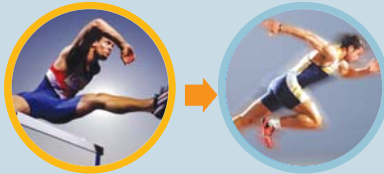




KATS Newsletter

Korean Agency for Technology & Standards, Ministry of Commerce, Industry and Energy

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Standards, Certification Innovation in Full Swing

The government-recognized standards and certification schemes play an important role in facilitating product quality and safety, thus having a significant influence on products' credentials in market, industry and society. However, drawbacks related to complex procedure due to overlapping certification schemes cause problems and confusion among consumers and enterprises alike.



Prior Notification System for Safety Management

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Quality of Measuring Instruments to Be Improved

The government plans to implement a KS-mark certification system for all measuring instruments, including water meters, weighing instruments and watt-hour meters, which have close relations to consumers and are used frequently in commercial transactions.

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Remove Hurdle, Leap for Success Standards, Certification Innovation in Full Swing

The government-recognized standards and certification schemes play an important role in facilitating product quality and safety, thus having a significant influence on products' credentials in market, industry and society.

However, drawbacks related to complex procedure due to overlapping certification schemes cause problems and confusion among consumers and enterprises alike.

Referencing and using different standards by respective authorities result in increasing product cost and decreasing consumers' reliance due to duplicating compliance processes and, sometimes, conflicting standards.

In Korea, the government and private sector currently operate a total of 140 different certification schemes (required by law: 80; private systems: 60).

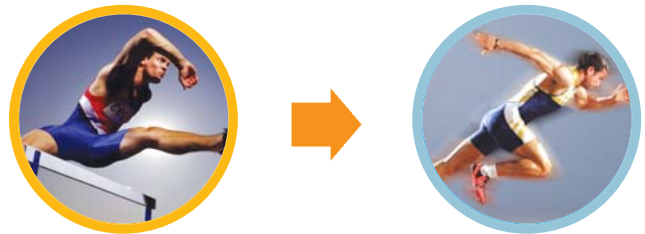
The government has embarked on a huge effort to revise entire standards and certification schemes based on international standards to eliminate areas of redundancy in order to better protect and inform consumers and help enterprises increase competitiveness.

The Basic Master Plan for the National Standards was established by working together with authorities, and National Standards Council chaired by Prime Minister approved the plan in June 2005.

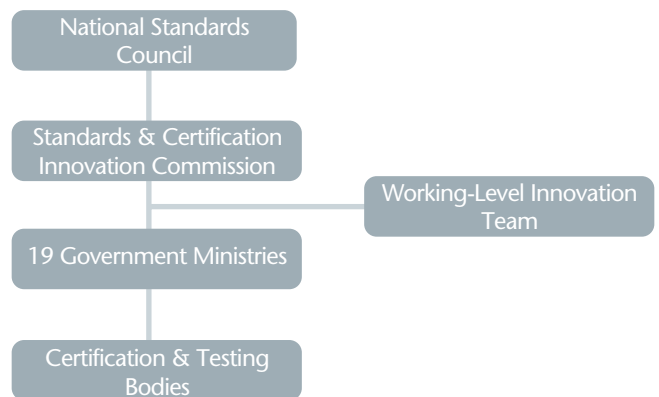
• Progress in Innovating National Standards & Certification Systems

- **June 2005:** Approval of the 'Basic Master Plan for National Standards' by National Standards Council (NSDC).
- **July 2006:** Establishment of 'NSDC's Working-Level Innovation Committee' consisting of 10 government ministries and private sectors.
- **August 2006:** Inauguration of 'Standards & Certification Innovation Commission' joined by 10 government ministries.

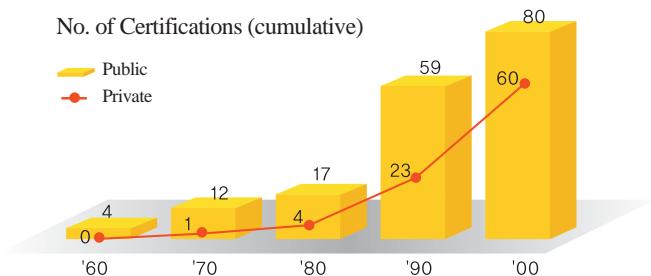
Based on consensus development from a wide range of stakeholders at national level, the working-level innovation team plans to promote integration and harmonization of national certification schemes, coordinated management of national standards and technical regulations, establishment of conformance assessment infrastructure, etc.



• Structure for Implementing 'National Standards & Certification Innovation'



• Figures in Certification Schemes



* Corporate burden from duplicating and conflicting certifications is estimated at about 800 billion won/year.

The working-level innovation team plans to:

- Build modules in mandatory certification processes;
- Develop integrated marking system for mandatory certifications;
- Eliminate duplication and conflict among certifications;
- Establish a self-regulatory system for private certifications;
- Strengthen linkage of national standards and technical regulations; and
- Expand conformance assessment infrastructure.

17 Products Certified as NEP in 1st Quarter of 2007



In the first quarter of this year, KATS issued NEP (New Excellent Product) certificates to 17 products having strong economic and technological ripple effects and excellent quality.

The 17 products were selected from among those commercialized with the application of technologies developed for the first time in Korea or equivalent substitute technologies, according to KATS.

With the certification, the number of issued NEP certificates valid through March 2007 totaled 611.

Most of the NEP-certified products this year are newly developed technologies with patent application and registration cases reaching 51. They are categorized as follows:

● Products closely related to daily life:

- Grain Selection Machine: With a built-in high-speed air gun, this product has superior selectivity for substandard grains due to higher air gun speed of 1,000~1,200 times/sec increased from 500 times/sec utilizing a CCD sensor camera;

- Wireless Ordering Terminal for Restaurants: Transmits order details to the restaurant counter and kitchen, and enables automatic issue of an order slip when a patron inputs an order into the terminal within 100 meters of the restaurant;
- Freeze-resistant Potable Water Meter: Prevents rupture of the water meters during cold temperatures by utilizing a high-molecular absorbent, etc.

● New products for industrial use:

- LCD Detection-Use Zoom Lens: With an adjustable magnification range from x1.0 to x1.6 on the pixel line CCD of an LCD, it can detect minute defects on the LCD surface from 4.4 μm up to 7 μm ; and
- Content USB: Unlike simple USB storage devices, this product has the world's first 'Hidden Area' technology, making it impossible to delete stored content and application programs.

Meanwhile, the NEP-certified products are designated among those items that should constitute more than 20% of procurement of government ministries, local autonomous bodies, government subordinate organizations, etc. Therefore, they are expected to contribute significantly to the sales growth of small and medium enterprises.

'KNOW TBT Conference' Held in Seoul

KATS hosted 'KNOW TBT (Korean Network On World Technical Barriers to Trade) Conference' with a focus on international environmental restrictions April 16~17 at COEX in Seoul with invited domestic and foreign experts from China, Europe, etc.



The two-day gathering was organized by the Agency, designed to provide domestic enterprises with the latest information on international environmental restrictions and ways of responding to them.

The invited experts explained the core of the world's key environmental restrictions, including RoHS, REACH, EuP and WEEE, and suggested solutions enabling the participants to acquire comprehensive information at one venue.

Of particular note, Dr. Vicky Lu, a standards expert at the Chinese Ministry of Information Industry (MII), which has legislated China's RoHS, was invited to the conference in an effort to enhance domestic business communities' understanding of the recently established Chinese directive.

KATS also welcomed Secretary-General Park Dae-Young of Korea Environmental Council in Europe (KECE), which is now conducting activities representing the interests of Korean companies in Europe, to discuss Europe's REACH-response trends.

To help corporate working-level staff resolve difficulties they are experiencing in responding to environmental restrictions, KATS prepared a separate consulting area outside of the lecture room. In order for domestic enterprises to cope efficiently with international environmental restrictions, which in some cases are emerging as trade barriers, KATS plans to address the detrimental effects on domestic industries in the future by providing related technology information on a continued basis.

‘International Eco-Design Standard Guide’ Published



With the enforcement of the EuP (Energy-using Product) Directive slated for August 2008, KATS has published an ‘International Eco-Design Standard Guide’ for electrical and electronic products to help domestic small and medium enterprises (SMEs) respond effectively to the new system in

advance.

The publication, which will become a guidebook on energy-efficiency and environmentally conscious design for product development and manufacture, contains the latest environmental restrictions, international standards trends and implementation methods of detailed procedures by Korea’s major export partners, Europe, China, Japan, etc.

Key Content of the Guidebook:

- WEEE Field: Provides IEC-established designer responsibilities regarding re-use, recycled use and acceleration of reproduction, assessment, product

decomposition methods, recycling processes and relevant information

- RoHS Field: Describes the scope of materials declaration, minimum requirements and test & analysis methods, where international standards have already been established or are in the process of establishment

- Regarding the comprehensive EuP design field encompassing WEEE, RoHS, etc., the guidebook describes general consideration items ranging from product design processes to acquisition of raw materials, manufacture, transaction & delivery, use & maintenance and energy recovery & disposal, etc. and the requirements of interested parties.

For SMEs that are experiencing difficulties due to a lack of environmental restriction-related information, KATS plans to provide required information to 300 KS-certified export firms on- and off-line with priority. The Agency also intends to develop and distribute a more detailed standard guidebook suited to domestic situations by technology and business type by the end of this year to provide substantial help to SMEs.

Harmonizing Farm Tractor Parts KS with ISO Standards

Among a total of 13 types of KS for farm tractor parts, KATS plans to harmonize 9 types of KS with ISO standards in advance in order to secure compatibility between domestically-made parts and imported parts.

The KATS’ plan is intended to resolve farmers’ difficulties and facilitate international trade of farm machinery parts.

No.	Part Name	KS Standard
1	Wheel fixing on hub for farm wheeled tractors	KSB7774
2	Hydraulic couplers for agricultural tractors	KSB7921
3	Electrical connectors for agricultural tractors	KSB7922
4	Connecting drover hitch pins for agricultural tractors	KSB7934
5	Upper linking pins for agricultural tractors	
6	Upper hitch pins for agricultural tractors	
7	Journal cross-assembly for PTO drive shafts of agricultural tractors	KSB7937
8	Friction clutch discs for PTO drive shafts of agricultural tractors	KSB7938
9	Ball used in 3-point linkage for agricultural tractors	KSB7941
No. of Parts: 9		No. of KS: 7



Introducing DoC System for Net Quantity Labeling

Starting in September this year, KATS plans to implement a Declaration of Conformity (DoC) system for 26 types of net quantity labeling products. The new system is designed for manufacturers, importers, packagers and sellers to declare that actual quantities included are the same as that marked on the labels of containers and packages.

The 26 products subject to the system are daily living necessities, including rice, milk, sugar, confectionaries, beverages, detergents and paints, stipulated in the Measures Act.

“Although local autonomous bodies are implementing the market surveillance to the actual quantity for the 26 products, the situation is that substantial management cannot be achieved due to a lack of experts and inspection facilities as well as insufficient budget,” said KATS.

KATS explained that it decided to implement this system to enhance manufacturers’ awareness of net quantity labeling products and also to help them manage quantities more thoroughly and efficiently with required manpower, equipment and quantity management system.

Key elements of this system include quantity management organization, quantity management system, document management, quantity inspection process management,

quantity inspection facility management, quantity inspection environment, packaging process management, actions to non-conformity process and preventive measures and DoC confirmation criteria.

With implementation of the system, those who wish to obtain DoC confirmation of net quantity labeling products, shall apply to the heads of the bodies designated by the Minister of Commerce, Industry and Energy, equipped with financial condition, personnel status, quantity management system and guides, inspection facilities, etc. .

Those firms that acquire DoC confirmation can attach the “k” mark to their products. “k” marked products will be exempt from the market surveillance implemented by local autonomous bodies.

A related KATS official said, “Introduction of this system will give consumers confidence regarding the actual quantity of ‘k’-marked products and it will also help the establishment of a fair transaction order and enhancement of manufacturers’ actual quantity management capabilities.” He added, “Furthermore, it will provide momentum for the nation to boost exports of daily necessities by preparing in advance for the IQ-Mark Certification System to be implemented by the International Organization of Legal Metrology (OIML) starting in 2009.”

‘Riding Elevators Correctly’ Safety Campaign



The ceremony for ‘Riding Elevators Correctly’ safety campaign was held at the Grand Conference Room of Seoul Railroad Station at 10:30 on March 22. The participants joined its advertising campaign at the station’s square following the ceremony.

The campaign was sponsored by KATS and organized by Korea Elevator Safety Institute (KESI) and Korea Elevator Safety Technology Institute (KEST) to implement the elevator safety accident countermeasures.

The countermeasures included enhancement of elevator users’ safety awareness; revision and amendment of elevator inspection criteria to suit the domestic environment; and improvement of elevator safety management system in parallel with the medium and long-term industry development.

In 2007, the national elevator inspection body, KESI, plans to conduct training programs for 500,000 children at about 350 primary schools. KESI is also conducting training programs for 700,000 children at about 2,000 kindergartens and primary schools focusing on correct methods of using elevators and the accidents caused by misuse.

Moreover, the two institutes intend to conduct elevator safety campaigns nationwide jointly with citizens’ organizations in order to enhance public awareness of safety and to prevent accidents.

Stricter Safety Certification, Expansion of Self-Regulation Prior Notification System for Safety Management

A new industrial product safety management system was put into effect on March 24, featuring stricter safety certification, expansion of the scope of corporate self-regulation and reinforced safety of products for children.

To fundamentally stop the marketing of dangerous products with the participation of sound enterprises and consumers, the government revised and implemented the product safety management system, according to KATS.

The primary characteristics of the revised system include the total number of object items reduced to 79 from 94, strengthened safety management content and modification from the past supervision by the government to the preventive safety management system through business-consumer cooperation.

First, the revised system differentiates safety management methods in terms of the level of hazard and expands the scope of corporate self-regulation, while preparing systematic devices to enable thorough management of highly dangerous products from the production stage.

The number of object items required to have safety inspections decreased (39 items), which was previously mandatory for highly hazardous items, and changed to safety certification (18 items). However, the inspection regime was strengthened from just product inspection to product inspection & factory examination.

The safety verification self-regulated by business (31 items) has been modified to self-regulatory safety confirmation (47 items), which is now mandatory. The previous 'Inspection' and 'Safety' mark were also changed to new KPS (Korea Products Safety) marks, such as 'Safety Certification,' 'Self-regulatory Safety Confirmation' and 'Child-Resistant Packaging.'

According to the KPS mark classification, there are safety certification (18 items), self-regulatory safety confirmation (47 items) and safety & quality mark systems (14 items).

Due to the emergence in the market of so many new products to the extent that laws cannot keep up, the government also newly established a 'Rapid Countermeasures System' to solicit recalls and announce via the media when consumer damage is feared to spread, even if not legally specified by law.

Protection for children safety also was reinforced. To prevent poisoning accidents that can occur when children drink or inhale household chemical products, reports on child-resistant packaging became mandatory and 40 kinds of hazardous chemical substances, including formaldehyde, are restricted from

use in children's goods.

Enterprises are obliged to promise the supply of safe goods, while the prior notification system for safety management designed for consumer-centered safety watchdogs to monitor dangerous goods also will be established.



Furthermore, the revised system increased policy transparency and consistency in a way that enables the direct participation and appraisal by enterprises, consumers and experts starting at the

List of the Revised Safety Management System

Improvement of Safety Management Methods

Previous	Revised	Remarks
Safety Inspection (mandatory) *Product Inspection	Safety Certification (mandatory) * Product Inspection + Factory Examination	•Items with serious hazard potential of causing fatal accidents
Safety Verification (voluntary)	Self-regulatory Safety Confirmation (mandatory) *Report after a public certification body's inspection	•Items feared to cause a safety hazard to human body
Quality Mark (voluntary)	Safety & Quality Mark (mandatory)	•Items that can secure safety if precautions are followed at the time of use
-	Measures for Items Unspecified by Law (newly established)	•When hazardous products are found and spread of damage is feared

Adjustment of Safety Management Items

Before Revision	After Revision
94 Items	79 Items
Safety Inspection 39 Items	Safety Certification 18 Items
Safety Verification 31 Items	Self-regulatory Safety Confirmation 47 Items
Quality Mark 24 Items	Safety & Quality Mark 14 Items

Introduction of New Safety Mark

Before	After	Classification of KPS Marks
Safety Inspection	Safety Verification	
* KPS: Korea Product Safety		

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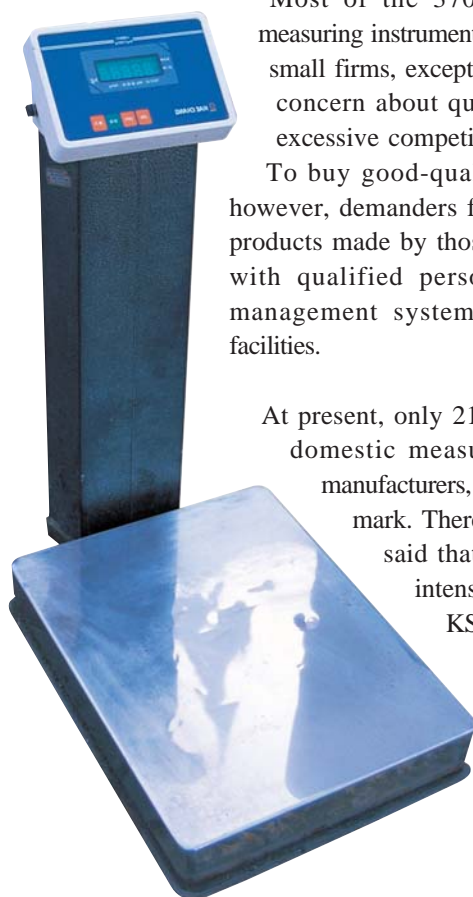
Implement a KS-Mark Certification System Quality of Measuring Instruments to Be Improved

The government plans to implement a KS-mark certification system for all measuring instruments, including water meters, weighing instruments and watt-hour meters, which have close relations to consumers and are used frequently in commercial transactions.

For 18 items designated as legal measuring instruments in accordance with the Measures Act, manufacturers and importers have thus far produced, imported and sold these after acquisition of type approval alone. But under this system, it was difficult to expect quality enhancement, since type approval could be obtained through simple product tests, according to the Ministry of Commerce, Industry and Energy (MOCIE).

Most of the 370 domestic legal measuring instrument manufacturers are small firms, except for a few, raising concern about quality decline and excessive competition among them. To buy good-quality instruments, however, demanders favor KS-certified products made by those firms equipped with qualified personnel, a quality management system and inspection facilities.

At present, only 21 firms, 6% of all domestic measuring instrument manufacturers, have acquired KS-mark. Therefore, the ministry said that it plans to more intensively promote the KS-mark certification system.



Subsequently, KATS, under the umbrella of MOCIE, plans to conduct explanatory session tours in each region for those companies without KS-mark certification and publicize the fact that they will qualify for benefits like exemption of type approval, priority purchase by public organizations, etc. if they obtain the certification.



Once the system is converted into a KS-mark certification from type approval, the ministry expects that it will not only bring stable quality improvement but also provide momentum to better respond to demander requirements, while preventing excessive competition among small-size manufacturers.

Status of Domestic Legal Metering Equipment Makers (As of December 2006)

Category	Mass	Volume	Watt-Hour	Heat	Others	Total
No. of Firms	153	124	39	13	35	370

Type Approval Cases by Item (As of end December 2006) (Unit: Type Approvals/Firms)

Automatic Weighing Machine	Electronic Weighing Instrument	Watt-Hour Meter	Gas Meter	Water Meter	Hot Water Meter	Oil Dispenser
23/7	66/15	269/32	31/8	240/54	54/19	9/2
Oil Meter	Sphygmomanometer	Heat Meter	Total			
2/1	13/2	46/12	753/152			

Status of KS Certificates Issued by Item (As of end December 2006) (KS-Certified Firms/Manufacturers)

Weighing Instrument	Oil Meter	Watt-Hour Meter	Gas Meter
3/137	3/40	7/21	4/14
Water Meter	Heat Meter	LPG Dispenser	Total
1/40	1/8	0/110	19/370

(Continued from p6)

Protect Consumers, ...

stage of government drafts of safety management policies as well as systemization for feedback of the results.

For those enterprises that have difficulties in putting their products on the market with labeling of the new safety marks or

that are not aware of the revised regulation, KATS plans to actively publicize the new system by designating a guidance period until June and to conduct a full-scale crackdown starting in July this year.

New Safety Labeling System for Chemicals Korea Ready for Enforcement of GHS in 2008

To prepare for GHS (Globally Harmonized System of Classification and Labelling of Chemicals), which goes into announced on March 28 its plan to distribute publicity posters and develop an expert training program.

GHS is a new safety labeling system for chemicals that lays down the danger level of 27 chemical substance groups with pictograms. The United Nations adopted the system in 2003 and is encouraging its common use in all countries throughout the world.

For the domestic settlement of GHS, seven of Korean government ministries set up an interministerial GHS committee in 2004. With revision of the Industrial Safety and Health Act (responsible authority: Ministry of Labor) in December 2006 as the start, MOCIE, the Ministry of Environment (MOE), National Emergency Management Agency (NEMA), etc. also are getting started to revise related legislation.

Although there is a mandatory regulation that prohibits exports and imports unless GHS is followed, there still exist a considerable number of domestic enterprises that do not even know even what GHS is. Therefore, its publicity and training are essentially needed.

KATS plans to enhance publicity activities, including distribution of GHS posters to related business communities, based on KS standard (KS M 1069: "Labeling of Chemicals Based on GHS") published in December 2006.

To raise awareness of GHS, the Agency also plans to develop an expert training program this year and underpin infrastructure to take off toward being an advanced country in the field of safety management of chemicals.

In the GHS training program, the Agency intends to create all necessary courses, such as classification & labeling methods, data collection & analysis methods and product labeling methods.

Considering that GHS is associated to public safety as well as its application to enterprises simply engaged in product management of chemicals and to other diverse areas, distribution (rail, sea & air transport), storage, etc., MOCIE plans to increase publicity and strive for the settlement of a safety management system for chemicals matching Korea's status as the world's seventh-ranking chemical industry nation.

GHS Pictograms (According to U.N. Criteria)

<Flame>



- Flammable Gas
- Flammable Aerosol
- Flammable Liquid
- Flammable Solid
- Self-Reactive Substances & Mixtures
- Pyrophoric Liquid/Solid
- Self-Heating Substance & Mixture
- Water-Reactive Substance & Mixture
- Organic Peroxide, etc.

<Flame in Circle>



- Oxidizing Gas
- Oxidizing Liquid
- Oxidizing Solid

<Explosion of Bomb>



- Explosive Substance
- Explosives
- Organic Peroxides

<Corrosiveness>



- Substances Corrosive to Metal
- Skin Corrosion/Irritation
- Serious Eye Damage/Irritation

<Gas Cylinder>



- Gases Under Pressure

<Exclamation Mark>



- Skin Sensitizer
- Acute Toxicity
- Skin Irritation
- Serious Eye Damage/Irritation
- Target Organ Systematic Toxicity - Single Exposure



- Acute Toxicity (severe)

<Health Hazards>



- Respiratory Sensitivity
- Germ Cell Mutagenicity
- Carcinogen
- Reproductive Toxicology
- Target Organ Systematic Toxicity - Single Exposure
- Target Organ Systematic Toxicity - Repeated Exposure
- Aspiration Toxicity

<Environmental Hazards>



- Acute Aquatic Toxicity
- Chronic Aquatic Toxicity