Investigation of Terrorism Incident Utilizing Communications Technology & Legal Issues

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Bio

- 2004. Passed Korean bar exam and completed judicial training at the Judicial Research & Training Institute
- 2007. 2. Prosecutor, Incheon District Prosecutors’ Office
- 2009. 2. Hongsung District Prosecutors’ Office
- 2011. 2. Gwangju District Prosecutors’ Office
Overview of counterterrorism related activities of ROK Prosecutors’ Office

Case example: Bomb threat at a department store in Korea

Legal issues with utilizing communication records in investigations and ways forward
1. Overview of counterterrorism related activities of ROK Prosecutors’ Office
Overview of counterterrorism related activities of ROK Prosecutors’ Office

- In charge of overall judicial actions relating to terrorism, including investigation, prosecution and enforcement
- Reviews legal issues related to terrorism and provides legal support to relevant agencies
- Collects and disseminates terrorism-related information
- Researches, develops and implements investigation techniques
2. Case example: Bomb threat at a department store in Korea
2013. 2. 7. Suspect calls a reporter to threaten bombing:

“I placed an explosive in the department store”

“I want 2 billion won (~200,000 USD)”

“I just exploded a car one hour ago”

2013. 2. 7. Police SWAT team searches for explosives in the department store but discovers none

2013. 2. 12. Suspect arrested
Suspect called a local reporter threatening to explode a bomb inside of a department store and had the reporter confirm previous car bombing.

Figured out that the destroyed car had been stolen.

Secured CCTV footage of when the car theft occurred and deciphered the license plate number of another car used by the suspect.

Matched a mobile phone number with the same name registered to the other car and proceeded with real time automatic location tracing and analyzed call records.

Found the suspect near the telecom base station and arrested him.
Evidence
- Suspect owned two mobile phones
- Analyzed and recovered the data contained in the phone used to make bomb threat
- Suspect had browsed the internet for relevant news on the incident by searching the key words, “bomb threat” and “department store” with a separate smartphone

Suspect fully confessed to the crime after being interrogated based on the evidence above
Method of discovering suspect’s phone number, analyzing call records, and tracing the location of the mobile phone is a commonly used investigation strategy in Korea.

ROK Prosecutors’ Office uses computer programs for analyzing call records such as the I2 program and the Tracer, which is a self-developed analytic program:
- Analysis of call frequency, call times and callers’ locations.
Auto-analysis by I2 system
Transforms Chart
3. Legal issues with utilizing communication records in investigations and ways forward
Retention of call records & IP log record

- In practice, telecom carriers retain call records in their servers for 6 months to 1 year.
- In practice, telecom carriers retain IP log records in their servers for 3 months.
- Article 41(2) of the Protection of Communications Secrets Act: prescribes duty to cooperate, but does not require retention of call records or Internet log histories.
- Since records are not retained or only for a short period, criminal investigation can be difficult.
Problems with m-VoIP

- Voice call service based on the Internet, provided through smartphones, wireless terminal devices & network (3G,Wifi)

- Problems with application-based voice calls (e.g. Kakao talk)
  - Possible to register only with mobile phone number and email address
  - No authentication of registered mobile phone number
  - Retains chat/call histories only for 3 months, not including the IP access

- In the case of service providers based outside of Korea, prompt and close cooperation from the foreign companies and foreign investigation authorities is necessary.
Ways Forward

- Need to add new regulations to the Protection of Communications Secrets Act
- Need to discuss the appropriate retention period of communication data and consider an extension
- Need to discuss and propose preventive countermeasures for cases where m-VoIP service is used for terrorism purposes
- Need international cooperation for disclosure of data from foreign service providers
Thank you

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