# Void Aware Routing Protocols in Underwater Wireless Sensor Networks: Variants and challenges

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Recently, Underwater Wireless Sensor Network (UWSN) become a wide range technology for gathering important events from underwater world. UWSNs is consisting of underwater sensors with limited energy and using acoustic link as a communication medium. Routing methods is the major part that need to be designed in order to transmit the data with minimum cost such as high delivery rate and low energy consumption. Communication void is one of the major perspectives that effects the delivery ratio and energy consumption in the whole network. Therefore, this issue attracts researchers to follow up and design techniques that helps in improving the overall performance of the networks. This article reviews and compares different void aware algorithms proposed for UWSNs. We analyze and discuss representative routing protocols, and discover the requirements considered by the different routing algorithms, as well as limitations and the design requirements under different operations. Finally, we highlight some important future perspectives for UWSNs belonging to routing protocols.

Khasawneh, Ahmad M., Abualigah, Laith, Al Shinwan, Mohammad, (2019), Void Aware Routing Protocols in Underwater Wireless Sensor Networks: Variants and challenges, Journal of Physics: Conference Series