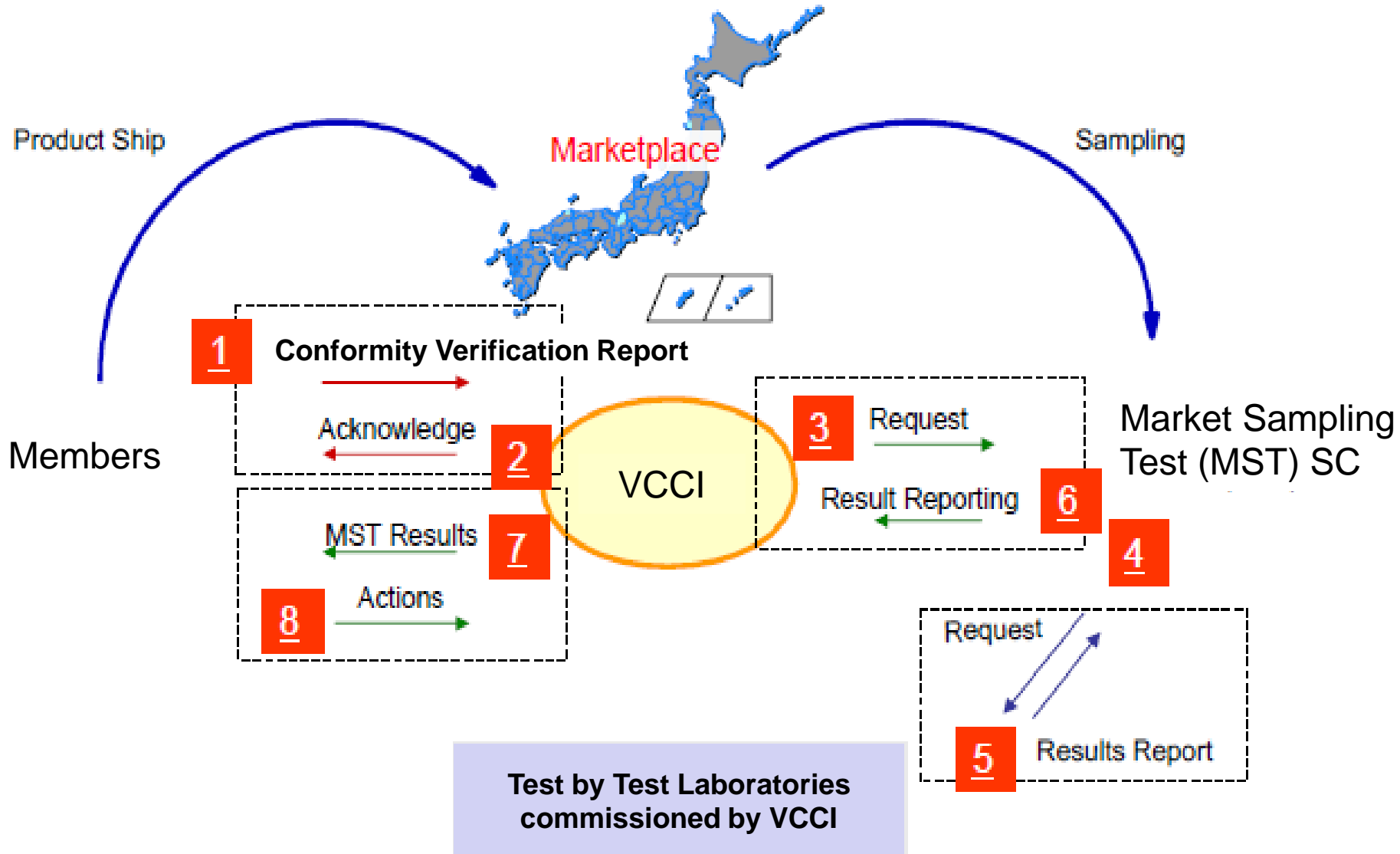
- Test lab to be used for VCCI conformance test must be registered to VCCI prior to starting a VCCI conformance process
- Two routes are available for technical assessment of the laboratory to be registered. One is **certification** by VCCI and the other is laboratory **accreditation** (ISO 17025 + VCCI technical rules) by VLAC or JAB.
- In April 2007 VCCI extended the accreditation scheme to NVLAP, A2LA and ACLASS that officially include VCCI rules, with the exchange of letters under Japan-US telecom MRA.



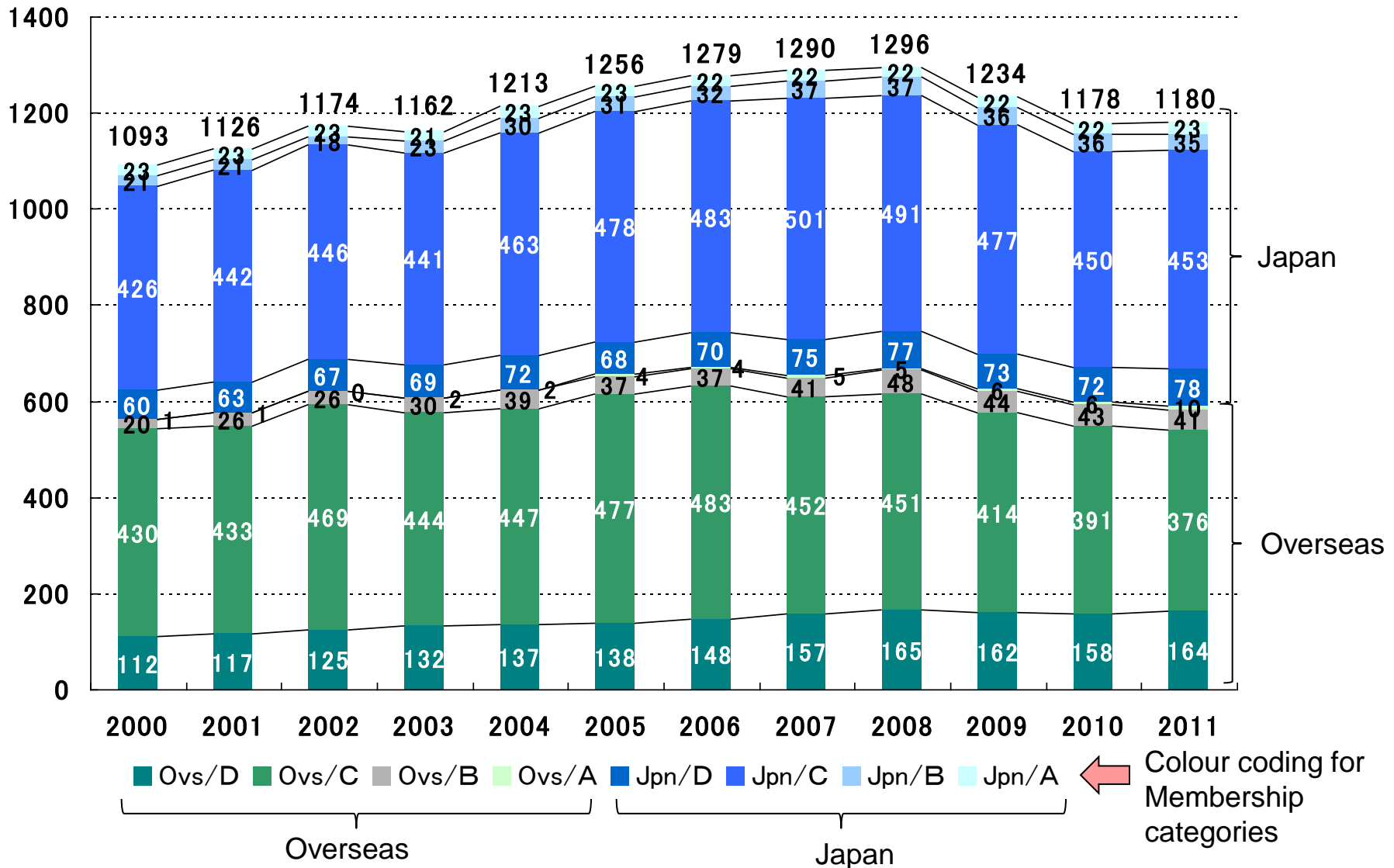
⇒ Choice of certification or accreditation is a member-option.

VLAC, JAB : Accreditation Bodies in Japan
NVLAP, A2LA, ACLASS : Accreditation Bodies in US
MRA : Mutual Recognition Agreement

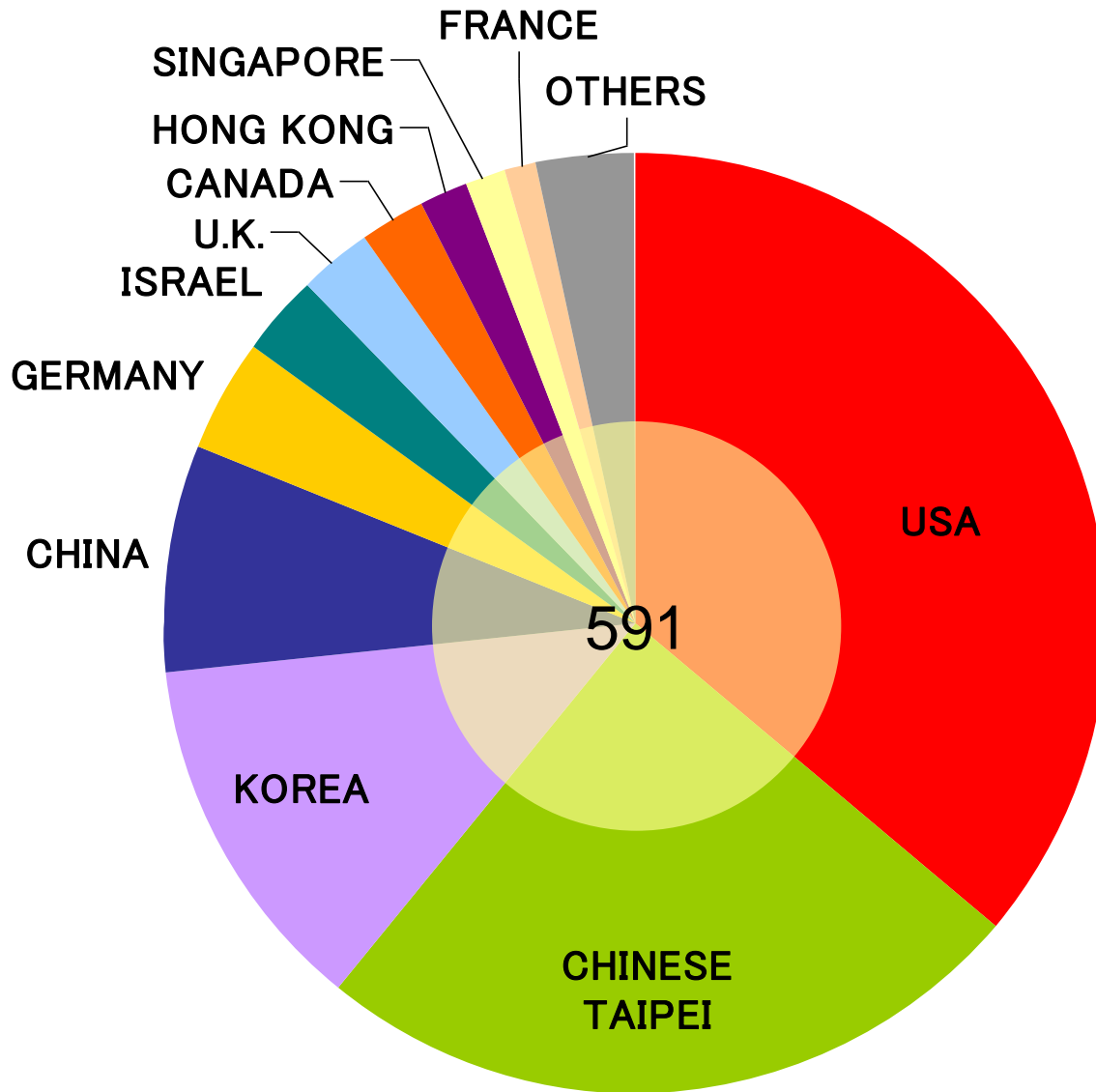
Market Sampling Test



Changes in membership

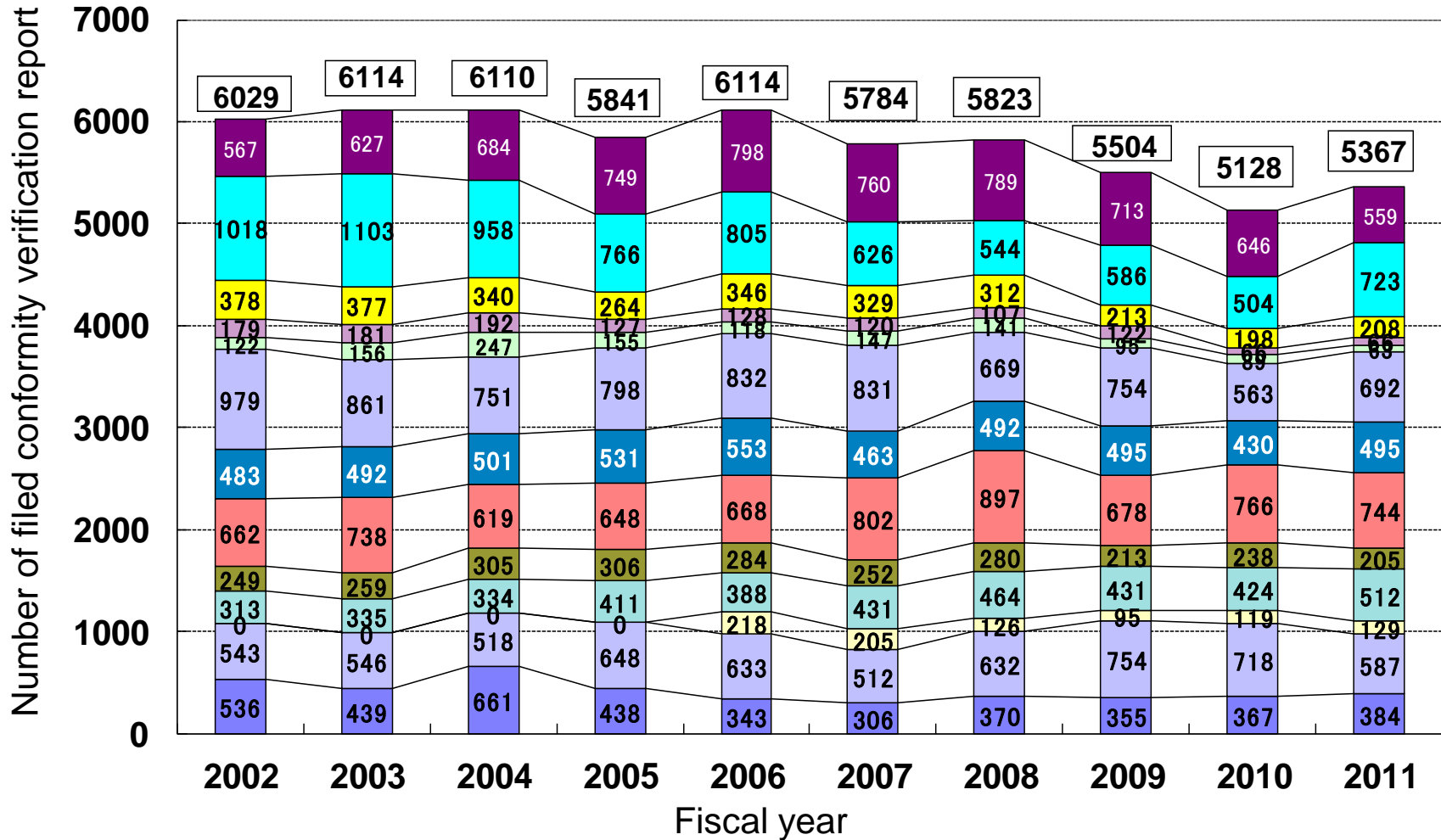


Breakdown of Overseas Members

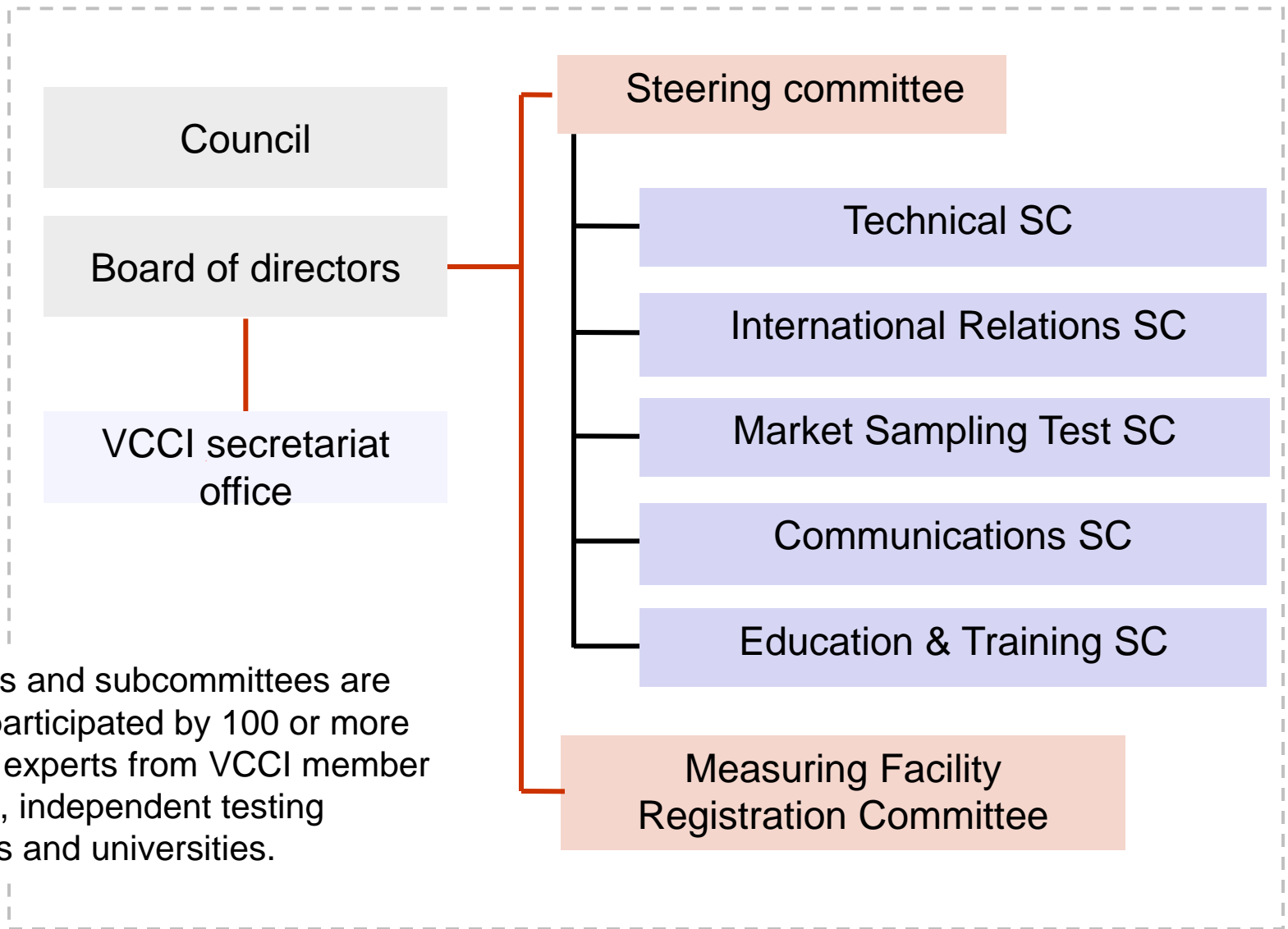


USA	214
CHINESE TAIPEI	146
KOREA	73
CHINA	46
GERMANY	24
ISRAEL	16
CANADA	13
U.K.	15
HONG KONG	10
SINGAPORE	7
FRANCE	8
OTHERS	19
Total	591

Changes in the number of conformity verification reports filed



Organization



Committees and subcommittees are positively participated by 100 or more competent experts from VCCI member companies, independent testing laboratories and universities.

Major Activities of Subcommittees



Technical SC

- Revision control of the VCCI Requirements
- CISPR/I Secretary and experts for JPNC, and technical contribution to CISPR NC
 - Radiated & Conducted emission WGs
 - Measurement site validation method WG

International Relations SC

- VCCI International Forum (Tokyo)
- VCCI Workshop (overseas)
- Watch Standards and Regulatory Movement overseas and update members

Market Sampling Test SC

- Post Market Sampling Test
- Monitor rightful use of VCCI mark at shop front

Communication SC

- Operation of VCCI Homepage / Journal / Q&A
- VCCI Promotion

Education & Training SC

- Training Course for test engineers (entry level)
- Training Course for test engineers (practical level)
- EMI Antenna & Site Calibration course (advanced level)

EMC Milestones



VCCI related

- ◆ Dec. 1985 VCCI founded
- ◆ Jun. 1986 Started DoC filing
- ◆ April 1993 Started measuring facility registration
- ◆ April 1998 VLAC established
(laboratory accreditation services)
- ◆ April 2007 Mutual recognition of testing laboratories with FCC
- ◆ April 2009 Reconstituted as VCCI Council

Worldwide related

- ◆ 1979 FCC Mandated testing
- ◆ 1985 CISPR 22 published
- ◆ 1996 EMC Directives issued by EU
- ◆ 1996 FCC introduced DoC
- ◆ 1997 Australia introduced DoC

Note: VCCI implemented DoC ahead of EU and US.

MRA Scheme between Japan and US

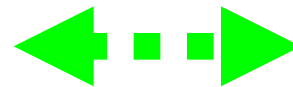
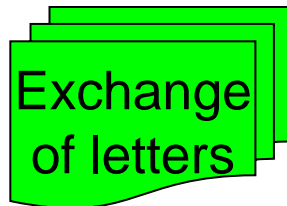


Radio Law
and
Telecommunication
Business Law



47CFR Part 11,15,21,22
47CFR Part 68

Voluntary Control
for ITE



47CFR Part 15 Subpart B
47CFR Part 18
(Constituting DOC)

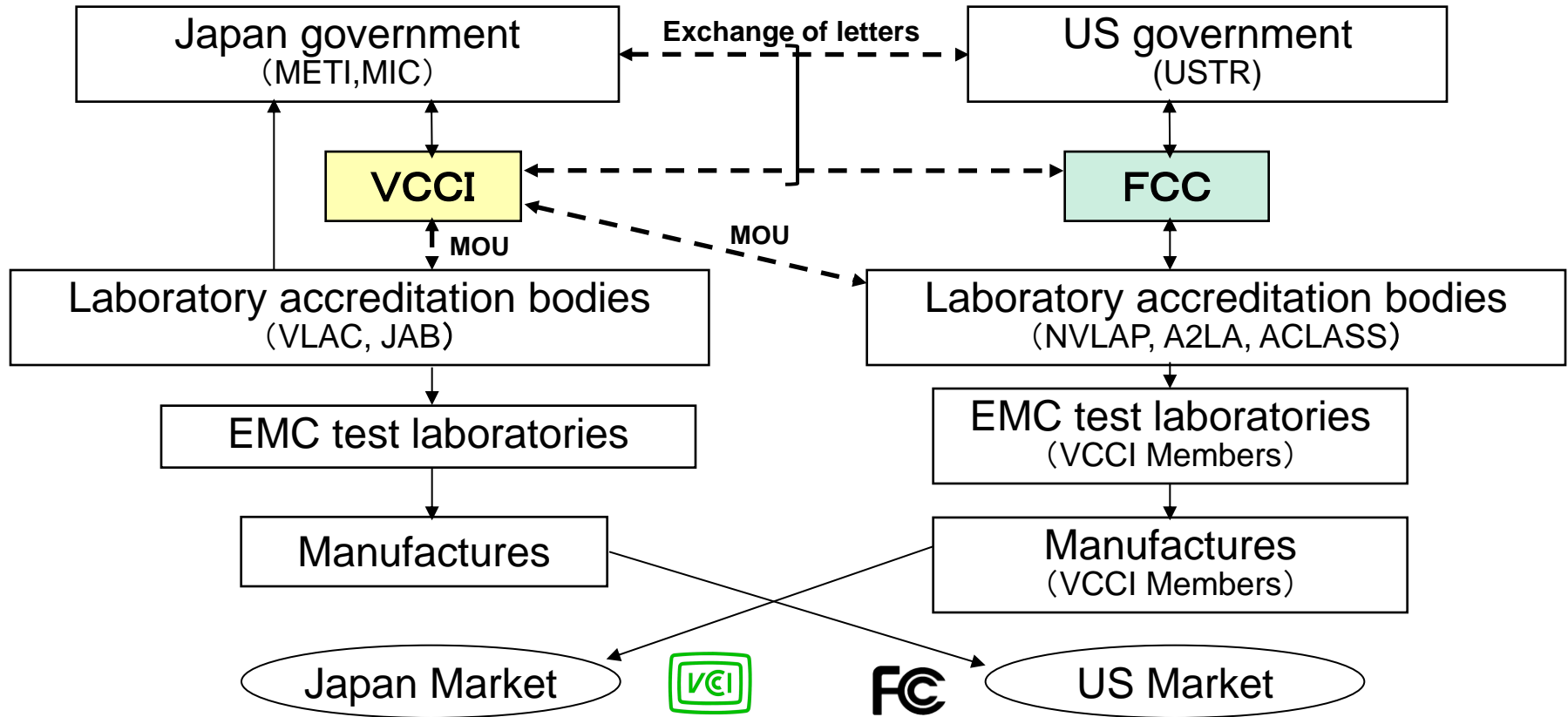
Exchange of Letters between Jpn and US

- Exchange of letters on the control of EMI from ITE came into effect under Japan-US telecom MRA in **February, 2007**.
- ITE imported to US from Japan:
FCC accepts DOC with test report issued by testing labs accredited by Japanese accreditation bodies. Affixing the FCC mark on the products allowed
- ITE imported to Japan from US:
VCCI accepts test report issued by US testing labs accredited by US accreditation bodies. Affixing the VCCI mark on the products allowed
- Accreditation bodies to continuously monitor competence of testing labs

MRA between Japan and USA



VCCI and FCC mutually accept EMC test laboratories accredited by accreditation bodies in the other country from April 2007 (by MoU).



Points to nurture reciprocity



- Secure equal market access from the other

VCCI must sincerely accept test reports from US as US accepts DoC from Japan.

- Keep level of laboratory accreditation on parity

The equivalence is secured as the accreditation bodies of the two countries are both members of APLAC MRA.

Merits of the Exchange of Letters in MRA

1. For testing laboratories

Once accredited by a Japanese accreditation body a laboratory -

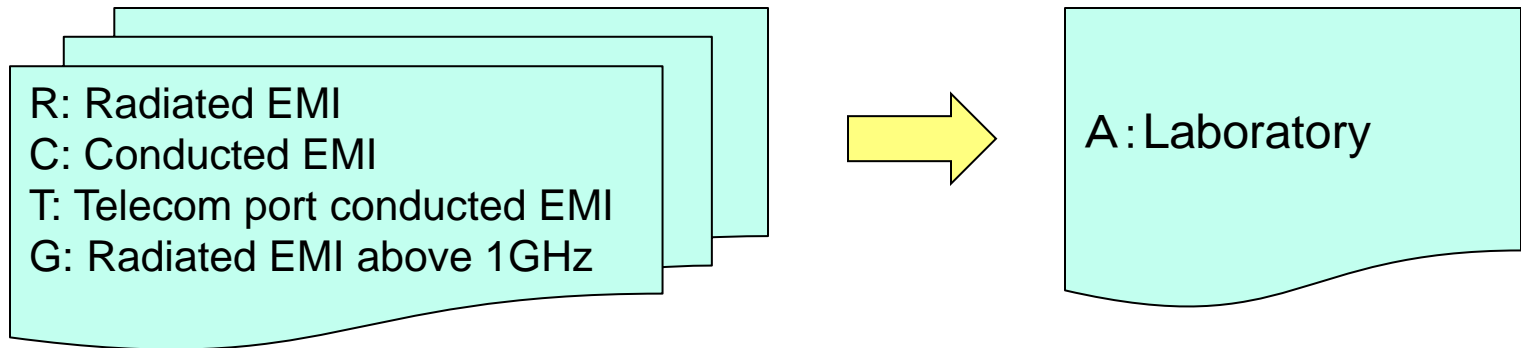
- i. can enjoy the status of accredited laboratory both of VCCI and FCC
- ii. can enjoy fast-track facility registration at VCCI (shortened to 1 week from usual 3 months)
- iii. can be exempted from submission of measurement data and payment of registration fees to VCCI

2. For Japanese ITE manufacturers

- i. Can enjoy one-stop testing at a laboratory in Japanese passable both in Japan and US
- ii. Can shoot troubles, when occurred, in Japan

Registration of accredited laboratory

- A laboratory accredited by a accreditation body meeting requirements of MRA can register its measurement facilities to VCCI with examination exempted
- A single registration number is collectively assigned to multiple measurement facilities listed in the scope of a certificate of accreditation granted based on Article 15 on and after April 1, 2012



- Facility registration based on Article 15 is possible via a web site from July 2012.

The number of accredited laboratories registered to VCCI



		As of March 31, 2012	As of December 31, 2012
Japan	No. of Facilities	303	192
	No. of Labs	-	34
Overseas	No. of Facilities	469	170
	No. of Labs	-	74

- Laboratory based collective registration is on the smooth increase
 - Good acceptance of Web based registration procedure
 - All accredited laboratories will be switched to registered laboratories by March 2014
- 3 – 4 measurement facilities per registered laboratory in average

VCCI International Forum 2013



Date : March 1, Friday, 2013 10:30 – 16:50

Venue : U Thant Conference Hall, United Nation University

Admission fee : free

1.	Development in EU regarding EMC	Mr. Jan Coenraads, EU
2.	Development in the EU regarding R&TTE Directive	Mr. Jose Prats, EU
3.	Introduction to Customs Union Customs Union Technical Regulation	Mr. Sergey Smirnov, Russia
4.	EMC Legislation and Standardization in Israel	Mr. Elya B. Josse, Israel
5.	Conformity Assessment System of Communication Equipment's	Mr. Choi Namho, Korea

Hands-out is downloadable at:

<http://www.vcci.jp/event/forum2013/materials.html>

Summary



1. VCCI is a membership organization with the purpose to suppress electromagnetic interference from ITE in Japan.
2. Started as a voluntary organization in 1985 VCCI was reconstituted as a legal entity “VCCI Council” in April 2009
3. The number of VCCI members is approximately 1,200 which is almost equally divided by companies in Japan and overseas
4. VCCI and FCC came to an agreement to mutually accept test reports issued by accredited laboratories of the other country in February 2007 in the framework of Japan-US telecommunication MRA
5. Registration of accredited laboratories is making smooth progress in the both countries:
 - Japan :192 facilities + 34 laboratories
 - US :170 facilities + 74 laboratories