

**UK Marine Autonomous Systems Regulatory Working Group
Conference 16th to 17th November**

Unmanned Surface Vessel Regulation – The Human Element

Day 1 Wednesday 16th November

Registration and Welcome			
Time	Title	Speaker	Affiliation
0830 - 0900	Coffee & Registration		
0900 - 0910	Welcome	Kevin Forshaw	Associate Director, Innovation and Enterprise, NOC
0910 -0930	Opening Keynote	Ashok Mahapatra	Director, Maritime Safety Division, International Maritime Organisation
The Vision for USV's			
0930 -1000	Future Legal Benefits from Unmanned Surface Vessels	Professor Henrik Ringbom	Part-time Professor at the Scandinavian Institute of Maritime Law at the University of Oslo and Adjunct Professor in maritime law and the law of the sea at Åbo Akademi University.
1000 – 1030	The future is large USV's	Eshan Rajabally	Engineering Consultant, Project Manager and Technologist, Rolls Royce
1030 – 1100	Creating the right conditions for growing the MAS Industry	John Murray	CEO Society of Marine Industries
1100 – 1130	Coffee		
USV's and the Human Element			
1130 – 1200	A Framework for UMS Certification incorporating the Human Element	Tim Kent	Technical Director, Marine & Offshore Lloyds Register
1200 – 1230	The Legal Viewpoint	Professor Eric Van Hooydonk	Professor, Antwerp University and partner, Eric Von Hooydonk, lawyers
1230 - 1300	Skills for the safe operation of USV	Dr Bev Mackenzie Glenys Jackson	Technical and Policy Director, Institute of Marine Engineering, Science and Technology (IMarEST) Head of Merchant Navy Training Board
1300 – 1400	Networking Lunch		
1400 – 1430	A Perspective from the Shipping Industry	John Murray	Director Marine, International Chamber of Shipping
1430 - 1500	A Mixed Maritime Operating Environment – Ships and USVs	Jim Scorer	Secretary General, International Federation of Shipmasters' Associations
1500 - 1530	Insurance for MAS	Richard Morgan	Marine Insurance Director, Towergate
1530 - 1600	Coffee		
The Regulatory Working Group Code of Practice			
1600 – 1630	Code of Practice	Andy Higgins	QinetiQ, Member of the MAS Regulatory Working Group
1630 - 1730	Panel Discussion	James Fanshawe, Professor Henrik Ringbom, Eshan Rajabally, Anderson Chaplow, Dr Bev Mackenzie, Andy Higgins	
1730 – 1900	Conference Drinks		
2000	MATS Showcase Dinner Tickets can be purchased at the following link: https://conference.noc.ac.uk/product/mats-showcase-2016-gala-dinner		

MASRWG Conference 16th to 17th November <i>Unmanned Surface Vessel Regulation – The Human Element</i>
Day 2 Thursday 17th November

The International Perspective			
Time	Title	Speaker	Affiliation
0830-0840	Welcome	James Fanshawe	Chair, UK MASRWG
0840 -0900	Keynote	Sir Alan Massey	Chief Executive at UK Maritime and Coastguard Agency
0900 - 0930	Autonomous Ships and the COLREGs 1972	Professor Zhang Renping	Director, International Maritime Convention Research Centre, Dalian Maritime University, China
0930 -1000	Towards the establishment of USV regulation in Korea	Dr Sun Young Kim Dr Yeon Min Kwak Professor Jung Sik Jeong	Korean Research Institute of Ships and Ocean Engineering Korean Register Mokpo National Maritime University
1000 - 1030	Coffee		
1030 - 1100	UMS Safety and Regulation	Magnus Ornfelt	Chairman, Safety and Regulations for European Unmanned Maritime Systems (SARUMS)
1100 - 1130	USVs in USA – Regulators’ Perspective	George Detweiler	Marine Transportation Specialist Navigation Standards Division Office of Navigation Systems US COAST GUARD
1130 - 1200	Unmanned Maritime Systems and COLREGs: An Industry Perspective	Rand D. LeBouvier, Ph.D., CAPT, USN (ret)	Chair of the Association for Unmanned Systems International (AUVSI) COLREGS Subcommittee
Towards an Informal International Correspondence Group			
1200 -1205	Proposal	Professor Andy Norris	Head of Delegation to IMO of the International Association of Institutes of Navigation (IAIN) Special Professor of Navigation Technology, University of Nottingham
1205-1245	Panel Discussion with questions from the floor	Sir Alan Massey, Professor Zhang Renping, Professor Jung Sik Jeong, Magnus Ornfelt, George Detweiler, Professor Andy Norris, Rand LeBouvier, James Fanshawe	
1245 - 1300	Conference Closing Summary	James Fanshawe	
1300	Conference Closes		