

**ACOUSTIC IMPULSE RESPONSE MAPPING FOR ACOUSTIC COMMUNICATIONS IN SHALLOW WATER**

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**Abstract**

In this paper we review the accepted methods for characterization of digital communications channels and present results from recent measurements made in shallow water. Several different methods for characterization are reported for signals over a frequency range of 40 to 60 kHz. The use of a system identification method (SID) for equalization of received data transmission is presented and compared to standard methodology for data rates to 10kbps. Comparison of OAIR derived from standard acoustic propagation models is also presented.