Project	
Microphone positions	Free field 1.5 m above ground level
Time	N1: Wed 09.09.20 to Thursday 10.09.20 N2: 09.09.20 1000-1130 & 10.09.20 1700-1800
Operator	Damian Brosnan BSc MSc MIOA MIEI
Standard	ISO 1996 (2016 & 2017)
Field calibrator	Bruel & Kjaer Type 4231 Serial 2342544 Laboratory verification 14.02.19 by Sonitus Systems

Weather	
Cloud cover	100 % during daytime, varying 50-100 % during night-time
Precipitation	0 mm
Temperature	13 °C at set up, falling to 10 °C overnight, rising to 16 °C on 10.09.20
Wind direction	SW throughout
Wind speed	0-3 m/s on 09.09.20, falling to 0-2 m/s overnight and next morning, rising to 1-5 m/s afternoon of 10.09.20
Wind measurement	Anemo anemometer 2 m above ground level

Instrument 1	
Stations used	N1
Instrument	NTi XL2 ('xl2') IEC 61672-1:2013 Class 1
SLM serial	A2A-14337-E0
Microphone serial	A14972 + pre-amp 7266
Range	0-100 dB
Intervals	Logging at 1 s with audio Relevant intervals extracted
Time weighting	Fast
Frequency weighting	Broadband: A+C Spectrum: Z
Laboratory verification	14.02.19 by Sonitus Systems Compliance certificate available on request
Field calibration	09.09.20 1031 @ 42.7 mV/Pa
Post survey drift check	93.8 dB

Instrument 2	
Stations used	N2
Instrument	NTi XL2 ('xl5') IEC 61672-1:2013 Class 1
SLM serial	A2A-17932-E0
Microphone serial	A18747 + pre-amp 9220
Range	0-100 dB
Intervals	Logging at 1 s with audio Relevant intervals extracted
Time weighting	Fast
Frequency weighting	Broadband: A+C Spectrum: Z
Laboratory verification	13.12.18 by NTi Compliance certificate available on request
Field calibration	09.09.20 1010 @ 43.8 mV/Pa 10.09.20 0923 @ 43.7 mV/Pa
Post survey drift check	93.9 dB

Uncertainty	
Residual noise	u_i = 0.5 dB c_i = 1 dB where source dominates, >20 dB where source becomes masked c_iu_i range = 0.5 to >10 dB
Weather conditions	Levels representative of contemporaneous conditions only c_iu_i = 2 dB at wind vector + or x Otherwise c_iu_i >2 dB
Anemometer height	Not possible to measure wind speed at 10 m Anemometer height of 2 m may increase meteorological uncertainty
Precipitation	Precipitation = 0 mm during reported intervals c_iu_i = 0 dB
Operating conditions	Levels representative of contemporaneous operating conditions only c_iu_i <1 dB
Location	c_iu_i = 0 dB at free field positions c_iu_i = 0.4 dB at near field & reflective field positions
Instrument	IEC 61672-1 class 1 specifications u = 0.5 dB.
Combined	3 dB to >10 dB, depending on position Variation chiefly to meteorology & residual noise intrusion
Expanded	6 dB to >10 dB, 95 % coverage