

ABSTRACT

Indonesia is the largest archipelagic country in the world, located at the convergence of three major tectonic plates: the Eurasian Plate, the Indo-Australian Plate, and the Pacific Plate. This geological position makes Indonesia highly vulnerable to various natural disasters, particularly earthquakes, tsunamis, volcanic eruptions, and landslides. One of the regions with a high level of disaster risk is Banten Province, especially Umbul Tanjung Village located in Cinangka District, Serang Regency. This village was directly affected by the 2018 Sunda Strait tsunami, which was triggered by volcanic activity from Mount Anak Krakatau, and to this day, continues to face several issues related to mitigation systems and emergency response management. Umbul Tanjung Village is categorized as a "Moderately Resilient Village" (Desa Tangguh Madya). Although there have been efforts to strengthen community capacity, the implementation of mitigation and early warning systems remains suboptimal, particularly in the utilization of information technology. Therefore, this study aims to design an integrated early warning system that is tailored to the local needs of the village community using an Enterprise Architecture approach with the TOGAF 10 framework. This research also supports the implementation of the Sustainable Development Goals (SDGs), particularly the goal related to Climate-Resilient Villages. Based on an analysis of Umbul Tanjung Village's SDGs data, it was found that the indicators for disaster response and mitigation remain low and are not yet supported by adequate infrastructure and information systems. By adopting the TOGAF 10 approach, this study produces a comprehensive and adaptive blueprint for a village-scale early warning system architecture.

Keywords: *Early Warning System, Tsunami, Enterprise Architecture, TOGAF 10, Disaster-Resilient Village, Village SDGs.*