

2012 Annual Report of BSMI



Press of BSMI
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Bureau of Standards,
Metrology and Inspection



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Bureau of Standards, Metrology and Inspection

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Introduction

Now, it is the twelfth lunar month toward the end of Chinese year, normally a festival time which should be full of happiness and thundering cheers. Yet, contrary to traditional time, the current moment of domestic economic situation in this year, owing to global economic downturn, is akin to the scene with frost and snow. Nevertheless, being as a public servant based on the people-benefit orientation, the BSMI, despite the poor macro-environment as well as the plight of financial funding, has continued its efforts to uphold the vision of “people-based” governance and completed a number of policy objectives in accordance with planned budget.

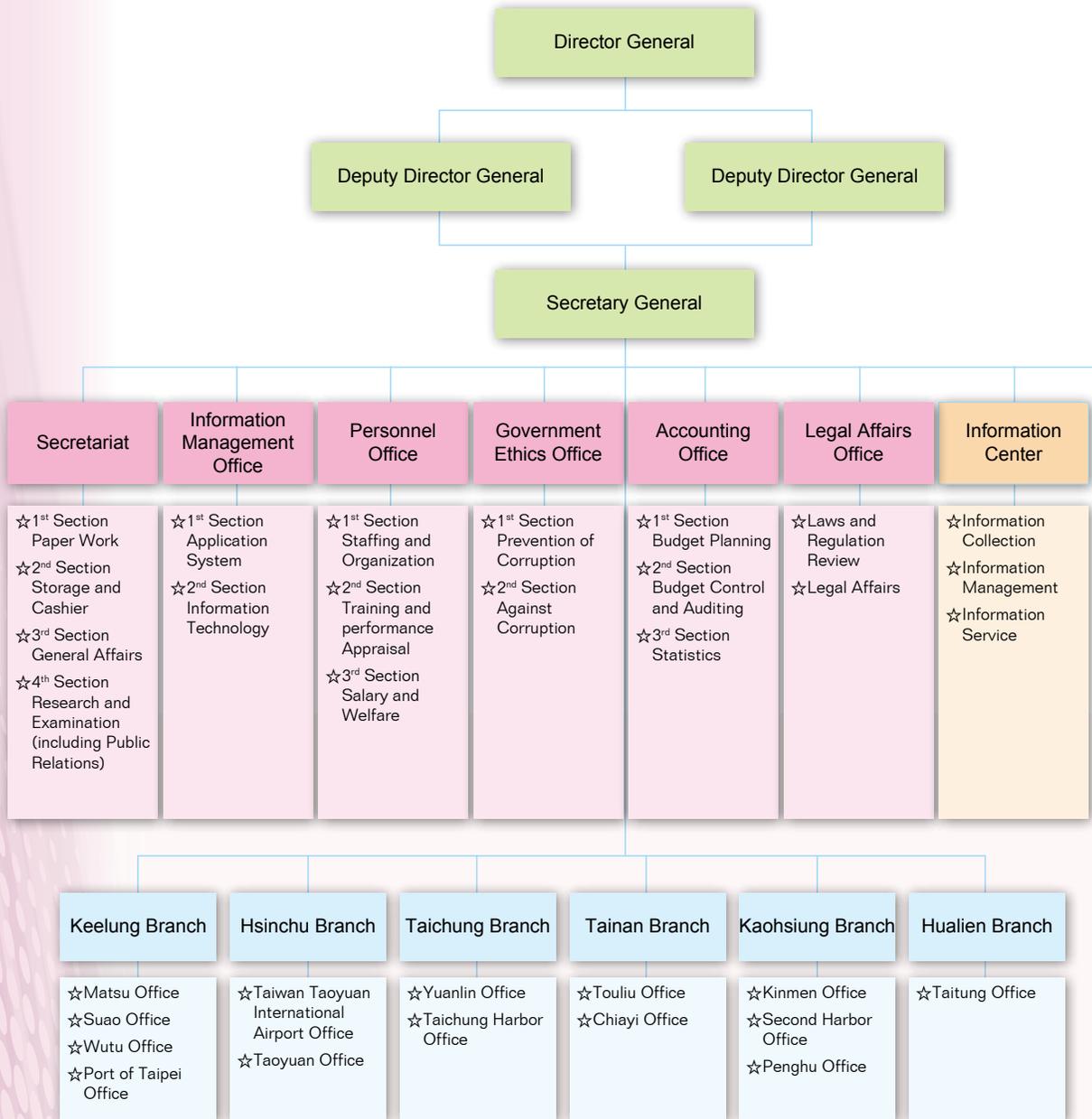
To comply with the theme of World Standards Day this year, the BMSI has targeted on the goal of “Standard Piloting, Corporate Benchmarking” to promote and implement the standardization of product specifications as well as the improvement of standardization system, hoping to enhance administrative efficiency and execution of government units largely, and to lead a leap forward in enterprise production and service quality significantly.

Having regard to electrical and electronic goods as the main products of Taiwan's export trade and for the purpose to help domestic industries acquiring business opportunities through more convenient sales channel of fair reciprocity for export commodities, the BSMI has actively integrated private certification resources to construct the national certification and verification system. After seven years of communication and coordination, the “Taiwan-Japan Mutual Recognition Agreement (MRA) on Conformity Assessment of Electrical and Electronic Products” has finally signed which will effectively reduce the costs of conformity assessment for electrical and electronic equipment of both states and upgrade the competitiveness of our products in the markets of Japan and even Northeast Asia.

Being adhered strictly to the principle of “People First” and the ideal of pursuing excellence of service quality, the award of “The Forth Government Service Quality Award” to our Taichung Branch this year is indeed a great glory and encouragement. This year, with the public opinion constantly lambasting the public servants along with corruption scandals released, the Government image has been serious battered and the society is also permeated with uneasy atmosphere. In view of this, the BSMI, in the New Year approaching, expects all its colleagues to keep national consumer safety always in mind, eliminating unsafe merchandise to protect the security of national life and contributing to the prosperity, peace and happiness for future years of our country.

I. Organization, Budgets, and Manpower

1. Organization Chart



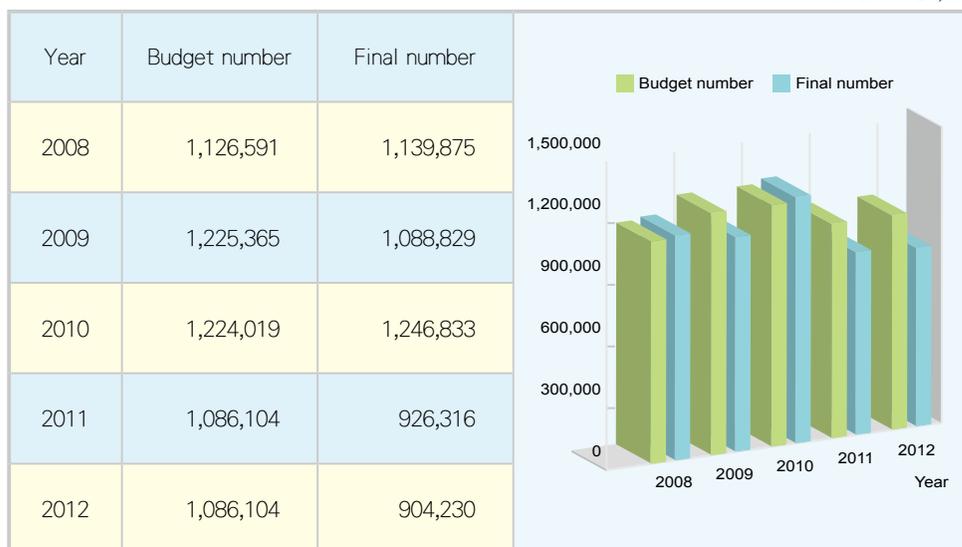
| Organization, Budgets, and Manpower |



2. Distribution Chart of Budgets

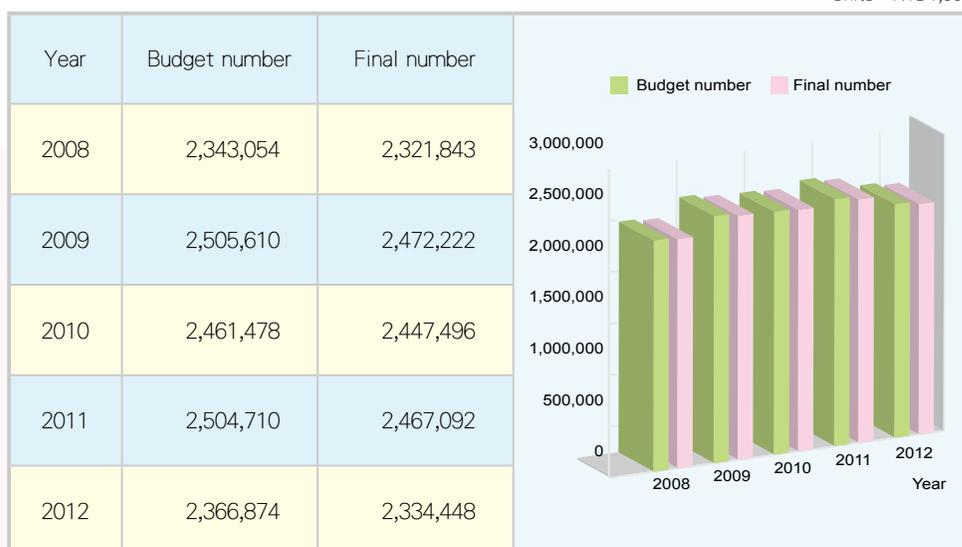
> Annual income budget

Units : NTD1,000



> Annual expenditure budget

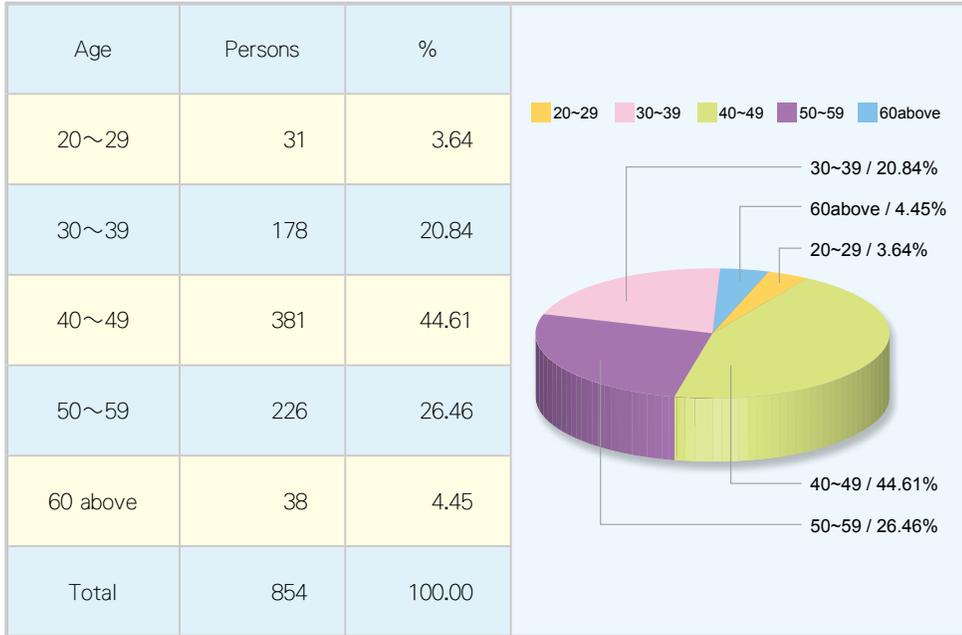
Units : NTD1,000



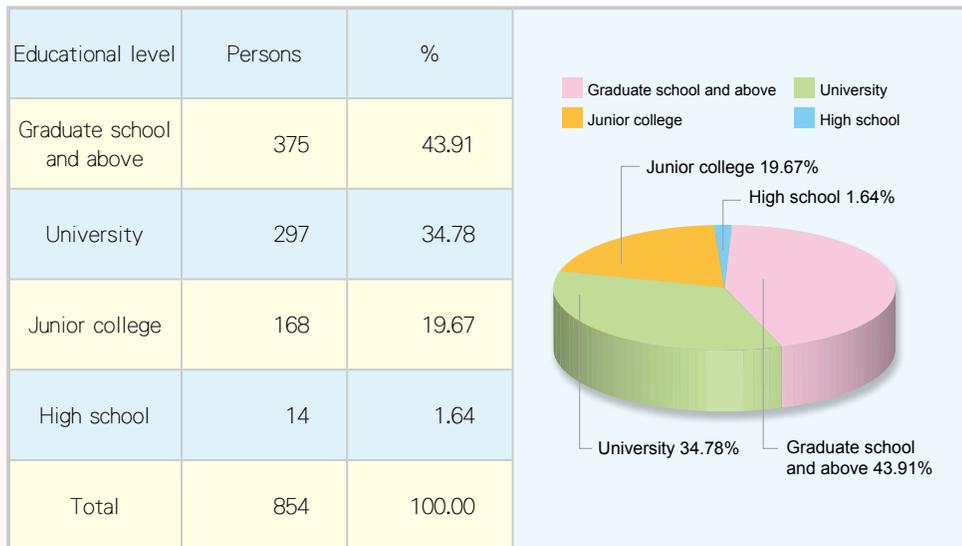


3. Distribution Chart of Manpower

› Personnel age distribution



› Personnel education distribution



II. Service Overview

1. Standards

(1) Service report

With a view to producing high-quality products and services for business performance improvement through proper resources allocation, many enterprises and organizations have introduced the processes of standard operations in recent years. Therefore, in line with the theme of “Less waste, better results –Standards increase efficiency” promoted in the 2012 World Standards Day, the BSMI has aimed at the goal of “Standard Piloting, Corporate Benchmarking” to promote and implement the standardization of product specifications as well as the improvement of standardization system, hoping to enhance administrative efficiency and execution of government units largely, and to lead a leap forward in enterprise production and service quality significantly.

In view of this, BSMI subsidized a number of companies and organizations to attend the international standardization activities held by the CIE, OMA, SEMI, HL7, and other organizations according to the “Directions Governing Subsidy to the Association Impels the Standardization Activity” . They discussed lighting, mobile communications, solar photovoltaic, agreement of Health Level Seven (HL7), and other relevant international standards; in addition, the BSMI has, according to “Participation in International Standardization Activities on the Major Development of Science and Technology” of Science and Technology Development Fund Plans, sent standardization experts to attend standardization activities of the International Organization for Standardization (ISO) and International Standards Development Organization (SDO), in order to actively master the pulse of international standards and collect the latest information.





In order to promote the CNS Mark, the BSMI has continuously set up “CNS Mark advocacy website” , utilizing network new social lifestyle to promote the ideas and interacting with online communities through virtual community effects, to convey the concept that “selection of the CNS Mark means selection of quality assurance” , so as to provoked people's awareness in purchasing fine products and to achieve the purpose of protecting national consumers safety indirectly.

(2) Service results

A. This year BSMI developed or revised 380 national standards and withdrew 213 inappropriate standards in cooperation with existing policies and industrial developments. Until the end of this year there were 14,510 national standards in existence.

B. National standards development strategy and mediation planning

◆ Participation in international standardizing activities is supported by the Science and Technology Development Funds in Taiwan. The BSMI puts in efforts to dispatch experts to attend meetings or events delivered by international standardizing organizations to share our experiences and make our contributions. With the emerging of new technologies, in 2012, we participated in standardizing activities about e-book of Chinese encoding, electric vehicles, EMC, smart grid and solar photovoltaic held by ISO, IEC, AFACT and related standards development organizations.

◆ Enhance the international competitiveness of domestic industries as well as the participation in international standardization activities, the BSMI has acted in accordance with “Directions Governing Subsidy to the Association Impels the Standardization Activity” to subsidize a number of companies and organizations to attend international standardization activities organized by CIE, OMA, SEMI and HL7 to grasp the latest trends of international standardizations and collect the latest standards information.

C. Enact and promulgate the “Regulations for Reward of Accessible Design of Consumer Products” pursuant to the provisions of Article 52 (1) of

the “Protection Act for the Rights and Interests of (Physically and Mentally) Disabled Citizens” to reward enterprises who have developed, manufactured products or provided services which meet the requirements of national standards for accessible design.

D. Strengthening CNS Mark management and promotion

- ◆ Promulgate additional 10 products of “Lead Free PVC Insulated Wire for Electrical Apparatus (KIV-LF)” as product items for the application of CNS Mark and expand the use scope of CNS Mark products in order to enable the CNS Mark to be the assurance foundation for the validation quality of domestic products.
- ◆ Strengthen the extension of CNS Mark through publishing relevant information in domestic major newspapers and magazines, advertising on the Internet, organizing levy election activities of CNS graphic as well as conducting promotion and advocacy activities in face book and outdoor.
- ◆ Ministry of Economic Affairs announced the CNS Mark certification system as the second category of validation objects of Taiwan-made MIT Smile Product Certification System, and appointed the BSMI and its branches as the certification institutions on November 8, 2012.

E. Important activities and advocacy

- ◆ BSMI responds to the activities of “World Standards Day” on October 14 annually to hold various forums and seminars to promote the importance of standardization in order to improve public awareness of standardization.



- ◆ Held the 13th National Standardization Awards to issue 3 awards of the Standardized Forward-Looking Contribution Award, the Company Standardized Award and Standardization Achievement Award, and to implement the standardization of product specifications and sound standardization system based on the spindle of “Standard Piloting, Corporate Benchmarking-Standardization, the Power to Change the World” in the hope to enhance the



administrative efficiencies of government units and the production and quality of service of business community significantly.

2. Metrology

(1) Service report

This year the Bureau International des Poids et Mesures (BIPM) and the International Organization of Legal Metrology (OIML) jointly set “The Metrology for Safety” as the theme of World Metrology Day. The so called measurement is no longer rigidly limited to the precise measurement unit of high-tech, but also includes the measurement of penny units in our daily lives. All economic activities are profit-oriented, but the security is a minimum requirement. That's the reason why the precise measurement is so important to the safety of work and life.

In addition to industries which are comprehensively under mature and recession stages, the application of metrology also has well connected with our lives and closely related to the public well-being. For the purposes of establishing the credibility of measurement units, maintaining the standards of the national metrology and consolidating traceability system, the BSMI has created and expanded 6 sets of measurements of the “Total Spectral Radiant Flux Calibration System” and completed the processes of amendment and promulgation of regulations and norms for 7 weights and measures technics of “Regulations Governing the Certification and Inspection for Weights and Measuring Instruments” to establish a protection fence for the public to enjoy life without security concern.

Since 2011, the BSMI has launched self-management system of oil gauge which, except existing mandatory verification and inspection system, encourages the gas station industry voluntarily to participate in self-management system in order to ensure the oil gauge accuracy of gas station at any time.

(2) Service results

A. Establishing measurement standards, developing measurement technologies, and

actively participating in international weights and measures organizations

- ◆ Since joining the Conference Generale des Poids et Mesures (CGPM) as an associate member in 2002, the National Measurement Laboratory has actively participated in the various activities of this Organization. This October, the approval of Certificate in Investment Performance Measurement (CIPM) allowed associate member to participate, as an observer, CC meetings, comparisons and CC workshops as well as to chair Working Group. This accomplishments truly enhance our autonomy in participating international metrology organizations.
- ◆ Kept participating in key comparisons activities and registered in key comparison databases of the International Bureau of Weights and Measures (BIPM), so the calibration reports issued by this country can be internationally accepted and conform to international standards. Until the end of this year, the registration results are shown in the following table:

		Total	National Measurement Laboratory	National Radiation Standard Laboratory	National Time and Frequency Standard Laboratory
Registered in BIPM KCDB	Key and supplementary database standards activities participated in this year (Appendix B)	17 items	8 items	4 items	5 items
	Items registered in CMC BIPM KCDB (Appendix C)	421 CMCs in 103 systems	324 CMCs in 87 systems	89 CMCs in 11 systems	8 CMCs in 5 systems

B. Held measurement technology promotion activities

- ◆ Held the 4th frequency measurement capability test in order to enhance the domestic laboratories' compliances with ISO / IEC 17025 specification and meet the requirements of TAF on mutual comparison between domestic calibration laboratories.
- ◆ Focusing on the theme of “Metering and Security - Guard Your Safety” of this year to host World Metrology Day in 2012, which invited scholars and experts to carry out in depth exploration on 7 issues such as the importance of



safety and correct measurement of electromagnetic to daily life, the importance of stoichiometry to safety, the health hazards of airborne particulates, etc.

- ◆ Holding “Seminar on Risk Assessment for Ionizing Radiation Measurement Capability Test and Radioactive Waste Disposal” , inviting experts to conduct academic exchanges with a view to upgrade domestic laboratory



measurement technology, maintain the quality of the laboratory measurement data and reach for the consistency of traceability standards.

- ◆ BSMI hosted the “2012 Exhibition of Joint Achievements on Science and Technology Program” with the assistance of Industrial Technology Research Institute, Chunghwa Telecom Laboratories, Institute of Nuclear Energy Research and other 11 execution units, and with the year “marked seized HKIT pilot industry new initiatives” theme, displaying the results across the different areas of standards, metrology, testing, certification environment construct, the scene made a big splash, and successfully promote technological achievements to the industry.

C. Conducted a nationwide inspection of measuring instruments to establish a fair market trade

- ◆ Strengthening surveillance business in measuring instruments market, educating the local to purchase verified weights and measures instruments, executing market surveillance to display and sales site or channel of measuring instruments under the jurisdiction, stopping channel of malpractices in order to protect legitimate industry and the rights of people.
- ◆ Promoting weighing verification project to gold, silver and jewelry stores and coordinating all associations to cooperate with the BSMI to encourage their members to apply for verification. All verified scales will be attached with a verified tag of “” .
- ◆ Conducting sampling inspections for weighting at tourist attractions, traditional markets and discount stores in line with important festivals.

- ◆ In cooperation with county and city governments to conduct inspections on fruit stands in Tourist Night Market and issuing a press release of the inspection results in order to establish a friendly night market environment.

D. Important activities and advocacy

- ◆ In order to upgrade technical level and quality of metrology work domestically, a metrological technical personnel examination was held in 2012. The 96.6% average attendance rate of this examination shows fully support of metrology industry for the examination system.
- ◆ In order to promote legal units of measurement, the BSMI conducted “2012 Annual Promotion Plan of legal units of measurement” . A series of activities including exhibitions of measuring instruments and family activities were held and cooperated with the National Museum of Natural Science and National Science and Technology Museum.



3. Commodity Inspection and Certification

(1) Service report

To ensure the security of all kinds of daily necessities, the BSMI has constantly set and amend a variety of inspection provisions in accordance with market demands. This year a number of chemicals, electrical appliances and electrical commodities have been listed as mandatory inspection items. Furthermore, for preventing low-quality textile products, which may affect the health of the people from reaching the market, the BSMI has implemented the inspection list for textiles (towels, sweaters, clothing, swimwear, lingerie, hosieries, beddings) since October 1, 2012, and there are totally 1,050 items to be inspected by the end of this year.

Whereas electrical and electronic goods are the main products of Taiwan's export trade as well as of international trade activities in technological era, in order to help domestic industries acquiring business opportunities through more convenient sales channel of fair reciprocity for export commodities, the BSMI has actively integrated private certification resources to construct the national certification and verification



system. After 7 years of communication and coordination, the “Taiwan-Japan Mutual Recognition Agreement (MRA) on Conformity Assessment of Electrical and Electronic Products” has finally signed which will effectively reduce the costs of conformity assessment for electrical and electronic equipment of both states, promote bilateral trade, and upgrade the competitiveness of our products in the markets of Japan and even Northeast Asia. In the future, the BSMI will continue to plan and establish more fair reciprocity for export commodities to actively assist manufacturers in order to conform to the trend of international trade facilitation.

The inspection certificates of export foods issued by the BSMI after the initiation of the inter-ministerial cooperation mechanisms for the management of fishery product exports to the EU have functioned smoothly and effectively in helping the certification traders to successfully meet with the requirements of various countries in products selling. In addition, with regard to the business aspect of import and domestic commodities inspection, the Council adheres the attitude of sharing administrative resources and taking all government units as whole to accept the entrustment from Council of Agriculture, the Ministry of Finance and the Department of Health for border inspection business of specific commodities such as imported feed, alcohol and condom to maintain citizens' consumption rights.

(2) Service results

A. Strengthen product inspection

- ◆ Adding new chemical mandatory inspection items, including “thermal paper” , “paint” , “motorcycle tires” , “herbal medicines” , plywood for concrete-form” and “scaffolding plywood” etc. in a total of 6 products and 68 items.
- ◆ Adding new machinery and electronic facilities to be inspected as mandatory inspection items, including 7 products of “web server” , “router” , “bridge” , “exchange” , “hub” , “circular saw for wood processing” and “grinder” .
- ◆ For preventing low-quality textile products which may affect the health of the people from reaching the market, the BSMI has implemented the mandatory

inspection list for textiles (towels, sweaters, clothing, swimwear, lingerie, hosieries, beddings) since October 1, 2012, totally 346 items of 7 products to be inspected.

- ◆ Completing the deliberation and amendment for inspection standards of 3 products of “plastic box for low voltage A.C. power meter” , “vinyl chloride polymer rigid tube” and “Portland cement” .

B. Promoting “virtual account” for annual fee payment operation of product certification registration, not only the promotion can facilitate manufacturers' payment procedure and shortens account receiving time, but also to improve work efficiency.

C. Vigorously develop detection technologies and verification platform

- ◆ Conducting “2012 EMC Design Competition” to enable participants to present their skills on electromagnetic compatibility design through competition platform, and to root such concept deeply into the future designs of electronic products via the competition processes in order to enhance the whole technology competency of Taiwan in the EMC field.



- ◆ Handling “Contest for Universal Design of Health Care Products” to promote the awareness of the industry and the public to health care as well as to assist the development of health care industry with a view to improving people's quality of life and promoting the sustainable development of the environment.

- ◆ Handling the “Exhibition of the Standard Confirmatory Results of Hydrogen Fuel Cell Motorcycle” which is the world's largest and first international hydrogen fuel cell motorcycle road empirical plan that will help the development of our hydrogen fuel cell motorcycle industry to be the





global leader in the future.

- ◆ Set an “Electric Vehicle Standards Testing and Verification Platform” , completed the construction of EMC energy testing for charging equipment of 80A AC electric vehicle, the expansion of lab test energy for small vehicles, the establishment of test energy for battery test, and to participate in the World Electric Vehicle Conference.
 - ◆ Carrying out the “Plan of Building up Platforms of Energy Conservation, Standards of Renewable Energy and Energy Industry Pioneer Products, Measurement Techniques and Certification” to construct response measurement system for solar cell spectrum and fixed-training testing equipment.
 - ◆ Processing “R & D Project of Testing and Certification Platforms for the Standard of Health Care Industry” to complete the construction of health care test and energy test, draft and review 19 drafts of health care standards, handle product standards for health care industry, measurement techniques, certification manpower training and international symposium in order to upgrade the development of domestic health care industry.
- D. Open admissibility of applications to the BSMI for commodity inspection specified laboratory accreditation of the third party laboratories in the territories of the European Union, the United States and Japan for specification test field of home appliances, audio-visual class, lamps, electric hand tools, electrical safety, and distribution of goods on January 1, 2012 to enhance economic and trade exchanges among Taiwan, Europe, the United States and Japan.
- E. Organizing “ Symposium of Standard Measurement and Certification” to discuss topics covering fuel cells, wind power, refrigeration and air conditioning, LED and solar photovoltaic in emerging energy industries, and to provide relevant information regarding requirements and correction practices of the development of international standards, measurement technology and international certification of the emerging energy industry in order to benefit the development of domestic green energy industry.

4. Product Safety Management

(1) Service report

To prevent online shopping sellers and web store owners from committing the provisions laid down in “Commodity Inspection Law” , the BSMI has strategically cooperated with Internet Platform Providers to launch “Retrieval Network for Commodities Subject to Inspection” hoping to reduce selling of non-compliant commodities and effectively curbing sales of “black-heart” products through the quick and easy query function in order to reach the goal of “Self-regulation by Internet Platform Providers, Legal Sales by Sellers and Safe Products for Consumers” .



The BSMI has continued to strengthen border check and auditing operations to prevent non-compliant goods flowing into the market and carried out joint audit for import abnormal commodity in this year, seized commodities with false or inconsistent origin labeling were seized. Furthermore, the BSMI has also actively expanded commissions to private sector organizations for carrying out commodity inspection activities in order to deter unscrupulous manufacturer escaping from inspection or inflowing substandard goods into the market.

Strengthening sample tests for high-risk, public concern, media reports, festivals and seasonal commodities, releasing sample test results in press from time to time to expose messages of unqualified commodities, and dealing with goods which violate regulations stipulated in “Commodity Inspection Act” and “Consumer Protection Act” . In addition, the BSMI has also provided guidelines and other essentials in good purchase through a variety of channels to enhance consumer awareness in commodity safety.

(2) Service results

A. Market product sampling and ad hoc market surveillance



- ◆ Focusing on commodities with higher hazard risk and higher frequency of legal violations to carry out 113 commodities of 113 project market checks and purchased sample test plans including household filter kettle, buddhistic lights, food processor; commodities fail to comply with the regulations' requirements will be tracked for investigation in accordance with law, and will be punished, depending on the circumstances of the violation, by fines, setting deadline for recall or correction, stopping displaying and selling, relocating certificate. Furthermore, the flow of unqualified commodities will also be under actively control in order to safeguard the interests of consumers.
- ◆ In line with the Government's plan of “Child Safety Year” for children commodities with high-risk or public concern to execute purchased sample test projects for 12 children commodities such as children's bath toys and clothing, hand push infant car in order to protect the safety of the public consumption .
- ◆ Carrying out border check for 835 cases of registered and certified commodities in accordance with the degree of hazard risk in order to prevent unsafe consumer goods from flowing into the domestic market.

B. To protect domestic consumers and legitimate business interests in industry, the BSMI has conducted joint inspection on non-compliant products with abnormal labeling, in particular for traditional industry products such as clothing, bedding and towels. This year, totally 248 joint inspections have been carried out and 66,178 product items with false labels or non-compliant labels have been found in domestic market.



C. Continued to expand the service events of the Product Safety Information Network

- ◆ Upon receiving the product incident reports, the BSMI will sent staffs to carry out investigation and promptly take appropriate measures to deal with unsafe products according to relevant laws and regulations, and issue the product recall news on the Product Safety Information Network. There were about 63 recall news been issued in the Network.



- ◆ The BSMI actively collected 1,606 information items from the US Consumer Products Safety Commission (CPSC), the European Rapid Alert System (RAPEX), and received the reports from representative offices abroad, and issued the relevant information on the Product Safety Information Network.

D. Held “2012 The 3rd Cross-Strait Symposium and Cooperation Working Group Conference on Standards, Metrology, Inspection and Accreditation for Consumption Goods Safety” , in order to implement “The Cross-Strait Agreement on Cooperation in respect of Standards, Metrology, Inspection and Accreditation” which strengthens the overall operational mechanism for the notification and co-processing so as to effectively control from the source of the production and protect the interests of consumers more comprehensively.

E. Important activities and advocacy

- ◆ Held “Recognition of Commodities Subject to Inspection” seminars to have hopes of that all official officers and distributors can purchase and sell inspection-qualified products respectively to prevent illegal ones from selling on the market.
- ◆ Set up the Unsafe Products Prevention Advocacy Group, which held 533 activities in schools, exhibition halls and supermarkets, to teach consumers how to choose the inspection-qualified products and to avoid buying unqualified ones of poor quality for protecting consumers' rights.

5. Management System Certification

(1) Service report

Acting as an independent and objective third party, the BSMI has committed to provide integrated authentication service with excellent quality to assist government departments and private companies to obtain national certificates of ISO 9001 Quality Management System, ISO 14001 Environmental Management System, ISO 27001 Information Security Management System, ISO 22000 Food Safety Management System TOSHMS / of OHSAS 18001 Occupational Health and Safety Management System so as to demonstrate management and operating performance. Furthermore,



in order to support the government to promote energy conservation and sustainable policies as well as to strengthen the global competitiveness of domestic enterprises, the BSMI has embarked on the planning and development of certification services for ISO 50001 Energy Management System and ISO 28000 Supply Chain Security management System.

The recent rise of environmental awareness and issues of global warming and greenhouse gas reduction have become an unmistakable trend. In response to the Government policies of sustainable development and greenhouse gas reduction, the BSMI has confirmed with guidelines and regulations of the EPA greenhouse gas inspection to accept greenhouse gas project application to help domestic manufacturers in the verification for intensity and reduction of emission; in response to the demand of energy management certification, the BSMI start to provide the certification service of ISO 50001 Energy Management Systems from March 1, 2013 to enable the domestic manufacturers to take into account of energy security, economic development and environmental protection.

After 9/11, the world has paid more attention to trade security. To follow this international trend and coordinate with the government launches of “High Quality Trading Network” and “i-Taiwan 12 Projects” , the BSMI will open admissibility for the certification service of ISO 28000 Supply Chain Security Management Systems on January 31, 2013 to enhance supply chain security management standards as well as assist the implementation of Authorized Economic Operator (AEO) certification system for domestic quality enterprises, so as to fasten the link between international and domestic trades and further strengthen the global competitiveness of R.O.C. enterprises.

(2) Service results

A. ISO 9001 quality management system certification services

- ◆ The TAF has permitted the BSMI to offer certification in 24 scopes, including a new accreditation scope “the 37th Category—education” .

B. ISO 14001 environmental management system certification services

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◆ The TAF has permitted the BSMI to offer certification in 20 scopes.

C. ISO 27001 information security management system certification services

◆ The BSMI has passed the accreditation by information security management system Certification Organization.

D. OHSAS 18001 occupational health and safety management system certification services

◆ The TAF has permitted the BSMI to offer certification in 7 scopes.

E. ISO 22000 food safety management system certification services

◆ The TAF has permitted the BSMI to offer certification in 10 scopes.

F. Certification business of TOSHMS Taiwan's Occupational Health and Safety Management System

◆ Being approved through the audit of TOSHMS certification body, Council of Labor Affairs.

G. Certification business of ISO 14064-1 Greenhouse Gases (GHG) Validation and Verification

◆ Responding to the government's concerns regarding global warming and climate change, sustainable development issues, and energy conservation to reduce carbon emissions policy, on August 26, 2010, the BSMI has passed the examination by Environmental Protection Administration of Executive Yuan, and in accordance with the GHS verification guidance and related regulations to provide the GHG early project (emission strength) verification; by the end of this year, 48 applications for the verification of electric power industry early projects have been completed followed with the issuance of 48 verification certification.

◆ The BSMI is currently authorized by Taiwan Accreditation Foundation (TAF) to offer ISO 14064-1 verification in 5 scopes.

H. Export food processing plant “Hazard Analysis Critical Control Point (HACCP)” certification services



- ◆ HACCP (export food processing plant certification of Hazard Analysis Critical Control Point system)

Until the end of this year, 74 factories have passed this certification.

- ◆ EU (export food processing plant certification of EU export fish products)

Until the end of this year 37 factories have passed this certification.

6. Information Services

(1) Service report

With the degree of democratization in Taiwan has become more sophisticated, the public services provided by government administrative agencies shall follow the private enterprises spirit of improving the quality of service for pursuing profit maximization to innovate and enhance their administration performance in order to take care of the well-being of people living. In order to provide the public with better services, the BSMI has actively embarked on the functional expansion of the “CNS Online System” for the purposes of satisfying the public demands with a brand new revamped image as well as continuously negotiating with world standards organizations on authorize photocopying agreement. Now the BSMI have exchanged information of standards with 7 major international standards bodies and, consistent with legal, cheap, convenient, safe, quick and free reading principles, provided domestic manufacturers with latest standard information and issued “E-Paper” monthly to expand our energy services.

(2) Service results

A. Status of collections

The Information Center, BSMI, collects standards information including Chinese Standards of the Republic of China (CNS), standards of major international standardization organizations, leading industrialized countries and major international associations as well as standards catalogues and metrology information.

Type	Format	Quantity	Remarks
CNS	Paper \ Internet	14,510	2,629 in English version
Foreign standards	Paper	199,035	
	CD/DVD version	18	
	Bound volume	18	
	Virtual collection (Internet downloads)	8	
Standard catalogs	Paper	89	
	CD/DVD version	18	
Metrology information	Paper	310	

B. Standards information in translation and publication

Taking account of business needs from industries and soliciting the opinions from the industries, experts and scholars, the BSMI establishes CNS standards English version. The BSMI exchanges CNS standards English version with other international standards organizations. This year the BSMI added 24 new CNS standards English version, withdrew 19 and another 70 standards are under amending. By the end of this year, there were 2,629 national standards with English version, which are mainly in the fields of chemical, electronics, machinery and food standards.

C. Information search system

◆ CNS Online Service (<http://www.cnsonline.com.tw/>)

The BSMI has built up CNS Online Service providing a 24-hour service. The public can perform online queries at any time and preview and download related CNS standards information. By the end of this year, the proportion of online application cases has been up to 98.7% and the number of users has reached to 415,054.



◆ Foreign Standard Online Catalogue (<http://fsms.bsmi.gov.tw/cat/>)

This system enables the public to make real-time online queries of foreign standards collection of Information Center, BSMI. At the end of 2012 the collection of the system reached about 200,000 standards information from more than 74 standards organizations. In 2012 there were 233,336 users utilizing the system.

D. Licensed photocopy service

In order to assist business and industry as well as academic institutions to quickly obtain the required standard information, the BSMI has signed licensed photocopy agreements with following standards organizations and their royalty ratios are as follows:

Acronym	Full Name	Royalties
AS	Standards Australia	40%
ASTM	ASTM International	60%
BS	British Standards Institution	50%
DIN	Deutsches Institut für Normung e.V.	66.66%
IEEE	Institute of Electrical and Electronics Engineers, Incorporated	75%
ISO	International Organization for Standardization	90%
UL	Underwriter Laboratories Inc.	80%

III. International Cooperation and Interchange

Apart from drafting international standards in line with international norms, establishing a national measurement standards system aligned with international systems, and promoting the effective functioning of conformity assessment infrastructure, the BSMI also actively promotes international cooperation and mutual recognition, and establishes collaborative relationships with prominent foreign certification organizations. The BSMI hopes that by means of international cooperation it can help the industry to obtain product marks of foreign certification bodies, and also looks forward to boosting its testing capabilities through technology sharing with foreign organizations. Multilateral and bilateral cooperation and harmonization of standards systems with foreign partners will ultimately result in greater social prosperity and national progress.

The BSMI's 2012 multilateral and bilateral interchange undertakings are summarized as follows:

1. Multilateral Cooperation

(1) UN/CEFACT and AFACT

- A. The BSMI participated in the 30th AFACT mid-term council meeting in Kish Island, Iran, from May 21 to 22 to promote industries to meet international standards.
- B. The BSMI participated in the 20th UN / CEFACT Forum Meeting held in Vienna, Austria from September 17 to 21. Participation in the event allowed the BSMI to acquire WCO Data Model information standards, exchange information, and obtain information connected with the harmonization of core elements, which would facilitate the draft and revision of e-commerce related national standards.
- C. The BSMI participated in the 30th AFACT Meeting Council Session and Plenary meeting held in Tehran, Iran, from November 19 to 22, in which the Deputy



Executive Director of Institute for Information Industry serving as Vice-President of the Council of AFACT. The activity increased the visibility of Taiwan in the participation of international affairs, and enhanced the actual interaction and cooperation relationship between countries in the Asia-Pacific region.



▲The 30th AFACT Council Session and Plenary meeting held in Tehran, Iran

(2) WTO / TBT

- A. The BSMI participated in the Regulatory Cooperation Seminar and the 59th regular meeting of the WTO/TBT (Technical Barrier to Trade) committee and the 6th Triennial Review of WTO/TBT Agreement held in Geneva from November 27 to 29.
- B. The BSMI is responsible for the operation of Taiwan's WTO/TBT Enquiry Point. As the end of 2012, the BSMI assisted domestic competent authorities to submit 22 WTO/TBT notifications, and distributed 1,753 TBT notifications made by WTO Members to the relevant competent authorities, industry associations and companies for commenting. To facilitate understanding of measures notified by countries with which Taiwan enjoys close trading relationships, the BSMI translated 832 notifications into Chinese. The BSMI further helped domestic competent authorities and companies to obtain information on TBT-related laws and regulations from other countries.

Comparison of Services by WTO/TBT Enquiry Point

Units: cases

	WTO/TBT notifications made on behalf of domestic competent authorities	Distribution of WTO/TBT notifications	Translation of notifications made by countries with which Taiwan enjoys close trading relationships
2012	22	1,753	832
2011	26	1,528	819

(3) APEC/SCSC

- A. The BSMI participated in the 1st Meeting of 2012 APEC Sub-Committee on Standard and Conformance (SCSC), held in Moscow, Russia, from February 9 to 10.
- B. The BSMI participated in the Multilateral Recognition Arrangement (MLA) Readiness Project in Greenhouse Gas (GHG) Validation/Verification Training held in Indonesia from February 28 to March 1.
- C. The BSMI participated the Seminar of Workshop on Improving the Custody Transfer of Liquid Fuel in the Asia-Pacific Region held in Singapore from March 6 to 8.
- D. The BSMI participated in the APEC Product Safety Incidents Information Sharing System Workshop held in Malaysia from April 23 to 26 and Workshop on Regulatory Approaches to Smart Grid Investment/Deployment held in Canada from May 16 to 17.
- E. The BSMI participated in the APEC EE JRAC Workshop on Developing a Harmonized Electrical Equipment Regulatory Risk Assessment Tool and 17th Joint Regulatory Advisory Committee for Mutual Recognition Arrangement on Conformity Assessment for Electrical and Electronic Equipment Meeting held in Singapore from May 14 to 18.
- F. The BSMI participated in the 9th Conference on Standards and Conformance in the Field of Innovations and Related Good Practices held in Kazan, Russia, from May 22 to 23 and the 2nd SCSC Meeting from May 24 to 25.

(4) OIML&CIML

The BSMI participated in the 47th CIML Annual Meeting and 14th OIML Conference held in Bucharest, Romania, from October 1 to 5.



(5) APLMF

The BSMI participated in the APLMF Annual Meeting and Working Group Meetings held in Cebu, Philippines from November 6 to 10, and chaired Working Group meeting on Medical Measurements.

(6) APMP

The BSMI participated in the APMP Meeting in Wellington, New Zealand from November 25 to 30.

(7) APLAC

The BSMI participated in the APLAC Annual Meeting in Sydney, Australia, from December 1 to 7.

(8) PAC

The BSMI participated in the PAC Annual Meeting in Hong Kong from June 16 to 23.

(9) ICPSC and ICPHSO

The BSMI participated in the ICPHSO Annual Meeting and Training Symposium and ICPSC Meeting in Orlando, Florida, the United States from February 28 to March 2, and in Brussels, Belgium, on October 15-19 respectively.

(10) IECQ

A. The BSMI invited the Chinese Taipei Electronic Components Certification Board (CTECCB) to attend the IECQ Conformity Assessment Bodies Committee (CABC) and the Management Committee (referred to as MC) held in Busan Metropolitan City, South Korea from April 23 to 27. The IECQ MC Chairman designated CTECCB's Chairman Mr. Joseph Cheng was designated to report the IECQ promotion activities made by CTECCB in Taiwan at the IECQ MC Meeting.

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B. By the arrangement from the CTECCB Chairman Mr. Joseph Cheng, the BSMI invited the IECQ MC Chairman, David Smith, to participate in the opening ceremony of the Taipei International Electronics Show TAITRONICS / Broadband Taiwan in autumn 2012.

C. Announcing the plan for conversion of Hazardous Substances Process Management (HSPM) certification from QC 080000:2005 to QC 080000:2012 during the IECQ 2012 Annual Meeting.

D. Adopting certification plan of Automotive Qualification Program (AQP) during the IECQ 2012 Annual Meeting.

E. IECQ headquarters awarded special souvenir medals to ASUSTek Computer Inc. in IECQ 2012 Annual Meeting to commend the company for recognition and application of the third-party verification plan of IECQ HSPM scheme and its outstanding contributions and leadership in the management and control of hazardous substances.



▲ Group photo of Vice President, Den-Yih Wu, Vice-Minister of the Ministry of Economic Affairs, Mr. Shih-Chao Cho, the Director General of the BSMI, Dr. Jay-San Chen, the Chairman of TAITRA, Dr. Chih-Kang Wang, the Chairman of TEEMA, Mr. Yu-Chun Chiao, the Chairman of IECQ Management Committee, Mr. David Smith, and the Director of American Institute in Taiwan when invited to participate in the opening ceremony.

2. Bilateral Cooperation

(1) Bilateral negotiations

A. Participation in bilateral consultations

- ◆ The BSMI actively participated in bilateral consultations, such as Taiwan-U.S., Taiwan-Japan, Taiwan-EU, Taiwan-Hong Kong, Taiwan-Philippines, and Taiwan-Singapore, to exchange views concerning standards and conformity assessment.

B. Promotion of bilateral agreements

- ◆ The BSMI and The Slovak Office of Standards, Metrology and Testing, Slovak



Republic signed the Memorandum of Understanding for Cooperation, which took effect from February 29.

- ◆ The Association of East Asian Relations of Taiwan and the Interchange Association of Japan signed “Arrangement between the Association of East Asian Relations and the Interchange Association for the Cooperation on Mutual Recognition” in the 37th Taiwan-Japan Economic and Trade Consultation on December 29.

(2) Various international exchange activities

A. International symposiums

- ◆ The BSMI participated in the 59th ISO / IEC JTC1/SC2/WG2 Meeting in the U.S. from February 13 to 17.
- ◆ The 3rd Cross-strait Symposium on Standards, Inspection, Certification, Accreditation and Consumer Product Safety and Related Working Groups were held in Hualien from April 24 to 25. The event was participated by 192 representatives from the industries, competent authorities and academic institutes in Taiwan and 34 delegates from competent authorities in Mainland China. Three symposia addressed issues on green energy, Lo-Ho environment, and standards for small and medium-sized wind turbines respectively were also held. Working-group meetings were also held to discuss cooperative issues concerning standardization, inspection, consumer product safety, and certification & accreditation.



▲ Group photo of the 3rd Cross-strait Symposium on Standards, Inspection, Certification, Accreditation and Consumer Product Safety

- ◆ The BSMI had made the participation of 170 experts in attending standards-related meetings held by major international standardizing organizations for developing industry standards in areas of information and communications

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products, including the WiMAX (Worldwide Interoperability for Microwave Access) Forum, 3GPP LTE/LTE-Advanced, IEEE 802.16, IEEE 1609 etc. The BSMI presented 199 advanced R&D results at these meetings, and 94 were accepted as technological contributions.

- ◆ The BSMI was invited by Germany to attend the International Standards Working Group Meeting on ISO/TC22/SC03/JWG1 Vehicle to Grid Communication Interface (V2G CI) held in Nanjing from June 4 to 7 in 2012. The participation would help the development of our relevant standards in line with international norms on Electric Cars and Smart Grid.
- ◆ The BSMI participated in the IEC/TC105/WG8 Micro Fuel Cell Power System Conference held in Quebec, Canada, from June 11 to 16. The four days event convened experts from the United States, Canada, Britain, Japan and other countries, who not only revised the current complexity of IEC62282-100, but also discussed the testing devices and methods for micro fuel cell system emission concentration.
- ◆ The BSMI participated in the ISO / IEC JTC1/SC2/WG2/IRG 38th Meeting in Gyeongju, South Korea, from June 18 to 22 to promote the incorporation of CNS 11643 Chinese Standard Interchange Code words and symbols into the ISO / IEC 10646 IRG and seek for greater involvement in IRG to enhance the domestic development of our cultural and creative industries.
- ◆ The BSMI participated in the 2012 IEEE International Symposium on Electromagnetic Compatibility (EMC) held in Pittsburgh, Pennsylvania, United States, from 5 to 10 of August. The technical paper Prediction of Radiation-Induced Frequency Locking and Shifting in a Microwave Oscillator we published in the conference is a major breakthrough in the application technique of electromagnetic compatibility.
- ◆ The BSMI participated in 2012 Cross-Strait Middle-Term Proficiency Testing Conclusion Meeting in Xining, Qinghai Province, Mainland China, from August 28 to 30, in which both sides shared their experiences and agreed to promote Cross-Strait Electromagnetic-Compatibility Proficiency Test Plan in 2013.



- ◆ The BSMI participated in The 5th China International Conference on Electricity Supplying and Cross-Strait Smart Grid Standards Forum held in Shanghai, Mainland China, from September 4 to 9, to promote the cooperation and exchanges of experts between cross-strait smart grid industries.
- ◆ The BSMI participated and published papers in the EMC Europe International Symposium on Electromagnetic Compatibility in Rome, Italy, from September 15 to 23.
- ◆ The BSMI held the seminar, The International Standard Development of Fuel Cell Test Programs and Safety Standards, on October 11, and invited Ms. Laurie Florence, the project engineer of UL Company, to carry out instructions.
- ◆ The BSMI held the seminar Design and Build Wind Turbine Test Site - Challenges, Risks and Risk Mitigation Strategies on October 11 at the Nangang Exhibition Hall. The U.S. DNV wind field testing experts was invited to make a description on the requirements of constructing wind turbine test site and specifications of power energy measure.
- ◆ The BSMI co-hosted the Taiwan-EU Product Risk Assessment and Toys Conformity Assessment Seminar with European Economic and Trade Office (EETO) in Taipei on October 29. Both sides shared experiences in field of the rules and regulations of toy products, conformity assessment in implementation aspect and market supervision during the event. A total of 173 people participated, comprising delegates from competent authorities, industry, and testing laboratories.
- ◆ The BSMI hosted the 2012 Cross-Strait Symposium on Metrology in Taipei on November 12. The participants, 110 Taiwan experts and 46 Mainland China delegates, were from industries, competent authorities and academic institutes to exchange views on the development of smart meters. Working-group meeting were also held to review cooperative issues and discuss plans for future interchanges.
- ◆ The BSMI was invited by Germany to attend the ISO/TC22/SC03/JWG1



▲ Group photo of the 2012 Cross-Strait Symposium on Metrology

Vehicle to Grid Communication Interface (V2G CI) International Standard Working Group Meeting held by Southern California EDISON company in Los Angeles (LA) from November 12 to 18.

- ◆ The BSMI held the Seminar on Energy-Saving and Detection Technology of Air Conditioning Products from December 12, mainly introducing the energy-saving system for Make-up Air Unit and the development and application of the latest energy-saving technology for air conditioning products. A total of 43 people were participated in the event.
- ◆ The BSMI held the Seminar of Current Certification Status of Japanese LED Lighting Products on December 12, inviting Manager Sudo, the expert technical director of Japan Quality Assurance Organization (JQA), to talk on The Regulations and Technical Requirements of Japanese LED Lighting Products to Apply for PSE and S Marks. A total of 44 people were participated in the event.

B. Reciprocal visits with other organizations

- ◆ The BSMI received delegations from the United States, Jordan, Nigeria, the EU, Japan, and the Philippines.
- ◆ The BSMI visited the CPSC in U.S. to study incident investigation and identification techniques and product safety system from April 14 to 27. During the visit, we had obtained further information regarding equipment construction and planning of commodity testing and evaluation laboratory equipment for domestic commodity accident identification techniques.
- ◆ The BSMI visited Japan Electric Safety and Environment Technology Laboratories (JET) from April 22 to 27 to attend Portable Lithium-Ion Battery Pack Standard Detection Training and collect standards and inspection information of portable lithium-ion battery and electric vehicle lithium battery pack.
- ◆ The BSMI participated in the 5th EU workshop held in Belgium from June 9 to 24.
- ◆ The BSMI participated in the 3D Integrated Circuit Electromagnetic Compatibility Measurements and Simulation Technology Training Program



held by INSA (National Institute for Applied Sciences) in Toulouse, France, from July 8 to 21.

- ◆ The BSMI received the IECQ Chairman Mr. David Smith couple and the CEO of U.S. ECCC (Electronic Component Certification Corporation) Mr. Stanley H. Salot Jr. on October 11 to discuss and exchange views on issues of our participation to IECQ activities through CTECCB and the cooperation with ECCC.



▲Director General of the BSMI Dr. Jay-San Chen (second from left) received the IECQ Chairman David Smith couple, the CEO of U.S. Electronic Component Certification Corporation Mr. Stanley H. Salot Jr., and chairman of CTECCB Mr. Joseph Cheng in the meeting.

- ◆ The BSMI visited the Small Wind Certification Council (SWCC) in northern America, DET NORSKE VERITAS (DNV) and Intertek Testing Services Ltd. (Intertek) to discuss the testing and certification of small and medium-sized wind turbines in December.
- ◆ The BSMI visited JQA, JET, and VCCI in Japan from December 16 to 21 to discuss the process of recognizing certification bodies under the framework of Taiwan-Japan Mutual Recognition Agreement.

C. Personnel training and professional courses

- ◆ The BSMI invited Mr. Takahashi Wakei, the technologies counselor of Japanese Standards Association (JSA), to visit Taiwan from October 30 to November 2, to introduce the JIS Developing System in Japan. Topics covered in the presentation included the coordination between METI and JISC, participation of industry associations in standards development procedures, etc.
- ◆ The BSMI and the Institute for Taiwan Toy & Children's Products R & D Center jointly dispatched staffs to give lectures in Saudi-Arabia Standard Weights and Measures Quality Agency (SASO) from December 13 to 28, and carrying out toy physical properties testing technology training cooperation programs during 2 weeks.

IV. Appendix Table

1.National Standards

Year \ Item	Existing (Kind)	Establishment (Kind)	Revision (Kind)	Abolition (Kind)	Standard Providing(Piece)			Foreign Standard Collecting (Piece)	Consulting Service (Person/ Time)
					Total	National Standard	Foreign Standard		
2008	14,303	141	176	57	191,908	180,796	11,112	11,386	17,473
2009	14,390	132	143	45	184,660	173,411	11,249	8,120	18,739
2010	14,473	240	175	157	160,152	149,839	10,313	13,047	16,023
2011	14,543	229	151	159	186,627	178,978	7,649	8,058	13,554
2012	14,510	180	200	213	159,536	153,082	6,454	8,006	13,160
Increase or Decrease Percentage Compared to the Last Year (%)	-0.23	-21.40	32.45	33.96	-14.52	-14.47	-15.62	-0.65	-2.91

2.The Management of CNS Mark

Year \ Item	Factory (No.of Factory)			Product (No. of Piece)			Quality Supervision (Factory Batch)	Product Sample Testing (No.of Piece)
	Existing Factory	Approval	Rescind	Existing Product	Approval	Rescind		
2008	616	44	46	1,897	67	74	495	1,695
2009	637	77	38	1,947	112	62	489	1,847
2010	630	60	52	1,930	95	112	498	1,604
2011	647	68	37	1,974	118	74	496	1,507
2012	650	49	45	1,980	79	73	531	1,510
Increase or Decrease Percentage Compared to the Last Year (%)	0.46	-27.94	21.62	0.30	-33.05	-1.35	7.06	0.20



3.Verification,Inspection of Metrology—by Item

Unit : Piece

Year \ Item	Total	Initial Verification	Subsequent Verification	Inspection	2 nd Grade Calibration	Calibration For Weights	Arbitral Inspection	Complaint and Uncovering Law Violating	Market Surveillance	Self-Management
2008	3,414,693	2,675,662	628,762	95,065	1,291	1,852	567	239	11,255	...
2009	3,174,282	2,323,835	730,885	106,549	1,532	1,930	820	235	8,496	...
2010	3,225,554	2,425,420	685,378	99,439	1,497	2,460	760	195	10,405	...
2011	3,537,562	2,619,236	802,504	96,032	1,573	2,222	734	232	15,029	...
2012	3,591,429	2,444,475	900,573	98,093	1,633	2,342	789	539	10,737	132,248
Increase or Decrease Percentage Compared to the Last Year (%)	1.52	-6.67	12.22	2.15	3.81	5.40	7.49	132.33	-28.56	--

4.Verification, Inspection of Metrology—by Branch

Unit : Piece

Year \ Item	Total	Headquarters of BSMI	Keelung Branch	Hsinchu Branch	Taichung Branch	Tainan Branch	Kaohsiung Branch	Hualien Branch
2008	3,414,693	1,364,855	16,206	129,771	46,986	1,792,566	54,016	10,293
2009	3,174,282	1,858,447	17,923	123,690	129,438	845,545	188,735	10,504
2010	3,225,554	1,366,359	17,605	124,777	196,792	1,364,589	145,273	10,159
2011	3,537,562	1,685,371	20,724	146,141	150,239	1,382,666	142,118	10,303
2012	3,591,429	1,581,538	39,027	175,290	246,942	1,348,847	186,586	13,199
Increase or Decrease Percentage Compared to the Last Year (%)	1.52	-6.16	88.32	19.95	64.37	-2.45	31.29	28.11



5.The Commodity Inspection— by Branch

Unit : Batch

Year \ Item	Total	Headquarters of BSMI	Keelung Branch	Hsinchu Branch	Taichung Branch	Tainan Branch	Kaohsiung Branch	Hualien Branch
2008	401,534	1,545	223,519	70,888	26,177	1,304	77,759	342
2009	392,363	1,521	215,092	74,672	24,378	1,183	75,195	322
2010	455,103	1,736	251,623	84,000	35,341	1,235	80,781	387
2011	357,821	1,410	205,850	102,940	24,760	1,226	21,213	422
2012	383,228	1,390	209,728	117,871	24,738	1,259	27,819	423
Import Inspection	376,100	132	209,516	117,039	22,205	34	27,170	4
Inspection for Domestic Market	7,128	1,258	212	832	2,533	1,225	649	419
Increase or Decrease Percentage Compared to the Last Year (%)	7.10	-1.42	1.88	14.50	-0.09	2.69	31.14	0.24

6.Market Surveillance

Year \ Item	Inspection of Commodities for Domestic Market (Item)					Distributor Inspection for Domestic Market (Company)	Purchased Sample Inspection for Domestic Market (Item)
	Total	Chemical	Toy	Electronic and Electrical	Machinery and Mechanical		
2008	30,673	4,481	8,169	14,696	3,327	9,090	1,739
2009	38,367	5,241	9,295	20,156	3,675	9,482	1,606
2010	48,297	6,203	10,778	26,632	4,684	9,712	1,644
2011	51,455	5,496	11,390	30,051	4,518	16,625	1,715
2012	45,079	5,668	10,525	25,490	3,396	4,970	1,226
Increase or Decrease Percentage Compared to the Last Year (%)	-12.39	3.13	-7.59	-15.18	-24.83	-70.11	-28.51

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