August 19, 2012

Korean Communications Commission
Via e-mail to: yes@kcc.go.kr

RE: ITI Comments on Korea’s “Proposed Bill for the Development of Cloud Computing and Protection of Users”

Dear Director Yang:

The Information Technology Industry Council (ITI) appreciates the opportunity to comment on the Korean Communications Commission (KCC)’s “Proposed Bill for the Development of Cloud Computing and Protection of Users.”

ITI is a leading U.S.-based high tech trade association. ITI’s members\(^1\) comprise leading information and communications technology (ICT) companies, many of which provide products and services that support cloud computing. Our companies also are global, earning a substantial portion of their revenues from foreign markets, conducting extensive cross-border business, and managing global supply chains. As a result, we understand the impact of international policies on ICT innovation, deployment, and use around the world.

We commend the KCC for seeking to promote the development and use of cloud computing. As you are aware, the cloud can bring numerous benefits to e-commerce, e-government, social networking, education, and health services, among others. For businesses and governments, the cloud can sometimes rapidly increase efficiencies, partnerships, and productivity while dramatically reducing costs. Simply put, cloud computing is a model that can allow users to do more with less and it can be a fundamental tool in achieving future sustainability and growth.

The KCC has put forth a number of very positive ideas that will help to further cloud adoption in Korea, such as government support for research and development (R&D), pilot projects, training, and proposals to promote international cooperation. However, we urge Korea not to move forward with regulating cloud computing. Fundamentally, the growth of cloud computing, and the cloud’s value to nations’ businesses, citizens, and economies, will continue only if its development is guided by the same open approach to an international policy framework that has long enabled the dynamic growth of the Internet and ICT generally. ITI recommends that policymakers in all countries, instead of enacting cloud-specific regulations, embrace the following six recommendations to realize the full benefits of cloud computing:

- **Innovation Policy.** Consider policies that encourage innovation in ICT generally, rather than cloud-specific policies.
- **International Cooperation.** Promote interoperability and mutual recognition of adequacy in data privacy and security laws and policies.
- **Trade.** Avoid discriminatory market access trade practices and policies that restrict the transfer of information and data across borders.

\(^1\) See attached ITI member list.
- **Cybersecurity.** Improve cybersecurity holistically, rather than targeting cloud technologies and applications specifically.
- **Broadband.** Aggressively roll-out high speed broadband networks that are critical to connecting to, and expanding, the cloud.
- **Standards.** Continue to rely on global ICT standards developed via standard-setting processes that are consensus-based, transparent, and industry-led, with participation open to interested parties.

Below we provide both general and specific comments to support our position.

### General comments on Korea’s proposed bill

Our general concerns are as follows:

- The bill would classify cloud computing in Korea as a telecommunications service, subjecting it to unprecedented regulation and stifling innovation in cloud computing. In fact, cloud computing is, and must continue to be treated as, an IT service subject to minimal levels of regulation. This approach has been critical to allowing IT services in Korea and around the world to grow and deliver unprecedented benefits to society.
- It is extremely unclear to whom the bill applies. This introduces legal uncertainty to industry.
- Many of the issues Korea attempts to address—such as security and data protection—are not confined strictly to cloud computing. The bill creates unnecessary distinctions that would prevent the development of measures that can protect data no matter where they are stored. Threats are global and the practices that respond to them must be as well.
- The bill includes requirements that could be unnecessarily burdensome on ICT providers and therefore hamper the growth of technology and cloud computing in Korea—the opposite of the bill’s intentions. While we understand that Korea seeks to provide greater assurance to Korean citizens that cloud computing services provide adequate security, levels of service, and data privacy protections, many of these issues are already addressed in either government policies or vendor practices (such as contracts) and do not warrant new legislation.
- The proposal does not take into consideration the global, multi-national, and multi-jurisdictional nature of cloud computing. Many of the proposed country-specific requirements would be impossible for global cloud services providers to meet. This would create de facto barriers against non-Korean cloud providers, in turn possibly creating a precedent that could be exploited by other countries who may emulate Korea’s proposed requirements to prevent access to their own cloud computing market by Korean cloud providers.
- Overall, regulation will deter growth of the cloud industry in Korea. Global companies must act globally, and non-globally standard requirements or burdensome licensing may outweigh the benefits of serving the market. Further, the cost of compliance and penalties will ultimately likely be factored into cloud services, and ultimately passed onto users—also impeding growth.

The specific comments below exemplify our general concerns above.
Specific comments on Korea’s proposed bill

Article 2: Definitions
The definitions are extremely broad and capture a wide range of ICT products and services, many of which may or may not actually support cloud computing at any given time. We believe it is difficult if not impossible to accurately define cloud computing, given its myriad technologies, services, and business models (which are ever-changing), without encompassing a broad range of web- and Internet-based technologies, services, and business models. Thus, companies will not know if they or their products / services fall under the legislation. Nor is it clear what a cloud computing “user” is—it could refer to the end customer (for example, software-as-a-service/SaaS user) and/or the enterprise customer that provides its own service using cloud computing service (for example platform-as-a-service/PaaS user), which creates additional uncertainty for businesses regarding their obligations. Further, attempting to define the cloud in legislative language would codify into law technologies and services that are rapidly changing.

Article 7: Fact-Finding Survey
While we support the Korean Government’s desire to understand the cloud computing industry to better promote cloud usage, any legislation, regulation, or policy should not require ICT companies to comply with government requests for materials, comments, statements, or statistics related to cloud computing (item 3). Such information often must remain confidential because it is intellectual property, trade secrets, customer-related data, business plans, technology architecture information, etc. Any provision of such information should be voluntary.

Article 14: Reporting of Cloud Computing Service Business, etc.
This article is troublesome from two perspectives. First, we are concerned with the requirement that companies wishing to engage in cloud computing service businesses file a report with the KCC. This requirement is unprecedented by any government (and could encourage emulation by other governments around the world, which could inhibit Korean cloud providers’ access to foreign markets). This is of particular concern since filing such a report is a condition for the provision of cloud services, and failure to file such a report would make the provision of these services illegal and subject to a closure order by the KCC. In addition, many cloud service providers may not know if their services are being used by Korean customers—or customers from any particular country. This is particularly true for free web-based services, such as cloud-based e-mail or photo-sharing. Companies cannot be expected to determine if Korean citizens are accessing these types of services.

Secondly, this article essentially renders cloud computing a value-added telecommunications service, because the KCC would consider the reports filed to be a “value-added telecommunications business report under Article 22 of Telecommunications Business Act.” It is important to distinguish between use and supply of telecommunications services, whereby telecommunications networks and services may be used as a means of delivery of other services, such as computing services (e.g. cloud services). Such computing services themselves are not telecommunications services. More importantly, while it is true that technology is converging and becoming more commoditized with the underlying network infrastructure (traditional telecom) becoming part of an integrated solution (e.g., cloud computing), the policy response
should not be to increase regulation. If the objective is to create a level playing field among traditional telecommunication network providers and new “cloud” service providers, it would be better to provide incentives for any company (telecom or potential new small- or medium-sized enterprise) to utilize cloud or create their own cloud offerings.

**Article 15: Transfer of Cloud Computing Service Businesses and Merger of Business Entities, etc.**
Global cloud computing-related companies should not need to file a report with any particular country’s regulators regarding transfers, mergers, or spin-offs.

**Article 18: Securing Interoperability**
Our industry strongly supports the goal of making IT systems in general, and cloud systems in particular, interoperable. In fact, that is a key competitive advantage of commercial-off-the-shelf (COTS) technology relative to custom-developed systems. However, we also strongly believe that interoperability can only be achieved through the market-based development and adoption of international, multi-stakeholder standards, rather than through government interoperability mandates.

**Article 19: Cloud Computing Service Certification & Article 21: Enhancement of Quality and Performance Reliability**
We are very concerned with the proposed certification system for cloud computing. The exact services or benchmarks which Korea seeks to certify are not described in the bill (KCC will determine them at a later date). However, we cannot imagine any aspects of cloud computing—including security, service levels, or other—that warrant government certification in the commercial market. Although transparent, standard security requirements and related conformity assessments may be appropriate for governments’ purchases of cloud services (the U.S. FedRAMP is an example), Korea’s proposed certification program extends to the commercial market. Cloud computing providers’ terms of service or availability will likely differ based on what a customer seeks, and will be set forth in private contracts and international standards developed through multi-stakeholder processes. Continued adoption of cloud computing services in the commercial space absolutely depends on an environment that would remain driven by the needs expressed by cloud users and the corresponding innovation of cloud providers. Such market-based mechanisms have extremely effectively enabled the development of cloud computing until now and there is every reason to believe that intervention would sharply inhibit them. It is very important to understand that the proposed local certification system would likely disproportionately harm global companies. Even if Korea’s certification system is voluntary, it would send the wrong signal internationally, creating a precedent that other countries may copy, imposing their own national certification systems, which could inhibit Korean cloud providers’ ability to access those markets.

We understand that one area the KCC seeks to certify is related to security. For many people, relinquishing direct control of one’s ICT infrastructure by adopting the cloud has raised perceived concerns about security risks. Cloud computing, however, can sometimes be more secure, depending on the needs of the user and capabilities of the user and provider. Like providers of on-premise ICT solutions, cloud providers can work with their customers to deliver security efficiently and effectively based on different levels of risk—security services can be
built into the cloud up front to optimize protection at a given risk level. Rather than create an arbitrary certification system to try to quantify security, the Korean Government might consider educating its businesses and citizens about the security considerations of cloud computing.

**Article 21: Enhancement of Quality and Performance Reliability**
This would allow the KCC to establish detailed criteria regarding quality, performance and their levels of adequacy and recommend these criteria to cloud computing service providers. We question how KCC would determine those criteria, and believe such a choice would be quite arbitrary. “Appropriate” quality and performance levels would be different from service to service depending on what is be offered or delivered, and are best addressed in private contracts. The bill should not try to set any baselines in this area.

**Article 22: Standard Contracts**
First, it is important to consider that there exists a large, still developing variety of cloud computing services and business models. Standard contractual clauses would not be able to reflect this diversity. Instead, they would apply a constrictive one-size-fits-all framework that would inhibit the development of cloud computing (as just one of many examples, contracts for consumers using public clouds differ greatly from contracts for business using private clouds).

Second, mandating contractual clauses should only occur if a public interest is not met. In the context of business-to-business contractual relations – where customers have an expert understanding of their needs—contractual clauses should not be mandated.

**Article 23: Report of Accidents**
The draft bill states that serious service disruptions or leakage must be reported to users “without delay,” and also, depending on scale (which is not defined), to the KCC. In the latter case, the KCC may take necessary related measures. The bill does not provide any detail as to what kind of data would fall under the scope of this article. To the same point we make about Article 22, the bill also applies a blanket presumption that the parties to the contract cannot provide for such requirements, and that such requirements—whether regulatory or contractual—should differ from those that would apply in the absence of this bill.

**Article 25: Prohibition on Provision of Information to 3rd Parties**
This Article lacks an exception for instances when there is a request from law enforcement.

**Article 26: Disclosure of Fact of Cloud Computing Service Usage**
Contrary to the overall intent of the bill—to promote the adoption of cloud computing by providing a level playing field for cloud computing relative to other forms of computing—Article 26 is based on an unjustified anti-cloud bias. The use of a cloud computing service by a company that handles personally identifiable information is subject to disclosure, when the use of other types of outsourced data storage and processing services – e.g., data backup – is not subject to such a requirement. It is not clear why cloud computing services should be subject to different or more stringent requirements – whether regulatory or contractual – than those that would apply in the absence of this bill. We are not advocating that disclosure be mandated beyond cloud service providers, but the opposite—that disclosure not be mandated at all.
Article 27: Disclosure Regarding Storage of Information Overseas
Article 27 also is based on an unjustified anti-cloud bias. The fact that data are stored overseas is not, in and of itself, indicative of a greater risk. Only in those specific cases where information security regulatory requirements apply – and, again, we urge the Korean Government refrain from imposing such requirements in a cloud-specific manner – should the government examine whether overseas data storage creates issues, and whether these cannot be addressed through mutual recognition.

Article 28: Measures for Information Preservation and Recovery & Article 24: Service Safety Directives
As stated above in our comments regarding Article 19, governments should not dictate to private industry specific standards in this area. Companies have their own procedures for preserving and recovering information that are laid out in contracts with their customers. Any recommended standards – whether maintenance, physical, technical, or otherwise – should be global standards developed through multi-stakeholder processes.

Article 31: Measures in Case of Suspension of Cloud Computing Service
As with some other Articles in this proposed bill, the mandate for cloud services providers to purchase insurance (and file a proof of insurance with the KCC) exemplifies unnecessary government regulation of business practices that are best addressed in private contracts.

Article 34: Order for Correction
We are very troubled by the provision that would allow Korean Government officials to enter the business premises of a cloud computing services provider and examine its business-related documents.

Conclusion

Although we commend the Korean Government’s interest in promoting cloud computing, we urge the Korean Government not to pursue regulation of cloud computing for the many reasons we laid out above. Korea should remove all portions of this bill that would impose regulations or other requirements (including “voluntary” ones) on cloud services providers in the commercial market. These types of regulations could hamper the growth of cloud computing in Korea—the opposite of the bill’s intentions.

ITI and its member companies appreciate your consideration of our comments and your committed openness to discussing the bill with stakeholders. Please contact us with any questions you may have at dkriz@itic.org. We look forward to a continued dialogue with you on this very important topic.

Sincerely,

Danielle Kriz
Director, Global Cybersecurity Policy
2012 Member Companies