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## A SURVEY ON ISSUES AND CHALLENGES OF MARINE COMMUNICATION USING BIG DATA

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### ABSTRACT

The "Big Data" is often very flattering. Some companies and maritime institutions have already tried to use big data to improve maritime safety and environmental protection. Encouraging this put into practice to raise the common and imperative challenges of the entire maritime industry with regard to big data use and related solutions; First, when reviewing the definitions of big data, three key factors are identified: Big data takes the electronic form, is available with a variety of sensors, and is difficult to process. There are four elements: volume, speed, variability and accuracy. In view of these factors, the size of the manuscript such as electronic data is single-minded by the expedition. Big Data Analytics poses a grand challenge on the design of exceedingly scalable algorithms and system to integrate the data and uncover large hidden values from datasets that are diverse, complex, and of a massive scale. Probable breakthrough includes new methodologies, systems and applications in Big Data Analytics that find out useful and hidden knowledge from the Big Data efficiently and effectively. DNV-GL, Lloyd's Register Foundation and IMO e-navigation framework have been selected as such. As a result, four main areas of difficulty in the use of bulky data sets are identified. Due to the strong competitive environment, directions should be provided with rights and obligations when handling large data. With regard to staff, governments are expected to demonstrate their strategy to raise the need for professionals and encourage collaboration with professionals and related industries. Supporting research and enlargement assistance programs and measures the style of relevant data sets. The issue of security requires deep-rooted legislation and a secure and valuable system to combat cyber attacks.

**Keywords:** Big Data, E-Navigation, Data Security, Globalization, Security