

ICMASS Workshop on Autonomous Test Areas

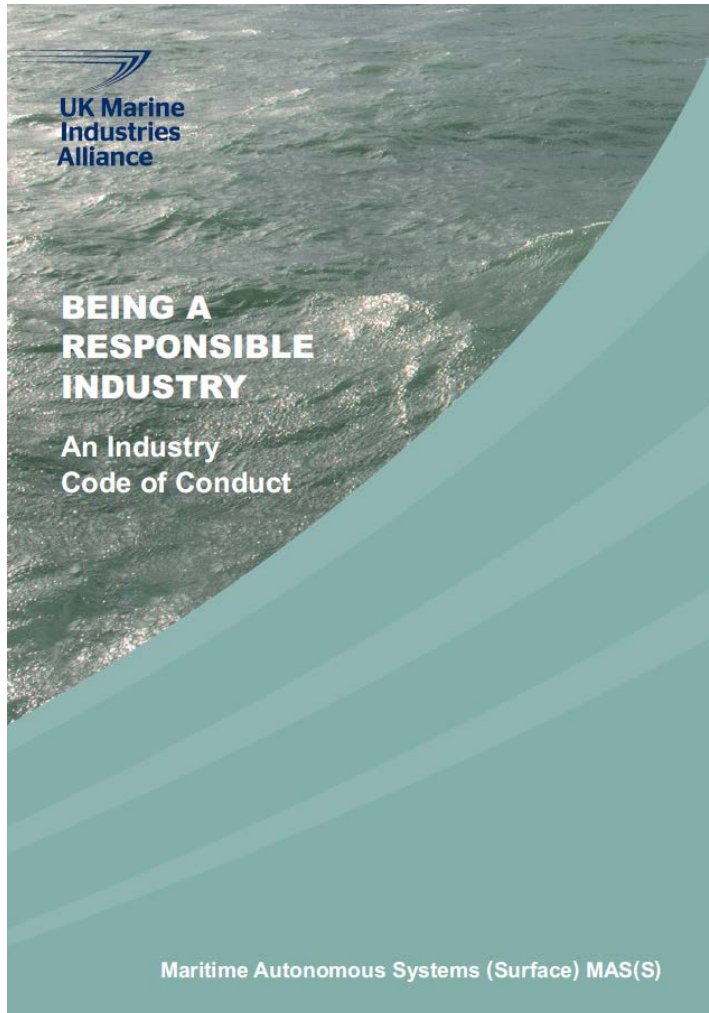
UK Update

**James Fanshawe CBE
Chairman UK MASRWG
7th November 2018**

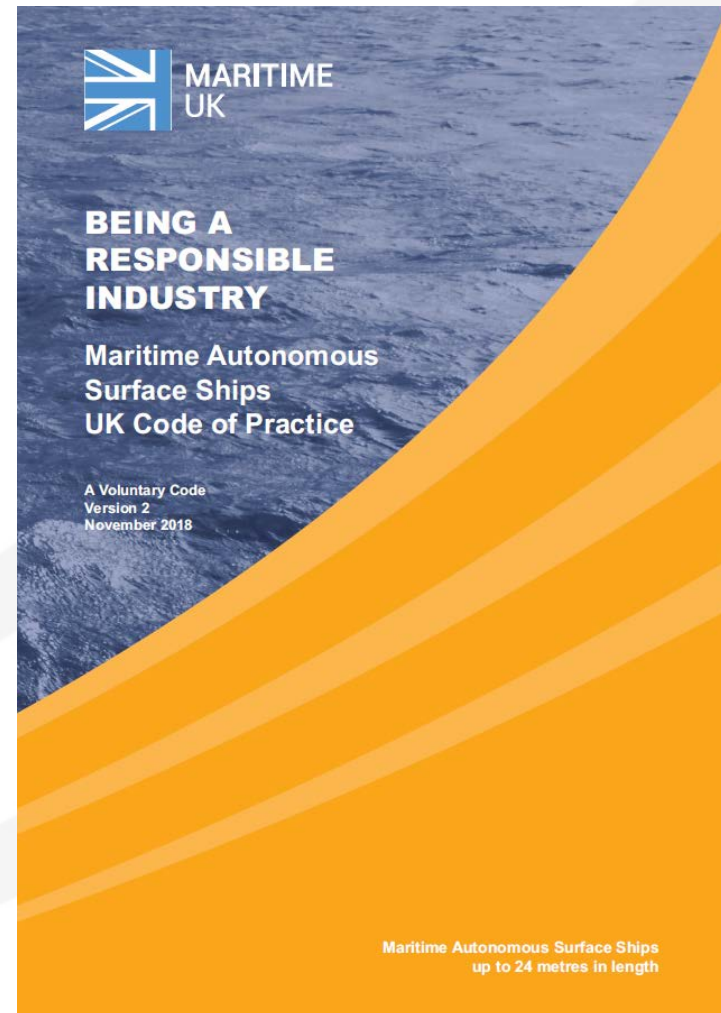


**UK Marine
Industries
Alliance**

Codes of Conduct & Practice



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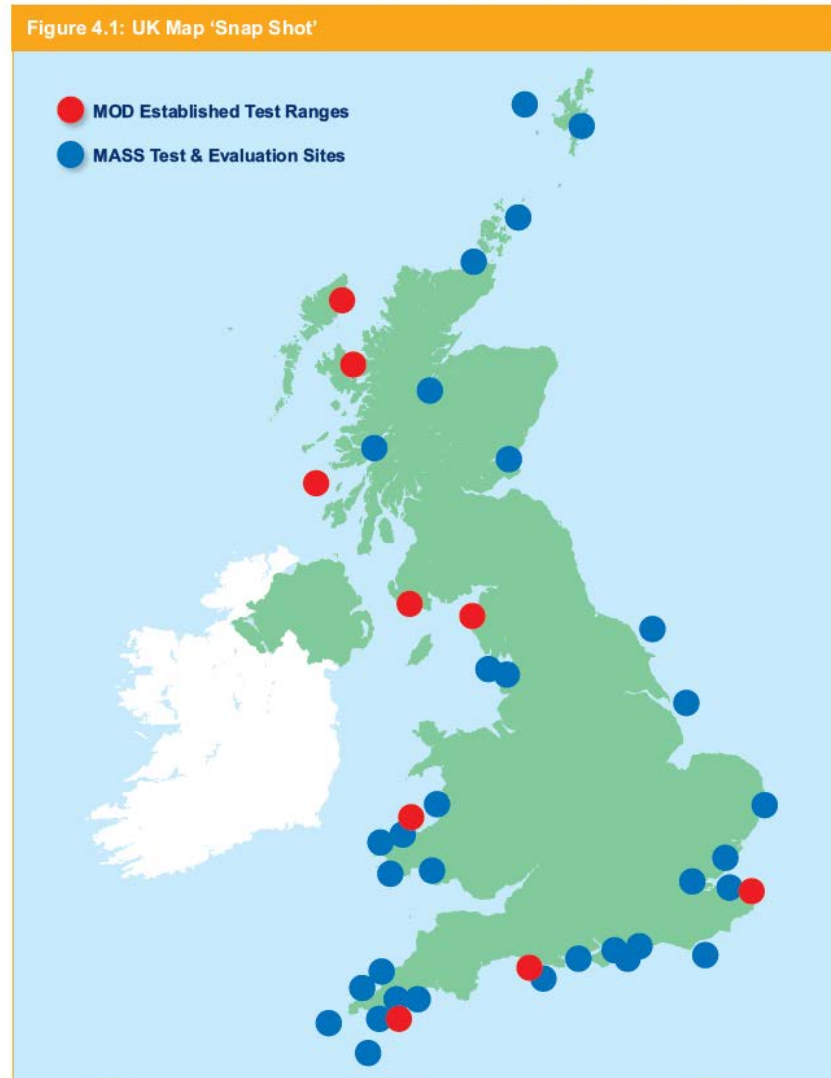


Version 2.0 published 13 November 2018

MASS Deployments

- To achieve a successful, authorised and approved MASS deployment a number of Waterspace Authorities may need to be consulted, including:
 - the Harbour Masters (HM) and Inner Harbour Authorities, the MCA local Office, Marine Scotland, and potentially the UK Government, MMO (Marine Management Organisation) especially where sensor and transmitter operating licences may be required.
- Notice to Mariners and appropriate radio navigation warnings (e.g. RNW and WZ) should be issued as appropriate.
- During the planning phase of any MASS Operational deployment the following additional operators and or authorities should also be considered, and notification issued and or clearance obtained where relevant:
 - Fishermen (Bulletin of intended ops);
 - Offshore operators (i.e. Oil & Gas, and Renewable Energy operators/owners);
 - Established local water sport leisure clubs and organisations;
 - Other stakeholders with economical, safety or environmental interests in intended location.
- A suite of HSE documentation should be provided to support the mission and assure the relevant approving authorities that full consideration to the safety and risk management of the intended operation or evaluation trial has been completed. This may include:
 - A full HSE Plan;
 - Launch and Recovery Risk Assessment;
 - Emergency Recovery Plan and Procedure; and
 - The outline Mission Plan and Method Statement.
- These documents will support the approval application and ensure all operations are conducted within the intent of the UK MASS Code of Conduct and the Code of Practice.

UK Test Ranges, Areas & Sites



Operational and Trials Plan proforma

Plan reference:		
Trial serial number		
Date code		[YYYY-MM-DD]
Trials identifier name		
Launch Location / Home Port		
Operations area		

Contact details:	
Corporate Name	
Owner/Ship Owner	
Main Operator / Responsible person Master Operating & Emergency contacts Designated person ashore	Definitions as per Ch 2 of the CoP
Insurance Company and Policy Number	

Operational and Trials Plan proforma

Contact person(s):			
Name(s)	Email address(es)	Telephone number(s)	Title / Responsibility / Training and Experience
	People and experience relevant to operation conduct and execution		

Date and location of operation:	
Please identify the intended operational area(s). Use the most appropriate means of defining location such as coordinates latitudes/longitudes or by marking on a chart image to be inserted or attached. Add further lines if more locations are needed.	
Location(s)	L1: including Charts and areas to be employed
	L2: including Charts and areas to be employed

Operational and Trials Plan proforma

Schedule:		
Dates / times	Location	Activities
	[e.g. L1]	[e.g. station keeping, target towing, high speed runs]
		[or detail Operational window for trials/Ops to allow flexibility for delays, programme changes or weather]

Unmanned craft details:			
Total number of unmanned craft		Telephone number(s)	
Please complete the following, and create a separate table for each craft involved in the trial:			
Name(s)			
AIS Transmission?	Yes/No. Note – AIS should normally be fitted.	MMSI:	
Length overall		Beam	
Draught		Displacement	
Max speed		Operational speed	
Propulsion type	[e.g. twin propeller]	Fuel	[e.g. Lithium ion battery]
Payloads	[and detail any towed sensors: size and depth]		
Visual & sound identification	[e.g. port of Origin & Destination, vessel description; shapes, lights, sound signals, flags]		
Design and Build Assurance details if available (Including Load Line requirements if appropriate)			
Picture of Vessel	Add attachment picture, for visual identification		

Operational and Trials Plan proforma

Main command and control station:

If there are several command stations, please provide details for the main station or a central point of contact for the duration of the trial.

Location	
Contact details	
Control link type 1	
Frequency 1	
Control link type 2	
Frequency 2	
Details of OFCOM license if appropriate	

Operational and Trials Plan proforma

Safety Case:	
Safety Case / Risk Assessment	Reference to attached Documents
Please specify the consequences in the event of a failure of command and control datalink:	
[e.g. propulsion will stop after a timeout of 15 seconds] Include use of guard ship/support vessels employed or on immediate stand-by Immediate salvage of 'vessel not under command' (Total power loss or Command Link failure)	

Support craft:	
Number and type of support craft	
Name / call sign	
Phone number	
MMSI if transmitting on UAIS	
Intended role during trial, and station/proximity during trial/Ops	[including, Time to close to unmanned craft & station keeping requirements]
Unmanned craft recovery method	[Including role to tow vessel to and from harbour facility or launch area]

Operational and Trials Plan proforma

Brief description of trials operations:

Please provide a description of intended operations

[e.g. – the USV will be running a survey pattern in an area South of Bear Island, typically comprising a raster pattern or 20 lines, spacing 10m apart and 500m long, South of Bear Island and clear of shipping lanes; a manned support craft will remain in line of sight within 300m of the USV for the duration of the trial].

Additional information:

[e.g. – the USV will be running a survey pattern in an area South of Bear Island, typically comprising a raster pattern or 20 lines, spacing 10m apart and 500m long, South of Bear Island and clear of shipping lanes; a manned support craft will remain in line of sight within 300m of the USV for the duration of the trial].

Approval:

Constraints

[e.g. approved for daylight operations, support boat to keep watch on Channel 13]

Approval signature:

Harbour authority			
Name			
Signature			

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**UK Codes of Conduct and Practice for Maritime
Autonomous Surface Ships are at:**

www.maritimeuk.org/media-centre/publications