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'Escrow Service,' a transaction protection system for e-commerce, is to be introduced on a full scale. Implemented as part of the third-year logistics B2B project, the escrow service is a system joined by banks with high public confidence as third parties in order to ensure fairness and transparency in the ecommerce process.

The first goal of the escrow service is to provide consumers with trustworthiness in e-commerce activities by eliminating thoroughly the instability of cash payment settlements. Domestic logistics businesses are paying keen attention to whether or not expansion of e-marketplaces and an increase in sales volume can be realized by securing of confidence through this service.

Up until now, domestic e-commerce communities have failed to transcend the 'Barrier of Uneasy Sentiment' accompanying the characteristics of online transactions in which neither sellers nor consumers are able to view products for sale directly. When cyber mistakes occur due to click error, etc., moreover, there has been a lack of legal basis that properly addresses such situations. As a result, the B2B market has faced limitations to its growth due to an absence of an alternative to the bill (draft) transaction system, etc. and buyers' tendency to favor offline transactions. Although statistically more than 73% of all Internet users have used e-commerce, their repeat utilization rate is very low, restricting growth of the overall market because dispute resolution devices for return of goods, refunds, etc. are yet to be systemized.

One of the characteristics of escrow is utilization of cyber accounts. At the time a buyer makes a payment for purchased goods to the escrow, a temporary

#### **Expected Changes in Economic Players Under Escrow Service**

Economic Players	Expected Services and Effects
Internet Shopping Malls	To provide e-payment settlement and integrated logistics services (requests for delivery, return of goods, cancellation, payment settlement, etc.)
e-Payment Settlement Firms	To prevent occurrence of transactions by camouflaged companies, reduce risks in e-commerce and possibly confirm transactions.
Logistics Companies	To secure new customers and unify settlement of logistics costs.
Customers	To ensure the safety of Internet shopping mall transactions and possibly utilize high-quality services for payment settlement and delivery.

KTNET-Haansoft marriage is expected to generate synergies in the e-document and ecommerce fields.

# KTNET, Haansoft Ink Strategic Alliance

Korea's representative efirm. trade KTNET, concluded ties with wellknown software company Haansoft on May 10. The two signed a strategic alliance to build an ebusiness and e-trade cooperation system at the former's grand conference room in the Trade Center in Samsung-dong, Seoul.



As the first project under the agreement, the two companies plan to establish an e-trade/e-commerce service portal that links KTNET's e-trade infrastructure and Haansoft's e-contract management system, HanCM.com.

The two firms will also embark on establishment of an infrastructure for KTNET's e-document registration/storage project and linkage of Haansoft's econtract and e-document management system and KTNET's e-trade infrastructure.

The other projects to be jointly staged include digitalization of KTNET's contract signing and management affairs as well as the work being carried out through KTNET's trade portal (www.cTradeWorld.com) and application of public certification and subsequent registration work implemented at Haansoft's 'HanCM.com.'

At the signing ceremony, KTNET President Shin Dong-Oh expressed his expectation, "With the present alliance, the technology power of KTNET equipped with knowhow in e-document exchange and storage areas and that of Haansoft, a web ASP-type e-contract management service provider, will combine and generate synergies in the e-document and e-commerce fields."

## e-Commerce Stability, Stimulus ...

(Continued from page 1)

cyber account is opened and a unique number is given. As credit and debit processes are achieved through the cyber account, buyers can avoid cumbersome procedures or reduce related commissions.

To ensure visibility, the weakest element of payment settlement in e-commerce, the service sends processing results by stage to both seller and buyer via SMS or e-mail. This mobile service to secure visibility is realized in the form of a kind of contact-point management, recording the processes ranging from input of transaction information to payment settlement, goods-delivery notification and confirmation of receipt of goods as well.

Business observers expect that thanks to its diverse functions, the escrow service will assume the hub role of shopping malls, etc., leading to enhancement of confidence in member stores and even achievement of an increase in their sales profit. Furthermore, publicity of member stores' products to Internet customers also will be possible through relevant banks engaged in the escrow service. From the aspect that publicity through e-mail and SMS marketing also can be achieved, observers forecast transactions will be stimulated.

#### **ISP/BPR Phases**

# e-Government Project in Full Blossom

The blueprints to realize the policy tasks for an e-government of the Participatory Government are being drawn in full swing. The National Computerization Agency (NCA), an organization promoting the e-government project, announced on May 23 that it had taken up selection work of egovernment supporting businesses.

Those involved in the policy tasks are the ISP (Information Strategy Plan) for advancement of the government's e-document distribution system; ISP for establishment of an online portal participated in by the people; BPR (Business Process Reengineering) for promotion of the second-phase national security project; and ISP for advancement of e-

The e-government project aims to raise the civil services via internet ratio to 80% by 2007.

government's communication network.

The budgets of the second-phase national security project and the ISP for advancement of e-government's communication network, in particular, are comparatively big and their project scales are also large, among others. Therefore, SI firms' competitions will likely be intensified, although these are preliminary projects.

The second-phase BPR/ISP project for national security is to set up an organic mutual collaboration system between related ministries and agencies, centering on the Office of Fire and Disaster Prevention to be newly installed on June 1, and to achieve the world-class level of systematic and efficient management of national disaster and calamity.

#### **Internet Civil Service Expansion Program**

Category	Present	2004	2005	2007
Number of Internet Civil Services	400	500	800	1,000
Number of Issuances via Internet	8	15	40	50

For this, BPR measures will be prepared after survey and analysis of present disaster and calamity management system from pan-governmental perspective, along with substantial and efficient medium and long-term ISPs that enable the new Office of Fire and Disaster Prevention to integrate and smoothly operate existing ani-disaster and fire-prevention information systems for enhancement of work efficiency and the people's safety. The office will also prepare standards to secure mutual operability of disaster and fire prevention-related systems and establish 'National Security Management Information System (tentative name),' a comprehensive national security system, in the future.

A top five priority project among the 31 e-government tasks, the ISP for advancement of the e-government communication network aims to establish an exclusive-use communication network for national agencies that guarantees security, stability and extensibility to realize ubiquitous e-government.

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CBEA plans to implement a wide variety of projects to help enterprises double their business performance results by utilizing e-business infrastructure.

## **Tool Exports via Korea-Japan eAMP**

In March and April this year, Korea's Tool & Tools exported the products of domestic Power Tools and MK Diamond to four Japanese companies, including Nippon Diamond and Stand F through eAMP (www.eamp.co.kr), according to the Korean Electronic Trade Association (KCALS) on May 3.

Tool & Tools is a leading firm in the tool business field for the second-phase B2B model project of the Ministry of Commerce, Industry and Energy (MOCIE).

The amount involved in the transactions was about 26 million won. With the access by Japanese firms to Tool & Tools' tool eAMP (www.ontool.co.kr), business transactions, from quotations for products to placement of orders, can be processed online. Payments, logistics, etc., however, are handled offline.

eAMP is an e-commerce project between Korea and Japan that has been underway since 2000. China also has expressed its intention to join the project. At present, four business sectors, tools, machinery, moulds and fasteners, are included in eAMP, and four more business sectors will be added by the end of May, electronics, precision chemicals, utilities, etc.

KALS Executive Director Lee Young-Shik said that his association will grow the Korea-Japan eAMP into a representative Northeast Asian e-marketplace at an early date by resolving matters related to payment system, etc., commenting that he believes the project will succeed, although it is still in the initial stage.

# 'Corporate e-Business Association'

On May 28, the 'Corporate e-Business Association (CEBA)' will be officially launched during its inaugural general assembly at the InterContinental Hotel in Samsung-dong, Seoul. CBEA recently completed registration with the Ministry of Information and communication (MIC).

Large enterprises, such as Mando Corp., LG, KT, SK, Hanwha, CJ and Kolon, are participating in CBEA and Mando President & CEO Oh Sang-Soo will be the first chairman of the association.

CBEA plans to implement a wide variety of projects to help enterprises double their business performance results by utilizing e-business infrastructure. The association will be engaged mainly in the dissemination and supply of web service business, in particular, under promotion by the MIC starting this year and will actively second the opinions from business communities to the government. To support this, it has decided to establish an affiliated corporate e-business strategy research institute.

The projected research institute will consist of various subcommittees to study ebusiness utilization, e-business trends, SCM, CRM, e-business integration, standardization, etc. and will develop index models for appraisal of web utilization. KCALS expects to lay a stable service foundation for actual transactions by providing an integrated environment for functions common to all business areas and by enhancing application efficiency by sector.

## **Establishment of B2B Integrated Platform**

The basic system for B2B integrated platforms is expected to be completed in September this year. This system will link external functions, finance, logistics, insurance, cargo, etc., that are required for corporate B2B transactions.

The Korean Electronic Trade Association (KCALS) will prepare an ISP to build a joint B2B network by the end of June and complete establishment of the first system to support a joint B2B service by the end of September.

Through establishment of the first system, KCALS expects to lay a stable service foundation for actual transactions by providing an integrated environment for functions common to all business areas and by enhancing application efficiency by

KCALS decided to build a catalog linkage system and to realize transaction support systems between business sectors. It also decided to prepare the operating base in a national B2B infrastructure by launching an integrated IDC (Internet Data Center) as well as linkage with G2B e-commerce, in particular, while expanding related projects that link business between Korea and Japan.

Next year, when the second-phase project starts, the association plans to promote expansion of domestic linkages with common-function projects, about 40 B2B business sectors and the government's supply market and global linkages with Japan, China, etc.

## e-Commerce Grows 4-Fold in 3 Years

E-commerce grew more than four-fold to surpass the 235 trillion-mark over the past three years.

As a result, commercial transactions over the Internet are estimated to account for some 15-20% of all business transactions in Korea, similar to 18% in the United States, according to the National Statistical Office (NSO).

Volume of e-Transactions by Transactors

(Unit: hillion won. %)

(Offic. Diction worl, %)											
	2002	Composition rate		2003 Composition rate		Changed amount over previous year	Changed rate over previous year				
Total amount of e-transactions	177,810		100.0	235,025	100.0	57,215	32.2				
B2B	155,707		87.6	206,854	88.0	51,147	32.8				
B2G	16,632		9.4	21,634	9.2	5,002	30.1				
B2C	5,043		2.8	6,095	2.6	1,052	20.9				
Others	427		0.2	442	0.2	15	3.5				

The NSO reported a that commercial transactions via the Internet amounted to 235.03 trillion won in 2003, up 32.2%, or 57.22 trillion won, from the preceding year.

The transactions reached 57.56 trillion won in 2000 and 118.98 trillion won in 2001.

Business-to-business (B2B)

transactions accounted for 88%, or 206.85 trillion won, of the total e-commerce last year, jumping 32.8% from 2002.

Business-to-government stood at 21.63 trillion won for a 9.2% share, up 30.1% year-on-year.

Business-to-consumer (B2C) transactions totaled 6.1 trillion won, up 20.9% from 2002 to 2003.

B2B e-commerce between companies in Korea amounted to 172.79 trillion won, up 33.2% year-on-year, while transactions between local firms and overseas companies rose 31% to 34.07 trillion won.

# MIC to Reinforce Global B2B Linkage

The Ministry of Information and Communication (MIC) plans to reinforce the infrastructure for the 'Asia-Pacific B2B Linkage Model Project' to the level of realizing security, certification, payment settlement and logistics stages. Up until now, the ministry has supported only corporate search, catalog inquiry and ordering.

According to the ministry and CommerceNet Korea on May 9, the Asia-Pacific B2B Linkage Model Project, under promotion since 2002 as part of APEC cooperation business, is expected to be expanded into an 'e-Signature-Based International e-Commerce Infrastructure Establishment Model Project' starting next year.

The projected infrastructure establishment model project aims to realize the remaining stages of payment settlement and logistics stages in addition to the corporate search, product catalog inquiry, exchange of quotations and ordering stages that were included in the Asia-Pacific Global B2B Linkage Model Project.

Scheduled to be introduced over three years (2004-2007), the infrastructure establishment model project will apply e-signatures to international payment settlement, logistics infrastructure, etc. through a model project for mutual recognition of e-signatures in respective countries worldwide and set up a stable global e-commerce infrastructure environment for businesses. It is a project that involves linking e-signatures to diverse payment means, logistics-based infrastructure, payment guarantee, etc. such as nation-to-nation opening of L/C, collection, escrow and open account.

In the first year of the project in 2005, the ministry plans to expand cooperation at home and abroad through realization of nation-to-nation mutual linkage systems and international seminars. The second year of the project will focus on the development of a model system to link with import procedures as the first stage of realizing international payment and logistics infrastructure. For the last year of the model project in 2007, the ministry intends to apply a mutual certification system to third-party logistics or payment guarantee agencies and also to develop the import process, the second stage of international infrastructure establishment.

In regard to this, a related ministry official said, "With the infrastructure establishment model project, overseas transactions by small and medium-size enterprises and stable international transactions will be realized between nations," revealing the ministry's goal to create more than US\$100 million annually in actual transactions through the system.

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## **Logistics & RFID Traceability**

# Visibility, Flexibility & Reliability

As for goods-tracking management and efficient inventory control, the function of existing bar codes has already reached a limit. Today, the application of RFID is heralding a new logistics revolution era as it can search for numerous products at the same time, store a large amount of information and allow input/correction/cancellation of information. KTNET researcher Choi Dong-Joon provided the following information in "Logistics and RFID Traceability:"

Presently in international logistics, there is a growing tendency to manage goods as inventory if there is a long shipment lead-time. Therefore, real-time inventory management concepts must be applied. Also, there is a need to control inventory on a real-time basis in order to change destinations flexibly and to make quick decisions on transshipment. The long time gap -- minimum 14 days and maximum 34 days -- required for goods shipped from Asia to arrive in North America highlights the importance of securing visibility all the more.

The information regarding goods in distribution and in the logistics process that consumers have access to normally is just the name of the manufacturer described on the goods. They are unable to determine the history of the products from raw materials to wholesalers/retailers. However, a 'Traceability System' that ensures transparency and stability of transactions and processing procedures can increase consumers' confidence through tracing and management of production history. It system also is emerging as enabling post management as well.

There are several tasks yet to be solved to facilitate RFID application. First is the lack of international standards. If global standards are not clearly designated, respective countries will have information input/output systems unique to nations and regions. Therefore, excessive time would be required to convert information and there would be accompanying data confusion. Time also would be needed to unify frequency ranges that differ by nation.

Second, there is a market applicability problem for the system. Today, suppliers

are small scale in many cases and there are no market leading firms, making transparent management difficult. Therefore, a collaboration system must be established between suppliers and distributors.

Third are the technical problems. Although prices of electronic tags and readers are on the decline, bar codes are still widely used, and there often are errors in data reading rate, high volumes, etc.

Producer-oriented visibility system and consumer-oriented traceability system

## Visibility System

Producer-oriented system

Advanced-management logistics system

(Services centered on long-distance movement of completed goods and supply of parts)

Utilization for export/import logistics

(The U.S. introduced RFID early for utilization in consolidated transport in domestic logistics.)

Handling of cargoes by document processing (B/L, L/C, etc.)
Tracing function through system DB

#### Traceability System

Consumer-oriented system

Post-management system to discern responsibility for defects in goods by tracing

(Manage product history and confirm responsibility related to return of goods and claims after shipment)

Possible to acquire product information through tags, etc. Traceable only with the chips attached to products

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# 한국인터넷백서<sup>2004</sup>

2004 Korea Internet White Paper (Korean Version)

# '2004 Korea Internet White Paper' Issued

Korea's legislation regarding the Internet voting process for the first time in the world, the nation's rise to leadership in online games and the emergence of netizen culture at the center of popular culture are among the top new section in the 2004 Korea Internet White Paper, which has been published by the the National Computerization Agency (NCA) under the arm of the Ministry of Information & Communication (MIC).

As for other sectors, it also pointed out rapid growth in the e-learning education market, Internet portals' creation of new profit models, nearing an era of 30 million Internet subscribers, full-scale operation of new financing services, including mobile banking, establishment of a support center to cope with Internet infringement, establishment of BcN (Broadband Communication Networks), promotion of policies to spread IPv6 (Internet Protocol version 6), maintenance of Korea's global 10th informationization level, etc. The following is a summary of the major Internet news:

## **Rapid Growth of e-Learning Education Market**

Recently, the online education market is growing sharply. The online entrance examination market appears to have grown to the 100 million won level in 2003 from 10 billion won in 2001. Projections are that this market will double to reach the 200 billion won level this year.

## **Creation of New Profit Models by Internet Portals**

Despite a general economic slump in 2003, sales of leading portals expanded more than twofold compared with 2002, and new services were introduced while keyword-search advertisements took a position as firm profit models. In 2003, portal firms introduced one-man media service blogs competitively, exerted utmost efforts in improving services and developed portal search into knowledge search services, moving past the original simple search function.

### 30 Million Internet Subscription Era at Hand

According to the results of a MIC fact-finding survey on informationization conducted in December 2003, Korea's Internet subscribers numbered 29.22 million as of the end of the year, opening an era of 30 million subscribers. The Internet supply ratio to total population exceeded 65%.

#### **Netizen Culture at the Center of Popular Culture**

The so-called 'Ulchang' (brilliant face), selected by netizens' vote after carrying photos of faces on the Internet, has became a gateway to popular stars. The collective lightning gathering phenomenon, 'Flash Mob,' also has taken root as a network culture, ranging from candlelight demonstrations to entertainment events.

#### **Full-Scale Operation of New Financing Services**

In 2003, new financing services, electronic currency, mobile banking, smart card, etc. and a variety of payment means were put into full operation. The IT-investment heat by financial institutions cooled down due to the delinquency of credit card firms. With brisk collaboration and ties achieved between mobile communication firms and banks, a convergence of financing and communications was deployed.