

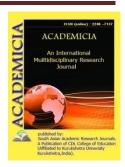
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APPLICATION OF SATELLITE NAVIGATION SYSTEM FOR EMERGENCY WARNING

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ABSTRACT

In the event of an emergency, one of the most important duties of any government is to convey and distribute safety information and warnings to the general population. New media, mobile technologies, and the associated expectations of personalized warnings to personal mobile devices are challenging the old paradigm of a government monopoly system providing warnings via a broadcast method. In the provision of emergency warnings, location-based emergency services and smartphone notifications are becoming more common. Several nations across the globe, including Australia, have embraced these innovative emergency service models. The Australian National Emergency Alert (EA), for example, is a phone-based service with locationbased features. The idea of using global satellite navigation systems, such as the Japanese satellite system, in the area of emergency warning and alerting is introduced in this article. The Japanese satellite warning system may be customized to send real-time location-based emergency alerts to people's mobile devices without being limited by ground-based communication technology. The great resilience of satellite-based communication against communication network overload and loss of ground systems and network infrastructure during a catastrophe is a significant benefit. During disasters, this allows individuals to receive critical information from anyplace (outdoor) and at any time. A satellite-based warning system may potentially be utilized in conjunction with current warning systems as a complementing technology. This paper looks at the benefits and drawbacks of utilizing satellite navigation systems to provide emergency and disaster alerts and security messaging.

KEYWORDS: System, Navigation, Alerting, Warning, Satellite.

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