## Global Standards Frontier KATS: Be The First

# KATS Newsletter

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

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### **Expediting Commercialization of New-Tech Robots**

KATS has announced to provide custom-tailored technical support for early commercialization of new robot products by applying its NEP (New Excellent Product) certification system as well as LABCON (from LABlatory to CONtainership) Plan to the robot field. NEP is a system certifying selected items having excellent quality & functions and high economic ripple effects among new-tech…



#### **KATS Dispatches Standards Experts to Mongolia**

KATS dispatched experts to MASM (Mongolian Agency for Standardization and Metrology) to train officials from May 1 to May 3. The training was aimed at sharing and exchanging KATS' experience in establishing National Standards Policy, operating a conformity assessment system, and improving assessment capability to respond to the rapid development of the national economy over the past several decades.



### Safety Checks on 41,000-Plus Old Lifts

Together with elevator inspection bodies and elevator repair & maintenance companies, KATS is planning to conduct safety checks on 41,820 units of old lifts from April 20 to August 19 this year. According to KATS, these lifts, installed on a large scale due to the new city development boom ahead of the 1986 Asian Games and 1988 Olympics, are ageing...

## Contents

#### 2 Issues & Focus

- Expediting Commercialization of New-Tech Robots
- KORUS FTA: Lowering Technical Barriers to Trade
- **3** Industrial Standardization Regime
  - Standardizing Biomedicine Production Facilities
  - Construction Gear Meeting Held on Jeju Island

- **4** International Standards Activites
- KATS Dispatches Standards Experts to Mongolia
- NWIP on mRFID Service Approved by ISO/IEC JTC1/SC6
- **5** Safety/Standard Prism
  - Safety Checks on 41,000-Plus Old Lifts
  - International Product Safety Workshop in Seoul

- **6** Industrial Development
  - Elevator Development Roadmap Established

#### **7** IT Security

- KTL Becomes IT Security
   Conformity Assessment Body
- 8 New Laws & Regulations
- Service Quality Certification Era in 2008
- Reorganizing Korea Industrial Standards Council

## Application of NEP and LABCON Systems Expediting Commercialization of New-Tech Robots

KATS has announced to provide customtailored technical support for early
commercialization of new robot
products by applying its NEP
(New Excellent Product)
certification system as well as
LABCON (from LABlatory to
CONtainership) Plan to the robot field.

NEP is a system certifying selected items having excellent quality & functions and high economic ripple effects among new-tech products developed for the first time in Korea. LABCON is a system to support certification, exploration of sales market and financing after identification of promising new-tech

products developed by small and medium-sized enterprises (SMEs).

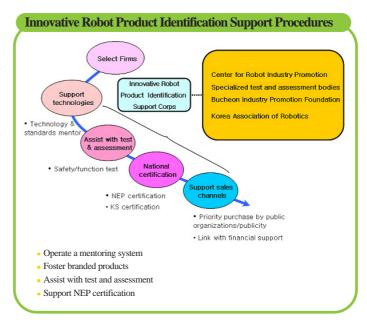
As a strategy to accelerate commercialization of robot technologies and to nurture newly developed robots into world-class products, KATS plans to organize an 'Innovative Robot Product Identification Support Corps' in cooperation with robot-specialized organizations, such as the Center for Robot Industry Promotion, Bucheon Industry Promotion Foundation and Korea Testing Laboratory, and also to designate and support 10 promising robot products of SMEs initially as a test case.

For this, KATS held an explanatory session on the corps on May 18 at the Robot Industry Research Center in Bucheon Technopark and received applications from relevant enterprises for its full-cycle commercialization support, including mentoring of difficult technologies by company, test & evaluation, certification, etc.

Once NEP certificates are acquired, public agencies would be

obliged to purchase more than 20% of certified products among their required total robot products. Starting May 10, moreover, NEP-certified products are exempt from conformity assessment in the government procurement market so as to stimulate introduction of robots into public sectors in addition to other various benefits, including subsidy for participation in exhibitions and preferential treatment with regard to conditions for performance bond and loans from banking institutions.

KATS expects its innovative robot product identification support system to encourage consumers' purchase of certified robot products and to provide momentum for further growth of excellent domestic robot products further for advance into the global market. The objects to receive priority support will be guide robots, education robots, fire-fighting rescue robots, etc., with the possibility of early commercialization due to their high technology levels and high demand in public sectors.



## KORUS FTA: Lowering Technical Barriers to Trade

Korea concluded the Free Trade Agreement with US (KORUS FTA) on April 2 this year. This agreement is expected to facilitate bilateral trade and promote economic growth both of Korea and US.

Representatives of Korean Agency of Technology and Standards participated in KORUS FTA negotiations and lead the Korean delegations in negotiations on technical barriers to trade (TBT) issues. In terms of TBT, some important elements agreed between Korea and US include: the provision of national treatment of each other's persons for participation in the development of standards and technical regulations; notifying proposals for comments and making available to the public comments received on the proposals; information sharing on the proposed and final technical regulations of central government as well as of the US State governments; provision of national treatment when recognizing testing and certification bodies.

## Product Quality and Safety System Standardizing Biomedicine Production Facilities

Responding to the request for preparation of GMP (Good Manufacturing Practices) from pharmaceutical industries, KATS has been actively promoting a five-year project to establish the foundation for standardization of biomedicine production facilities since its launch in 2005.

The purpose of this project is to develop GMP-related standards for implemention of GMP at both national and international levels. It is expected that by implementing this project, a significant contribution would be made to raising competitiveness of the pharmaceutical industries in Korea.

Biomedicines (1.2 trillion won) accounted for about 40% of the national bioindustry market (2.8 trillion won) in 2005. And Korea is looking at some tens of billions of dollars in pharmaceutical product exports 10 years from now.

As pharmaceutical products would have to comply with the standards on the basis of the regulations and satisfy GMP expectations for sale in national and global markets, pharmaceutical industries' demands for more detailed and up-to-date knowledge on GMP have also increased.



Accordingly, KATS, in cooperation with the Korean Society for Biotechnology and Bioengineering (KSBB), is endeavoring to develop guidelines on biomedicine production processes, facilities and standards development procedures for implementation of GMP.

On April 23, KATS launched a website which provides a great deal of information such as quality manual, guidelines, standards development procedures, bioindustry classification systems, classification codes for bioengineering technologies, etc., which are avaliable free of charge.

### Construction Gear Meeting Held on Jeju Island

The plenary meeting of ISO/TC195 (Building construction machinery and equipment) was held May 9-11 on Jeju Island with the participation of 33 experts from eight countries.

Korea is the world's fourth largest construction machinery producer at US\$5 billion annually, accounting for 5% of the world's construction machinery market. During the three-day meeting, Korean and global manufacturers of construction machinery and equipment, including Komatsu, Dynapac and Putzmeister etc., participated in developing international standards. The meeting drew considerable attention from experts and leaders of related industries, academia and institutions in Korea, and increased their understanding of international standardization activities.

Recent national and international technological development and standardization trends indicate that environment-related technologies and mechatronics technologies to enhance amenity and convenience are now the mainstream. In the environment field, development of engines with low exhaust emissions and low noise, and development of hybrid engines are underway. In the mechatronics field, GPS-related equipment management technologies and robotics technologies for unmanned operation are being developed. The participants in the meeting exchanged opinions on the plans establishing international standards for these technologies.



To provide for worker safety, in particular, the participants also had a wide variety of discussions on international standardization regarding 'Danger' signboards, 'Warning' labels, etc.

The ISO/TC195 meeting provided an excellent opportunity to introduce Korea's technological development in the field of construction machinery and equipment to countries around the world. During the meeting, Korea introduced its newly developed products, including a concrete pump vehicle enabling the pouring of concrete up to 58 meters high, a significant improvement on the existing capability of 32 meters.

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KATS dispatched experts to MASM (Mongolian Agency for Standardization and Metrology) to train officials from May 1 to May 3. The training was aimed at sharing and exchanging KATS' experience in establishing National Standards Policy, operating conformity assessment system, and improving assessment capability to respond to the rapid development of the national economy over the past several decades.

This special training program was proceeded in the form of lectures and discussions at the request of MASM. Subjects covered in the program were National Standardization Policy, International Standardization Activities, Legal Metrology, Conformity Assessment System, KS Certification System, Introduction to ISO 9001/14000, etc.

The participants were the Mongolian government officials involved in standardization, who need to upgrade their knowledge further by sharing experience in National Standards Policy, conformity assessment and certification-related capabilities.

The Korean President promised to support training on standards and technology for ASEAN countries on the occasion of the ASEAN+3 Summit in 2000. In this regard, KATS has been implementing training for "Development of Standardization and Conformity Assessment System" since



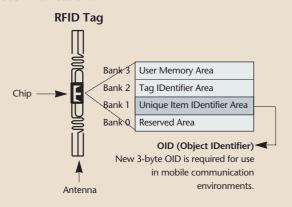
2002. Moreover, KATS has also implemented training program for the Vietnamese standardization officials on the Korean legal metrology system, standardization system and WTO/TBT related systems over the last two years and received a positive response.

#### **KATS Training Record for Developing Countries**

- Training for ASEAN countries on standardization and conformity assessment (2002~2006: five times in total, 70 personnel participated in the course)
- Training courses for the Vietnamese senior government officials (July 2005 and October 2006)
- Bangladesh's Vice Minister's visit to Korea to study conformity assessment (August 2005)
- Dispatch of KATS' experts to Sudan (Nov. 25~Dec. 23, 2004)

## NWIP on mRFID Service Approved by ISO/IEC JTC1/SC6

On April 20, a New Work Item Proposal (NWIP) on OID (Object IDentifier) technology submitted by Korea was approved by ISO/IEC JTC 1/SC 6, which develops International Standards in the fields of information and telecommunications.



The approved mRFID-based application service, OID, is a

new technology enabling utilization of RFID tags at mobile communication terminals. By launching this service, it is possible to see information in hand, such as RFID tagattached goods and culture, through mobile communication terminals.

The technology, which was developed by the Electronics and Telecommunications Research Institute (ETRI), is regarded as identical standards by ISO and ITU (International Telecommunication Union).

Currently, the Korean mobile communication companies such as SKT and KTF have set up a new business for mRFID-utilized test services including wine information and taxi safety services. Moreover, they are considering to extend the scope of their services to the fields of tourism and food. It is expected that the market size would reach 700 billion won in 2010.

### Safety Checks on 41,000-Plus Old Lifts



Together with elevator inspection bodies and elevator repair & maintenance companies, KATS is planning to conduct safety checks on 41,820 units of old lifts from April 20 to August 19 this year.

According to KATS, these lifts, installed on a large scale due to the new city development boom ahead of the 1986 Asian Games and 1988 Olympics, are ageing, and lifts more than 15 years old account for over 12.3%, about 40,000 units,

of the approximately 340,000 units in use.

Under these circumstances, a precise safety check will be conducted focusing on the parts most vulnerable to safety issues due to age, such as brake abrasion, gaps between doors and door-frames caused by long-term use, etc.

For old lifts with risk elements identified through an analysis of safety check results, KATS will notify mayors and municipal government officials to take administrative measures such as immediate suspension of operation and also to prepare a management scheme for superannuated lifts, including the establishment of precision inspection criteria.

#### **Status of Old Elevators**

(As of the end of February 2007, No. of Units)

Over 17 Yrs.	Old Over 15 Yrs.	Old Over 10 Yrs.	Old Over 5 Yrs.	Old Total
21,105	41,820	130,559	222,916	339,269

### International Product Safety Workshop in Seoul

KATS, jointly with Korea Society for Regulatory Studies (KSRS), held an international workshop on product safety on May 19 at the International Conference Room of Korea Press Foundation (KPF) in central Seoul.

About 200 product safety-related experts from domestic and overseas business communities, consumer organizations, safety institutions and academic circles participated in the workshop to discuss product safety policies and recent trends of international organizations and major countries and the establishment of common international safety regulations.

The workshop proceeded with an opening address by KATS Director General for Product Safety Policy Jun Dae-Cheon and a congratulatory address by Prof. Lee Sung-Woo of Hansung University.

Chairwoman Denise Pozen of ICPHSO (International Consumer Product Health & Safety Organization) and Chairman Dirk H. Meijer of ICPSC (International Consumer Product Caucus) attended Session I and gave presentations on international trends regarding reinforcement of international cooperation, expanded application of international standards, etc.

Director for Planning Moon Eun-Sook of Consumers Korea (CK) also introduced international standardization trends on the establishment of recall standards and product safety guidelines for businesses of ISO-COPOLCO (ISO Committee on Consumer Policy) where CK Chairman Kim Jae-Ok has the chairmanship.

In Session II, government officials of four nations -Europe, Canada, Japan and Korea - explained their country's product safety management systems and introduced their international cooperation activities.

Session I and Session II were chaired by Prof. Lee Sung-Woo of Hansung University and Prof. Kim Ju-Chan of Kwangwoon University, respectively. The lecturers included S. Wright of Canada's Ministry of Health, Labour and Welfare, J. Ozawa of Japan's National Institute of Technology & Evaluation (NITE) and KATS Director General for Living Goods Safety Yoo Dong-Ju.

With the international workshop as momentum, KATS expects to further spread product safety awareness and for the 'Industrial Product Safety Management System,' which was revised and put into effect in March, to take root at an early date.

## Implement a KS-Mark Certification System Elevator Advancement Roadmap Established

On April 19, the Ministry of Commerce, Industry and Energy (MOCIE) confirmed and announced the 'Elevator Advancement Roadmap,' which aims to reduce elevator accidents by half within the next 10 years and also to solidify the framework for advancement of the elevator industry.

In February 2006, the Ministry launched its work to develop a roadmap for elevators, organized an 'Elevator Advancement Roadmap Promotion Committee' comprised of elevator manufacturers' associations, consumer organizations, inspection bodies, academics and government representatives to prepare a draft, which was later confirmed after collecting opinions from public hearings and all walks of society.

The Ministry's completed roadmap calls for the promotion of 39 detailed tasks in three strategic fields on a step-by-step basis through 2016: innovation of elevator safety management system; advancement of elevator safety criteria; and promotion of the elevator industry.

According to the roadmap, the Ministry plans to strengthen safety management infrastructure and also significantly reinforce responsibilities of managing bodies in order to innovate the safety management system:

- Establish a systematic and comprehensive safety management policy direction and set up and announce 'Basic Master Plan for Elevator Safety Management' on a regular basis for dissemination to relevant organizations and industries in advance;
- Strengthen elevator safety management infrastructure, including the establishment of an elevator safety publicity system, a comprehensive information management system, re-establishment of the surveillance system, expansion of accident investigation functions, and preparation of a dispute resolution system;
- Provide for criminal punishment of elevator managing bodies if accidents occur due to negligence in maintenance and repair while being aware of elevator defects;
- Introduce a special management system to deal with the increase in number of old lifts and a precision safety check recommendation system, and promote advancement of inspection systems;
- Reinforce the registration requirements for elevator maintenance & repair providers, promote responsible maintenance contracts and make regular training on new

technologies mandatory for maintenance personnel; and

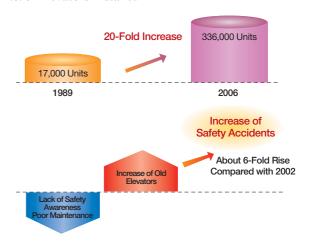
- Prepare a legal basis requiring that elevator manufacturers provide maintenance components to an 'Elevator Components Supply Center,' if this long-sought center for the maintenance business community is established, for the smooth supply of components for maintenance.

The Ministry also plans to promote advancement of elevator safety standards to establish safety criteria suitable to the Korean environment as well as to prepare fundamental measures to prevent accidents:

- Comprehensively analyze accidents that have occurred to date and prepare 'Elevator Safety Hazard Map' clearly providing the frequency of accidents, causes, etc., establish accident-prevention countermeasures with a priority order and prepare related safety criteria; and
- Establish separate inspection criteria for old lifts and turn general inspection criteria for elevators into performancebased criteria for easier application to new products and new technologies as in advanced countries.

To foster the elevator industry and to enhance competitiveness,

#### No. of Elevators Installed



#### **Domestic Market**



(Continued on p7)

## Stricter Safety Certification, Expansion of Self-Regulation KTL Becomes IT Security Conformity Assessment Body

On May 2, the Korean Agency for Technology and Standards (KATS) accredited Korea Testing Laboratory (KTL) as the first Conformity Assessment Body(CAB) by KOLAS (Korea Laboratory Accreditation Scheme) in the field of information security in Korea. Accordingly, Korea has become the world's ninth country to issu internationally recognized test results in the field of IT security.

Since joining the Common Criteria Recognition Arrangement (CCRA) in May 2006, Korea has opened its domestic IT security products market. As CCRA requires that IT security evaluation agencies comply with ISO/IEC 17025 (General requirements for the competence of calibration and testing laboratories), each country is actively introducing an internationally recognized accreditation system to expand its market for IT products and related systems.

Accrediting KTL as a globally recognized testing laboratory means that the test reports issued by KTL are valid both nationally and internationally. Furthermore, it is significant that Korea has established a platform to extend its domestic IT security products market and related services abroad at this point with sharp competition among nations.

\*\* Market scale for information security: US\$ 34.5 billion in 2005 at international level, 822.9 billion K/W (export: 51.7 billion K/W) at national level

KOLAS accreditation in IT security is based on a thorough on-site assessment to determine whether tests are conducted appropriately in compliance with ISO/IEC 15408 (Information Technology - Security Techniques - Evaluation Criteria for IT Security) and includes the following:

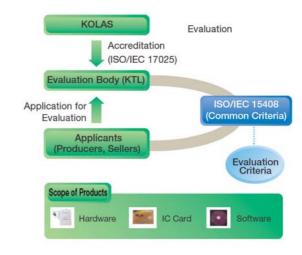
- Security level of IT products and systems;
- The approach to security vulnerabilities;

- Evaluation of whether to have a certain program structure against outside attack;
- Examination of whether to include undesirable security processes;
- Capability to respond to security problems detected in the past.

By accrediting KTL, national information security-related companies are expected to prevent the leakage of local IT security industry technologies, which is emerging as a new key export engine. Also they are expected to secure international competitiveness with reduction of the evaluation period. Finally, by supplying information protection products with verified safety and reliability, KTL is expected to gain credibility for the national information protection system as well.

With the new accreditation in the field of information protection, KATS gradually plans to expand the scopes of the KOLAS accreditation system from hardware to software, and to support related laboratories to become internationally recognized testing bodies.

#### **KOLAS Accreditation System for IT Protection System**



(Continued from p6)

#### Elevator Advancement...

the Ministry plans to promote policies required for solidifying the industry's development foundation:

- Support marketing activities, including development of strategic export items and common brands of small and medium enterprises (SMEs) for exploration of foreign markets and assist in building a cooperative network for sharing of parts and components;
- Set up comprehensive measures to strengthen the competitiveness of the elevator industry on the basis of precise surveys on actual conditions, and induce upscaling and specialization of maintenance and repair companies; and
- Establish an 'Elevator Mutual Benefit Association' in the long term to resolve financial problems that elevator manufacturing and maintenance & repair companies experience such as financial loans and bid bonds.

#### **Industrial Standardization Act Revised**

## KS Certificate Becomes Applicable to Service from 2008

The use of KS mark indicates conformity with the Korean Industrial Standardization Act' and, up to date, it has been issued only to products. By revising the Industrial Standardization Act this year, however, KS certification system becomes applicable to service from 2008. The public therefore will be able to be provided reliable and high-quality services on the basis of KS mark starting in 2008 when the revised Act goes into effect.

In an earlier revision of the Act in 2001, the Korean government laid legal ground to enable to establish KS(Korean Industrial Standards) for services. Since that time, the Korean Agency for technology and Standards(KATS) has established a total 71 types of KS in 28 service fields including call center, facility management, moving, door-to-door delivery and funeral ceremony.

Currently, KATS identifies and prioritizes the fields of service quality certification such as call centers and facility management services, and then plans to develop the KS certification scheme in other fields closely related to the everyday life, funeral ceremony, door-to-door delivery, etc. on a gradual basis.

In addition, the revised Act introduced the PSDO (Partner Standards Development Organization) system, which is designed to provide opportunities to the standardization-related private organizations to participate in KS development procedures.

The revision bill of the Industrial Standardization Act was passed at the plenary meeting of the National Assembly on April 27, 2007, and the revised Act will be enforced one year after its

promulgation in May. The Ministry of Commerce, Industry and Energy (MOCIE) and KATS exerts every effort to take necessary actions for successful implementation of the KS certification system, especially in the service field and to ensure public convenience and benefits.

#### **Highlights of the Revised Industrial Standardization Act**

- 1. Improvement of the Legal System
- Amending the Act to clarify the meaning of its provisions in an easier-to-understand way
- Seeking to ensure transparency of the procedure for designation of KS certification bodies
- Strengthening qualifications for KS certification auditors
- Reviewing and amending collective standards-related regulations
- 2. Introduction of New Systems
- Fostering specialized organizations in private sector as PSDOs
- Introducing KS certification system to service industries
- 3. Abolishment of Unnecessary Regulations
- Penalty for violation of the mark of conformity with collective standards
- Prescription related to tentative standards system
- Clause for encouraging private subscriptions to SDOs

## Harmonization With Global Standard Reorganizing Korea Industrial Standards Council

KATS plans to restructure the Korea Industrial Standards Council, which was set up 45 years ago, to make it identical to the ISO Council.

Accordingly, KATS intends to review the relevant laws so that the nation could respond better to the international standards management and rapidly deal with newly emerging international standards.

KATS predicts that the needs for national and international standards by national stakeholders, such as interested parties, consumers, managers and organizations, would increase significantly in the future. In this regard, KATS announced that it would change the existing top-down method for developing national standards to a demand-centered, bottom-up method, which would enable standards demanders to participate more actively in national standards development procedures.

To this effect, KATS is studying the introduction of the 'Partner Standards Development Organization (PSDO)' system on a full scale starting this year, designating PSDOs, and developing projects to support development of national standards by these organizations. When this system is introduced, the designated corporations or organizations will enable to develop draft KS directly through voluntary consensus of the relevant interested parties in a specialized field.