New Taiwan Safety Requirement for ITE

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Abstract—This paper introduces the new safety requirements for ITE Products (currently under EMC) that use AC power, Transformer, or switching powers supply implemented in Taiwan with effective from July 1, 2005. It presents the Safety Authority's Requirements, Type Approval, Registration of Product Certification, and Declaration of Conformity under Bureau of Metrology and Inspection, MOEA, ROC.

Keywords – BSMI; Taiwans; DoC; Safety Certification; RPC, VPC

I. INTRODUCTION

Nowadays, Consumers have higher demanding for products that are safe and of high quality. The objective of new added safety requirement is to prevent illegal or inferior commodities from being displayed or sold on the market; the BSMI not only strengthens ex-factory inspection and import inspection but also implements market surveillance. Violators are notified to recall and improve their products or taken to be fined. Products that do not meet inspection requirements are prohibited from being displayed or sold.

Effective July 1, 2005, in addition to the existing EMC requirement, new safety requirement because mandatory for information technology equipment (ITE) that imported to Taiwan. The ministry of Economic Affairs (MOEA) of Taiwan regulated that these products should meet both safety (CNS 14336 (2004) and Annex Z (IEC 60950-1 2001), and EMC (CNS 13438) requirement for obtaining the Bureau of Metrology and Inspection (BSMI) certification. BSMI requirement are based on the Chinese National Standards (CNS) of Taiwan,

There are two conformity assessments schemes to get BSMI certification for ITE product:

1. Registration of Product Certification (RPC)
2. Declaration of Conformity (DoC).

II. DECLARATION OF CONFORMITY ASSESSMENT SCHEMES

The DoC is intentionally to be applied to products of which the manufacturing technology already achieves a stable stage and with less risk concerns. Because DoC allows the manufacturer to have the testing done by laboratories on his choice from BSMI designated 3rd party test lab or NCB assigned CBTL with registration at BSMI, to prepare the technical documents on his own, and to draw up the declaration declaring the conformity of his products with relevant standards. These products are placed under market surveillance conducted by the BSMI.

At present, 19 items of commodities are announced to be applicable to the DoC procedure from January 18, 2002. These include electric calculators, data storage units, main boards, add-on cards with I/O, power supplies for computers and etc. Please see below for BSMI DoC marking:

III. REGISTRATION OF PRODUCT CERTIFICATION ASSESSMENT SCHEMES

On July 28, 1999, the Ministry of Economic Affairs (MOEA) of the Republic of China promulgated the Measures Governing Registration of Product Certification (RPC). RPC covers both electromagnetic compatibility (EMC) and safety requirements.

Under RPC, the applicant must be a manufacturing facility, not a marketing company. After receiving the application, BSMI reviews the administration requirements. If the application meets administration requirements, BSMI assigns an application number (which becomes the certification number) and collects the application fee. The application is then forwarded to the technical department for review. If questions arise during technical review or if BSMI requests a test sample, the applicant is notified by a letter. The applicant must respond within one month, or the application will be rejected. After the application passes technical review and meets the requirements, the registration number is assigned. This certificate must be renewed every three years.
The coding of the certification number is defined in the sidebar. Please see below for RPC flow chart:

BSMI Marking will enable consumers to differentiate between the registered and non-registered ITE products and to participate in the enforcement. It also serves as a deterrent and means to check for non-registered ITE products in the market.

All ITE products registered with the Bureau of Metrology and inspection must bear the BSMI Mark before they can be supplied to the Singapore market. Registered Suppliers are responsible for ensuring that their registered product are affixed with the BSMI Mark in accordance to the guidelines stipulated by the Authority.

The BSMI Mark is shown as below:

V. SAFETY CERTIFICATION UNDER IECEE CB SCHEME.

The following documents are required when submitting application for BSMI safety certification under CB report Scheme.

- One sample
- List of all models, and clearly definite the differences if any.
- User Manual (Chinese)
- Photographs (at least 4x6) of the product (Exterior, Interior, critical components)
- Label and location.
- Circuit Diagram or Schematic (power supply, D/A inverter, hazardous voltage circuit, battery charging and discharging circuit, output connector area circuit,...)
- PCB Artwork drawing or Layout (power supply, D/A inverter, hazardous voltage circuit, battery charging and discharging circuit, ...)
- Datasheets and Safety Certificates of Safety Critical Components (generally the same as what are listed in the CB)
- Power cord and adaptor must have BSMI ROC and submitted with BSMI certificate.

Note: For CB reports that are issued before July 1, 2005. It is allowed to make some self declaration on some documents. However, for CB report issued after July 1, 2005. All submittal documents must follow BSMI requirement.

VI. VOLUNTARY CERTIFICATION SERVICES

In addition to fulfill its functions in the field of regulatory inspection, the BSMI also provide voluntary certification and testing services to general public to meet their needs of taking initiatives in improving their products or of demonstrating compliance with export market.

The BSMI has two programs for product certification, namely the Chinese National Standards (CNS) Mark Certification and the Voluntary Product Certification (VPC). The VPC System was recently introduced as an alternative to the CNS Mark. The main difference between the two certification programs is the standards used for testing. The VPC System uses international standards as testing standards. The VPC System may also complement regulatory inspection approaches such as the "Registration of Product Certification (RPC) Scheme" and "Declaration of Conformity (DoC) Scheme." The core marking for VPC is shown below:

![VPC Logo]

VII. CONCLUSION

This paper will give you some ideas about Taiwan added safety requirement for ITE use AC Power, SPS, or power adaptor. The process and things need to know when making applications for the BSMI.

APPENDIX: LIST OF ADDED PRODUCT REQUIRED SAFETY AFTER JULY 1, 2005

- Transformer
- Switching powers supply
- Power adaptor
- Digital Video (DV) and Digital Still Camera (DSC)
- LCD TV, PDP TV, HDTV
- Other color monitor (without TV tuner and PC interface)
- DVD, VCD PLAYER.
- DVD Recordable/HDD (With BNC connector, RS232 Interface or RS 422 or GPIB Interface)
- Other Video Recorder (1. Recordable DVD (VCD) Player 2. Recordable DVD (VCD) Player with LCD Display 3. DVD (VCD) Player included AMP or Radio function.
- Pocket size data recorder and display that are able to calculate. (Power consuming over 10nW)
- Electronic calculator with attached data sorting device.
- Hard disk (external)
- Soft disk (external)
- CD-Rom (external)
- Other disk (external)
- Other data saving unit (external)
- Other automatic data processing unit
- Word-processing machines (electronic type)
- Automatic typewriters (electronic type)
- Typewriters, electric (electronic type), the weight is not exceed 12 kg (exclude package box)
- Other typewriters, electric (electronic type)
- Braille typewriters (electronic type), the weight is not exceed 12 kg (exclude package box)

REFERENCES

[1] URL: www.siemic.com/Pages/GlobalCertification_Taiwan.htm