

Geospatial Information Linkage of Five Senses

Jeon Hyeon Seok (Republic of Korea)

Key words: e-Governance; Geoinformation/GI; GNSS/GPS; Positioning; Risk management; link; Tagging

SUMMARY

Today, people communicate more often thanks to the advancement of telecommunication devices and the Internet. One of the most frequent topics of communication would be locations, which can be identified by a form of question -‘where are you?’. The answer would be easily informed by address information and/or adjacent landmarks, such as houses, firms, markets, cafes, etc. However, informing location based information would be difficult for some people in criminal situations. These people may be troubled by lacking cognitive ability or poor judgement due to extreme stresses; they may express their locations sensed by instincts - these include sight, hearing, smell, touch and taste. The objective of this study is to promptly identify locations in questions by connecting existing address data and a few keywords informed by five senses of the criminal situations.

The study is intended to assist the police more quickly identify the locations in questions and settle the criminal situations scenes as soon as practical. The output datasets from this study would be additional attributes to the existing spatial information where the additional attributes can be filled with the keywords learned by the five senses. These keywords can be collected by field visits, web-portal base roadview images and Mobile Mapping Systems (MMS), and be reproduced into more granular information proper to the existing spatial information. The outputs can smartly serve the police phone tracking to identify locations in questions by filtering the keywords within the error range, and therefore the police can minimize locating times and arrive at the locations as soon as practical.

It is expected that this study will be of great help in police security management by minimizing the time to locate reporters in criminal situations.