

Terrestrial analog TV ends in 2012 and the age of digital TV broadcasting begins!



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Press release

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The Korea Communications Commission makes public the results of its investigation into cell phone and e-mail SPAM during the first half of 2012.

- Cell phone SPAM down by 42.9% from previous year -
- SPAM types: loan offers 30.8% > gambling 25.8% > porn 21.0%. -

The Korea Communications Commission (KCC, Chairman Kye-Cheol Lee) announced the results of its investigation (first half of 2012) into SPAM circulation by major information and telecommunications service providers who provide channels for sending and receiving cell phone text and e-mail SPAM.

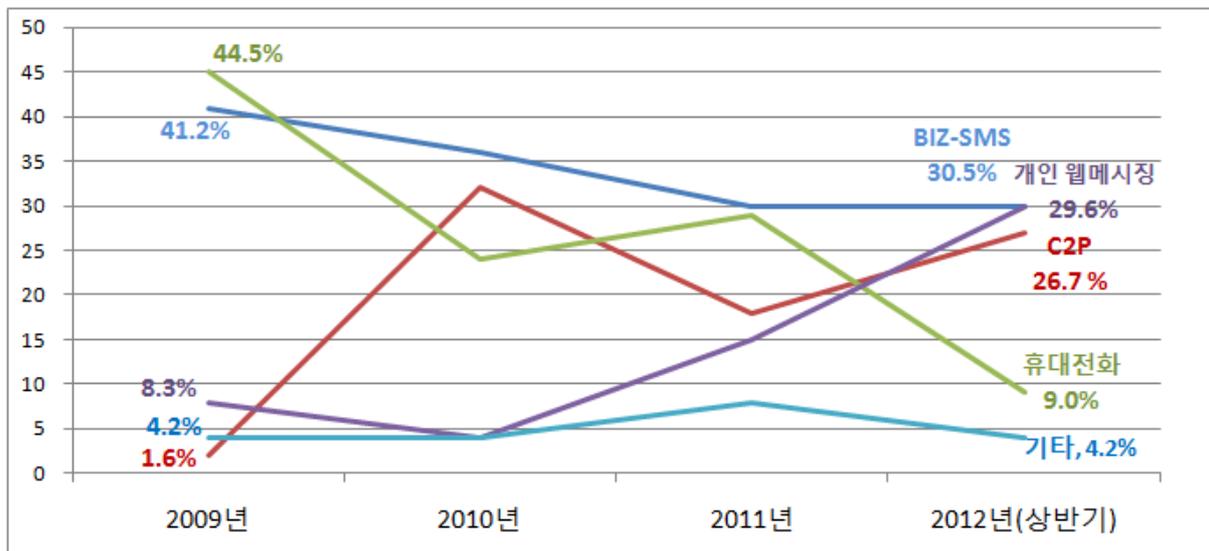
The KCC and the Korea Internet Security Agency (KISA) analyzed through which network SPAM was mostly circulated based on the number of SPAM reported to KISA from January through June this year, as well as the quantity of SPAM received per capita over the same period. For cell phone SPAM, bulk SMS services (BIZ-SMS, C2P), mobile communications services, and Internet telephony services were checked, whereas high-speed Internet services and the e-mail service of portals were looked at for e-mail SPAM.

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□ Cell phone - sending service

o (SPAM types) The most common SPAM types are loan offers (30.8%), gambling (25.8%), and porn (21.0%).

o (SPAM services) Major sending services are bulk SMS sending services (BIZ-SMS: 30.5%, C2P: 26.7%), personal web messaging services on mobile carriers' websites (29.6%), and mobile carriers' cell phones (9.0%).



[Figure 1] SPAM by service

- Personal web messaging
- Cell phones
- Others

2009, 2010, 2011, 2012 (first half)

※ Bulk SMS sending service: Operators who built a web-based bulk SMS sending system connect to mobile carriers via a leased line and send text messages to mobile subscribers. This service is divided into BIZ-SMS and C2P services (if the sender is a network service provider and interconnected with a mobile carrier, it is classified as a C2P service.)

o BIZ-SMS accounted for 30.5% of all SPAM, of which KT (10.0%) and LG U+ (8.6%) sent the most, whereas C2P

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accounted for 26.7%, of which KT (14.7%) also took up the biggest portion followed by LG U+ (12.0%).

- o SPAM sent by personal web messaging services, which allow users to send text messages from the website of a mobile carrier, accounted for 29.6% of all SPAM, and LG U+ (28.9%) accounted for the most.
- o SPAM sent from cell phones accounted for 9% of the total, relatively smaller than the other services.

Cell phone - receiving service

- o Text message SPAM received per capita was measured. Each user of three mobile carriers received **0.24** of SPAM on average (0.26 from SKT, 0.25 from LG U+, and 0.21 from KT).
- o Also, each **user of an intelligent SPAM blocking service**, a free supplementary service provided by each mobile carrier, received 51% less SPAM on average: 0.18 from LG U+, 0.14 from KT, and 0.11 from SKT.

E-mail - sending and receiving services

- o **(Sending service)** Major Internet service providers (ISP) on whose networks e-mail SPAM is sent include KT (38.5%), LG U+ (27.0%), and SK Broadband (8.6%).
- o **(Receiving service)** Daily e-mail SPAM received per capita

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was **1.64 on average**, and the average number of SPAM received by each portal account was 0.51 for Daum, 0.33 for Naver, and 0.15 for Nate.

□ Overall evaluation

- o Seeing that the number of SPAM received in 2012 decreased by 42.9% from the previous year (cell phone SMS SPAM: 0.42 in the first half of 2011 compared to 0.24 in the first half of 2012), with SPAM circulation statistics about to be disclosed, it is presumed that the efforts of **each information and telecommunications service provider to reduce SPAM and the government's strong policy to suppress SPAM transmission and block its reception have greatly contributed to reducing** the circulation of SPAM.

※ The policies the government has adopted so far include reducing the transmission speed of communication lines of operators which send bulk SMS SPAM, limiting the number of text messages that can be sent daily from a cell phone to 500, and working on having the intelligent SPAM blocking service included as a default service to mobile carriers' subscription contracts.

- o Looking at SPAM sent via personal web messaging services, if a new information and telecommunications service appears, the weak points of regulation were exploited, and SPAM volume quickly shifted to the new service showing the so-called '**bubble effect.**'
- o As for the volume of SPAM received, mobile carriers'

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intelligent SPAM blocking services proved to be fairly effective, blocking SPAM by an average of 51%, and the service subscription rate was 56.4% for KT, 38.9% for SKT and 8.6% for LG U+ as of June 2012. More efforts to raise the usage rate of the blocking service seem necessary.

- o Mobile network operators with wired telephone networks and Internet networks had a high share of bulk SMS service and Internet service clients, and accordingly accounted for a large portion of SPAM sent.

Future policies

- o The KCC plans to implement a stronger policy for suppressing SPAM based on the results of its investigation into SPAM circulation for the first half of 2012.
- o **'SPAM circulation investigation results,'** first disclosed now, will be published semi-annually.
- o The **'SPAM monitoring system'** will be built in order to monitor SPAM circulating on networks in real time, and provide this information to operators to induce them to reduce SPAM through self-regulation.
- o Also, as most e-mail SPAM is sent from a botnet infected with malicious code, the KCC plans to implement an **'e-mail sending port switching'** policy earlier than scheduled to have Internet service providers reinforce the

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authentication of senders.

※ **e-mail sending port switching**: a policy for changing the e-mail sending port from No. 25 without the sender authentication function to No. 587 with the authentication function to prevent botnet-based SPAM.