

The Seamless Connection between Underwater and Terrestrial Communication for 6G

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Abstract—Underwater communication was chiefly employed in military affairs and underwater exploration in the early days. In recent years, thanks to the progressive advancement of communication networks, many protocols have already been developed for underwater communication. However, due to technological factors, underwater communication is still looking for a seamless link to terrestrial communication. This paper proposes a novel frame format to improve the frame head of underwater communication, and presents a corresponding operation process of underwater nodes with the hope that the data link layer of the OSI 7-layer model provides the Media Access Control (MAC) protocol to the corresponding underwater network. This proposed method can be provided as a standard solution to create a seamless connection between underwater and terrestrial communication.

Keyword—Underwater communication, 6G, Gateway for underwater communication.



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