Standards Analysis on Korean Positioning System for Public Safety

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Abstract— In public safety, the position information of the rescue requester is an important element to provide public safety services to the rescue requester in time. Usually mobile network operators acquire the position information of the rescue requester through their positioning system and provide it to the national public safety agency using their own interfaces. Since each mobile operator implements and operates their own proprietary platform, an interoperability of the system among mobile operators is not assured and it sometimes causes system errors. Thus the stable and interoperable positioning system is required for the public safety.

In US and EU, the standard on the positioning system for public safety is being discussed and tested due to reasons described above. In Korea, the discussion to create standards on the positioning system for public safety was initiated in 2015 as well, and recently a standard work on system interfaces is finalized.

In this paper, requirements, architecture and interfaces of the positioning system for public safety standardized in Korea are analysed. And also the solution to develop the positioning system to ensure a system interoperability among mobile operators is proposed.

Keyword-Public Safety, Positioning System, Standard, Interoperability, Mobile LBS



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