

Maritime Acoustics

Environoise Consulting Limited has completed many projects in the maritime sector.

The work undertaken between 2014 and 2016 includes the following:

Holyhead Marine, Anglesey:



Undertaking of wheelhouse noise measurements using measurement procedure given in section 6.4.4.2 of C080 P3 2/09: 'Code of Practice for Controlling Risks due to Noise on Ships' of three 16m Pilot ships destined for Sydney Harbour and built by Holyhead Marine. The ships were named 'Sever', 'Sharp' and 'Sinclair' and the work was undertaken during sea trials off Anglesey to confirm that a noise level of 75dB $L_{Aeq,T}$ was not exceeded when the vessels were travelling at 22 knots.

Cammell Laird Shipbuilders, Ireland and England



We measured noise and vibration levels of the Strangford Lough Ferry in Ireland to inform us in the design of a new vessel being constructed at the Birkenhead shipyard. Advice was given on engine isolation, suitable surface finishes and floor types with required sound insulation performance for wheelhouse, crew quarters, passenger lounge etc plus noise level targets for the ventilation system. In addition to internal noise levels we advised on methods to achieve environmental noise limits imposed by the contract. Commissioning to be completed.

Stena Baltic



Stena's ship Norman Asturias was being re-assigned to duty in the Baltic Sea from the English Channel. A noise and vibration assessment was completed for the entire vessel in accordance with the requirements of the Danish Maritime Authority.

In addition to the engine room, vehicle decks and plant areas, an assessment of crew and passenger cabins were included.

Stena Line – UK Ferry Fleet



In total, twelve of Stena's ferries operating between UK, Irish and Continental ports have had noise and vibration assessments completed by Environoise in accordance with the Maritime Control of Noise and Vibration at Work regulations.



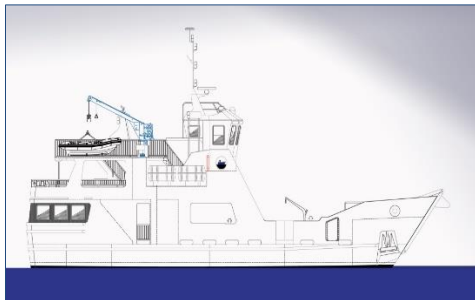
Surveys included assessment of noise exposure, Whole Body Vibration (WBV) in engine rooms and other plant areas.



Assessments of the noise exposure of deck crews during vehicle loading operations were done and noise contour maps of the engine rooms and ancillary plant spaces included in the resulting reports.

Vibration assessments were also done to ensure the comfort of patrons in ships cinemas

Arklow Marine



Arklow Marine, Co. Wicklow invited us to advise on construction details of a new ferry to service the crossing from Ballycastle to Rathlin Island so that they could achieve on board and environmental noise level targets set by the client.

Rathlin Island is the northernmost inhabited island of Northern Island and quiet operation of the vessel is desirable to preserve the tranquillity of the area.

Isle of Man Steam Packet Company



Noise and vibration assessments were completed for the Manannan and Ben-My-Chree ferries serving the Isle of Man.

The two vessels serve the Port of Douglas, Isle of Man from Liverpool and Heysham respectively