A new Underwater Sensor Simulation Tool (USNeT) is proposed in this paper which has been designed and implemented assuming the conditions that affect underwater communication. This system provides real-time process based simulation and supports three-dimensional deployment. USNeT follows the object-oriented design style and all network entities are implemented as classes in C++ encapsulating threads mechanisms. Threads have been used because of the system need to handle multiple tasks. Finally, the system has the functions to allow accurate visualization of the sensor nodes in a 3D manner and it presents a freely controllable camera that allows users to view the area from any angle.
Underwater Sensor Network Simulation Tool (USNeT)

Keywords
Cluster  multithread  object-oriented simulation  energy efficiency