Mitigation of Machinery generated Underwater Noise

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SONIC cooperative research project dedicated a full task to the study and mitigation of “Machinery generated Underwater Noise”. Task 3.4 in Work Package 3 focused on the study of the possible mitigation strategy of UNR induced by on board machinery. The large bore 4-stroke engine has been chosen as the most representative and relevant on board machinery. As extensively explained, the ultimate mitigation methodology is the simulation itself. Continuous improvement of the simulation methodology requires systematic modelling, checking and correcting the approach for each single ship built. Moreover, the strategy of improving a single components of the system has reached its highest peak, now the only way forward is the optimization of the whole system. To achieve this it is fundamental the cooperation between machinery manufacturer, resilient mounts manufacturer and ship builder, as well, each single party cannot be entirely responsible of the final result.