## **ESOMM-2024 Preliminary Programme**

# 8th International Meeting on

## the Effects of Sound in the Ocean on Marine Mammals (ESOMM-2024)

## Sunday, 08 September 2024

17.00-19.00 Icebreaker and Registration at the Carlton Beach Hotel Scheveningen (Ground Floor), The Hague

### Monday, 09 September 2024

08:00	Registration & conee

## Opening & Scope of ESOMM-2024

#### 09:00 Welcome

Opening of ESOMM-2024 by rear admiral Harald Liebregs, deputy commander

Introduction & scope of ESOMM-2024

Frans-Peter Lam

## Navy developments

## Chair: tbd

09:30	Royal Netherlands Navy approach	Droge
09:45	US navy current practice	Cowan
10:00	The development and implementation of a NATO sonar risk framework	Colbert
10:10	Navy Marine Species Research and Monitoring Efforts	Weise
10:20	Other navy current practice	tbc
10:30	Discussion	
10:45	Coffee	

## Internatinal Policy & Regulation, Science & Technology Developments

#### Chair: tbd

11:15	Introduction	
11:20	Uncrewed Aerial Systems Aid to Advance Field Studies of Construction Sound Exposure of Fin Whales in Southern New England Waters	Parks
11:35	Automatic GPS tracking of tagged cetaceans to conduct controlled exposure experiments at sea	Miller
11:50	Exciting News from NOAA! Focusing on Quieting, Debunking a Myth, and Updating Acoustic Behavioral Harassment Criteria	Harrison
12:05	Overview E&P Sound & Marine Life Programme	Hedgeland/ Bucki
12:15	Discussion	
12:30	Lunch	



International Policy & Regulation, Science & Technology Developments - continued			
Chair: tbd			
13:45	BOEM overview	Lewandowski	
13:55	NOPSEMA overview, tbc	Edgell	
14:05	Assessing ecological and cumulative effects from offshore wind in the Netherlands, specifically regarding underwater sound on marine mammals	Verdonk	
14:25	Harnessing Seafloor Telecommunication Cables for Enhanced Marine Mammal Monitoring: A Comparative Study of Distributed Acoustic Sensing and Hydrophone Arrays	Erbe	
14:45	Discussion		
14:55	Coffee		
	Science & Technology Developments		
	Chair: tbd		
15:25	The Interaction of Physiological Stress, Pollutant Load, and Acoustic Disturbance on the Foraging Behavior and Reproductive Success of Elephant Seals	Costa	
15:45	First empirical hearing test conducted in a baleen whale	Houser	
16:05	open slot tbc		
16:20	Discussion		
16:30	Closure		
16:30	Reception at the Beach House; closing 19.00		



	Tuesday, 10 September 2024		
08:00	Coffee		
	Behavioural Response Studies in the field		
	Chair: tbd		
08:30	The fourth phase of the Sea mammals and Sonar Safety project (3S4)	Kvadsheim	
08:50	Behavioral responses of Goose-beaked whales (Ziphius cavirostris) to military sonars	Southall	
09:10	Assessing beaked whale behavioral response to naval sonar using a hierarchical hidden Markov model	DeRuiter	
09:30	Changes in vocalization patterns of common dolphins in controlled sound exposure experiments	Oswald	
09:50	Discussion		
10:00	Coffee		
10:30	(Even more) factors affecting the behavior of beaked whales on a military training range	Schorr	
10:50	Quantifying the environmental footprint of naval sonar operations	von Benda-Beckmann	
11:10	Behavioural Response Research: A synthesis of data, questions, and analyses as they relate to current and future navy needs.	Harris	
11:30	Discussion		
11:45	Lunch		
	Offshore wind		
	Chair: tbd		
13:15	Introduction		
13:25	Project WOW acoustic sampling strategies, platforms, and initial results	Nowacek	
13:45	Establishing a Passive Acoustic Monitoring network along the U.S. Atlantic Outer Continental Shelf	Martin	
14:05	Offshore Wind Site Characterization Surveys Not Likely to Result in Incidental Take	Staaterman	
14:25	Designing offshore wind pile driving to minimise estimates of auditory injury in marine mammals	Booth	
14:45	Discussion		
15:00	Coffee		
	Offshore wind continued		
	Chair: tbd		
15:30	The soundscape and harbour porpoise presence in and around an offshore windfarm	Ransijn	
15:50	Assessing the impact of North Sea wind farm development on marine mammal populations	de Jong	
16:10	Sound Field Verification: U.S. Offshore Wind Construction Regulatory Framework	Denes	
16:30	Discussion		
16:45	Closure		



Wednesday, 11 September 2024				
	Several outdoor activities: tbd, starting time 7.15 - 8.00			
09:30	Coffee			
	Behavioural Response Studies in the field			
	Chair: tbd			
10:00	Using Continuous-Time Discrete Space Models to Assess Horizontal Avoidance in the Atlantic Behavioral Response Study	Schick		
10:20	Diving to the seafloor: Investigating Cuvier's beaked whale (Ziphius cavirostris) foraging behaviour	Quick		
10:40	Discussion			
10:45	Coffee			
	Offshore wind continued			
	Chair: tbd			
11:15	Body condition predicts foraging strategy and response to sonar in a deep-diving top predator	Burslem		
11:35	Behavioral and physiological responses of oceanic dolphins to military sonar	Casey		
11:55	Strong behavioural reactions of bottlenose dolphins to short startle sounds	Janik		
12:15	Discussion			
12:30	Lunch			
	TTS, captive studies, masking, soundscape, shipping			
	Chair: tbd			
14:00	Recovery patterns from low level temporary hearing threshold shifts (TTS) in harbor porpoises, harbor seals and California sea lions will interfere with effective quiet level determinations.	Terhune		
14:20	Temporary hearing Threshold Shift (TTS) in harbor porpoises, harbor seals and California sea lions: pattern of hearing loss, recovery and testing the equal-energy hypothesis	Kastelein		
14:40	Auditory Masking Parameters for Pinnipeds	Jones		
15:00	DEMASK, policy scenarios for noise management in the North Sea	Kinneging		
15:20	Discussion			
15:30	Coffee			
	Masking, Soundscape, Shipping			
	Chair: tbd			
16:00	Vessel Speed Reductions to Reduce Ocean Noise Pollution	Malinka		
16:20	The global natural ocean soundscape (10-100 Hz): Baleen whales, ice cracking and seismic activity	Ainslie		
16:40	Quantitative comparisons of measured and modelled ocean soundscapes	Heany		
17:00	Discussion			
17:15	Closure			



	Thursday, 12 September 2024	
08:00	8:00 Coffee	
	JIP session	
Chair: Hedgeland / Bucki		
08:30	Introduction JIP session	Hedgeland/ Bucki
08:35	A Behavioral Response Study with Baleen Whales and Marine Vibrators	Southall
08:55	E&P Sound and Marine Life JIP Acoustic Modelling (JAM) Workshop	Ainslie
09:15	Low-visibility detection techniques for marine mammals	Williamson
09:35	Coffee	
10:05	tbc	tbc
10:25	Unveiling Population Consequences of Underwater Noise on North Sea Harbour Porpoise PCoD using a novel integrated SDP-ABM modeling approach	Tuhuteru
10:45	New Developments in Cetacean Audiogram Models	Ketten
11:05	Discussion	
11:45	Lunch	
	UXO	
	Chair: tbd	
13:00	Introduction UXO session	tbc
13:10	UK position on clearance of unexploded ordnance (UXO) in the marine environment	Canning
13:30	BOOMIN at the whales: Behavioral Observations Of Marine mammals to Impulsive Noises at the individual level	Falcone
13:50	BOOMIN: Behavioral Observations of Marine Mammals Around Impulsive Noise	Watwood
14:10	Discussion	
14:30	Coffee	
	Regulation & mitigation	
	Chair: tbd	
15:00	The UK Marine Noise Registry and its role in impulsive noise monitoring and management	Mendes
15:20	Potential of Marine Spatio-Temporal Planning to mitigate effect of noise on marine mammals in highly biodiverse coastal waters	Akamatsu
15:40	Proposed Underwater Noise Limits for Offshore Wind Construction in the U.S.	Reeve
16:00	Sunday workshop report BOEM	Guan tbc
16:10	Management & Regulation discussion	
16:40	6:40 Closure	
17:40	Departure for Dinner (precise timing to be confirmed)	



	Friday, 13 September 2024	
08:45	Coffee	
	Population consequences	
	Chair: tbd	
09:15	Introduction	tbc
09:20	Considering the impact of sound on Bering Sea marine mammals in the context of climate change	Miksis-Olds
09:40	Spatial and temporal sensitivities of an endangered predator to acoustic stressors	Keen
10:00	Understanding the cumulative effects of multiple stressors on marine mammals – An overview of the Population Consequences of Multiple Stressors (PCoMS) project	Thomas
10:20	Questions	
10:30	Coffee	
	Population consequences continued	
	Chair: tbd	
11:00	A synthetic literature review and mechanistic dose-detection framework for understanding individual responses to human-altered sensory landscapes	Isojunno
11:20	Tbc iPCoD update	Hin
11:40	Discussion	
12:00	Lunch	
	Seismic, eDNA & Prey field mapping	
	Chair: tbd	
13:30	A comparison of measured sound levels from conventional and eSource airgun arrays and their impact on marine mammals in the Southern North Sea	Brinkkemper
13:50	The deep-sea prey scape of deep-diving toothed whales	Visser
14:10	Environmental DNA (eDNA) Monitoring of Marine Mammals	Weise
14:30	The use of active multibeam sonar in wildlife monitoring	Gillespie
14:50	Discussion	
15:00	Coffee	
	Seismic, eDNA & Prey field mapping	
	Chair: tbd	
15:30	tbc	
15:50	tbc	
16:10		
16:30		
16:40	Closing of plenary programme of ESOMM-2024 - time tbd	
17:00	The End	



Posters (first authors, alphabetical order)			
On display Monday to Friday			
1	CEE Tool demo; real-time whale tracking for Controlled Exposure Experiments	van IJsselmuide	

