Privacy Issue in Telematics
- LBS Law -

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Telecommunication Service Development Division

Ministry of Information and Communication
Republic of Korea
# Table of Contents

I. Korean ICT Status & Strategy
   1. Overview of Korean Economy
   2. Status of ICT in Korea

II. Location-Based Service Law
   1. LBS in Telematics
   2. Overview of LBS Law
   3. Structure of LBS Law
   4. Contents of LBS Law
   5. Privacy in LBS Law
   6. Safety in LBS Law

< Global Rank >

- Population: 48.2 M.
- GDP: US$ 667B.
- Car Manufacturing: 3.47 M.
- Ship Building: 18.8 M.(ton)

Global Rank:
- Population: 25th
- GDP: 10th
- Trade Volume: 12th
- Car Manufacturing: 6th
- Ship Building: 1st
I-2 Status of ICT Korea

Internet Use

<table>
<thead>
<tr>
<th>Country</th>
<th>%</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iceland</td>
<td>67%</td>
<td>1</td>
</tr>
<tr>
<td>Korea</td>
<td>60%</td>
<td>2</td>
</tr>
<tr>
<td>Sweden</td>
<td>57%</td>
<td>3</td>
</tr>
<tr>
<td>US</td>
<td>55%</td>
<td>4</td>
</tr>
<tr>
<td>New Zealand</td>
<td>53%</td>
<td>5</td>
</tr>
</tbody>
</table>

Broadband Subscribers

<table>
<thead>
<tr>
<th>Country</th>
<th>#</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Korea</td>
<td>218</td>
<td>1</td>
</tr>
<tr>
<td>HK</td>
<td>153</td>
<td>2</td>
</tr>
<tr>
<td>Canada</td>
<td>112</td>
<td>3</td>
</tr>
<tr>
<td>Taiwan</td>
<td>93</td>
<td>4</td>
</tr>
<tr>
<td>Belgium</td>
<td>84</td>
<td>5</td>
</tr>
</tbody>
</table>

Mobile Phone Subscriber Ratio

<table>
<thead>
<tr>
<th>Country</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>69.3%</td>
</tr>
<tr>
<td>Australia</td>
<td>64%</td>
</tr>
<tr>
<td>U.S.A</td>
<td>64%</td>
</tr>
<tr>
<td>Canada</td>
<td>50%</td>
</tr>
<tr>
<td>Korea (HK)</td>
<td>38%</td>
</tr>
</tbody>
</table>

Source: ITU, IMD World Competitiveness Yearbook 2004, World Telecommunication Indicator

“Most competitive in IT industry among OECD countries” - 2004 (Source: OECD)
I-3 Korean ICT Strategy : IT839

IT 839 Strategy for Another Take-off

8 Services
- WiBro Service
- DMB Service
- Home N/W Service
- Telematics Service
- RFID-based Service
- W-CDMA Service
- Terrestrial DTV
- Internet Telephony

3 Infrastructures
- Broadband Convergence Network
- U-Sensor Network
- Internet Protocol v6

9 Products
- Next-Generation Mobile Communications
- Digital TV
- Home Network
- IT SoC
- Next-Generation PC
- Embedded SW
- Digital Contents
- Telematics
- Intelligent Service Robot
II-1 LBS in Telematics

LBS(Location-Based Service)

- It is application service which is based on mobile network and utilizes LDT (Location Determination Technology) to seize the location of person or object.

LBS became a killer application for growth of Telematics Business.

LBS can be used most efficiently to vehicles on the road.

- LBS is recognized as basic technology of telematics.

<table>
<thead>
<tr>
<th>LBS in Telematics</th>
<th>Privacy Issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Navigation</td>
<td>• Personal location information exposed to Telematics Service Provider</td>
</tr>
<tr>
<td>• Real time Location-Based Traffic Info.</td>
<td><strong>Law</strong>: Legal steps are needed to prevent abusing personal location information and protect privacy</td>
</tr>
<tr>
<td>• Theft Tracking</td>
<td></td>
</tr>
<tr>
<td>• Emergency Assistance</td>
<td></td>
</tr>
<tr>
<td>• Location-Based B2C: V-Shop</td>
<td></td>
</tr>
<tr>
<td>• Location specific Advertisement</td>
<td></td>
</tr>
</tbody>
</table>
II-2 Overview of LBS Law

Background of Enactment LBS Law

- Rapid growth of mobile communication technology
  - Possible introduction of various application services based on the LBS such as logistics, security, advertisement, traffic and commerce transaction etc.
  - Technologies and services utilizing subscriber’s location information are generalized.
  - Obtaining in-detail location information by combining GPS and networks is available.

Necessity of Enactment LBS Law

- Prevent disclosure or misuse of personal information.
- LBS is expected to become a core service of IT839 Strategy.
- LBS Law is used for public use such as emergency rescue, danger warning and so forth.
- Prepare legal environment as the new businesses are emerging.

To enhance Personal location information Protection
To support activation of LBS
To use personal location information for the public use
To create environment for LBS business
Chapter 1. General Rules

Protection of Location Information

Chapter 2. Licensing location information business

Chapter 3. Protection of location information

Chapter 6. Penalties

Use of Location Information

Chapter 4. Using location information for the public use

Chapter 5. Creating environment of using location information

Protection

Accept

Collect

Provide

Declare

Use

Subscribers

The right of subscribers

Compensation for damage

Location Information operator

Location Information Business

Collect, destroy information

LBS provider

LBS Business

Location Information use, provide

Subscribers, the third party

Emergency rescue Depart.

Requesting, giving alarm of location information

Infra of location information

Location Information protection

Broadband IT Korea
Location Privacy Protection

- Location Information Operator·LBS provider must specify legal obligation on the stipulation when they collect personal location information or provide services and they must obtain subscribers' agreement.
- Location Information Operator can use privacy info. only for agreed purposes and can not provide it to third party.
  * Provider must destroy personal location information immediately when they achieve the purpose.

Commercializing LBS

- Location Information Operator must receive license and LBS provider must report before setting up business.
- Destroying the evidence collecting and using location information is compulsory.
- Revocation of license and suspension of business may be applicable.
- Making a stipulation and reporting system are mandatory.
II-4 Contents of LBS Law(2)

Public LBS : Emergency Service

- Emergency rescue department can request personal location information and give danger warning to Location Information Operator and they can not reject it.
  - Request personal location info. : when subscribers request emergency rescue
  - Request danger warning : giving warning to the subscriber located in dangerous area like typhoon, heavy rain, fire, chemical accident etc.

  ? limited to special request of telephone service such as 911

Environment for LBS Business

- The minister of MIC is arranging policies to create good environment for using of location information
- MIC supports technical development and various LBS related businesses.
# Privacy in LBS Law

<table>
<thead>
<tr>
<th>Location Information Operator</th>
<th>Obligation</th>
<th>Individual fact</th>
<th>Subscriber’s Rights</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Common fact</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Automatic recording is required when using, providing, collecting, and approaching location info.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Must receive subscribers agreement before collecting location info.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LBS Provider</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Location Information Operator can use privacy info. only for agreed purposes and can not provide it to third party.</td>
<td>Agreement of collecting and providing location info. must be completed via stipulation.</td>
<td>Withdraw agreement</td>
</tr>
<tr>
<td></td>
<td>2. Dispose location information after achieving the purpose.</td>
<td>3. Reasonable request of LBS provider can not be rejected.</td>
<td>Temporary veto right</td>
</tr>
<tr>
<td></td>
<td>3. Notice to the subscribers when they transfer their business.</td>
<td></td>
<td>Right to know and request the evidence of operating personal info.</td>
</tr>
</tbody>
</table>

- **Location Information Operator**
  - Automatic recording is required when using, providing, collecting, and approaching location info.
  - Must receive subscribers agreement before collecting location info.

- **LBS Provider**
  - Location Information Operator can use privacy info. only for agreed purposes and can not provide it to third party.
  - Dispose location information after achieving the purpose.
  - Notice to the subscribers when they transfer their business.

- **Subscriber’s Rights**
  - Withdraw agreement
  - Temporary veto right
  - Right to know and request the evidence of operating personal info.
  - Compensation for damage
  - Request for adjudication and grievance mediation
## II-6 Safety in LBS Law

<table>
<thead>
<tr>
<th>Location Information Operator</th>
<th>Obligations</th>
<th>Subscriber’s Rights</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>❑ Provide personal location information whenever there are request from the right parties.</td>
<td>❑ Citizen can receive variety benefits of emergency rescue service using personal location information</td>
</tr>
<tr>
<td></td>
<td>❑ Give an alarm to the people in danger area when the proper entities request.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>❑ Provide personal location information must be operated on the system.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>❑ Report statistic data of providing location information and danger warning to MIC</td>
<td></td>
</tr>
<tr>
<td>Emergency Rescue Department</td>
<td>❑ Possess location information system</td>
<td></td>
</tr>
</tbody>
</table>

**Possess location information system**

Emergency Rescue Department

- Provide personal location information whenever there are request from the right parties.
- Give an alarm to the people in danger area when the proper entities request.
- Provide personal location information must be operated on the system.
- Report statistic data of providing location information and danger warning to MIC.

Citizen can receive variety benefits of emergency rescue service using personal location information.
Thank you !!

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