



UNECE
55th Session of SC.3/WP.3

Regulatory Update

James Fanshawe CBE
Chairman UK MASRWG
20th June 2019

Water



Autonomy Backdrop

- The growth of autonomy continues to rise exponentially
- New systems and concepts arrive month by month
- These are not all to do with so-called unmanned vessels
- There are some intriguing benefits being identified for conventional ships
- The focus, when it comes to Standards and Regulation, tends to fall on the introduction and operation of vessels that will not necessarily have personnel on the bridge
- These vessels may be 'autonomous' but it is more likely that they will be monitored or supervised remotely

Regulation – Where are we?

- Definitions, terms and terminology industry
- UNECE work continues well
- IMO Regulatory Scoping Exercise for Maritime Autonomous Surface Ships (MASS)
- A variety of Rules and Guidelines are in force
- Many standards can be directly applied to these vessels but there will be a need for some new ones
- Dichotomy - the regulatory and standards work is bound to lag behind the reality of an ever increasing number of vessels which are operational
- Whether these vessels are truly autonomous, or being monitored or supervised from a remote station, is not the key question. They must all be seen to be operating within existing regulatory frameworks and standards

Regulation – Where are we?

- Standards are being reviewed:
 - General
 - Context related
 - Risk assessment related
 - Technical
- Safety is paramount
- Trust is a keyword
- Precedent law portfolio growing

IMO Regulatory Scoping Exercise

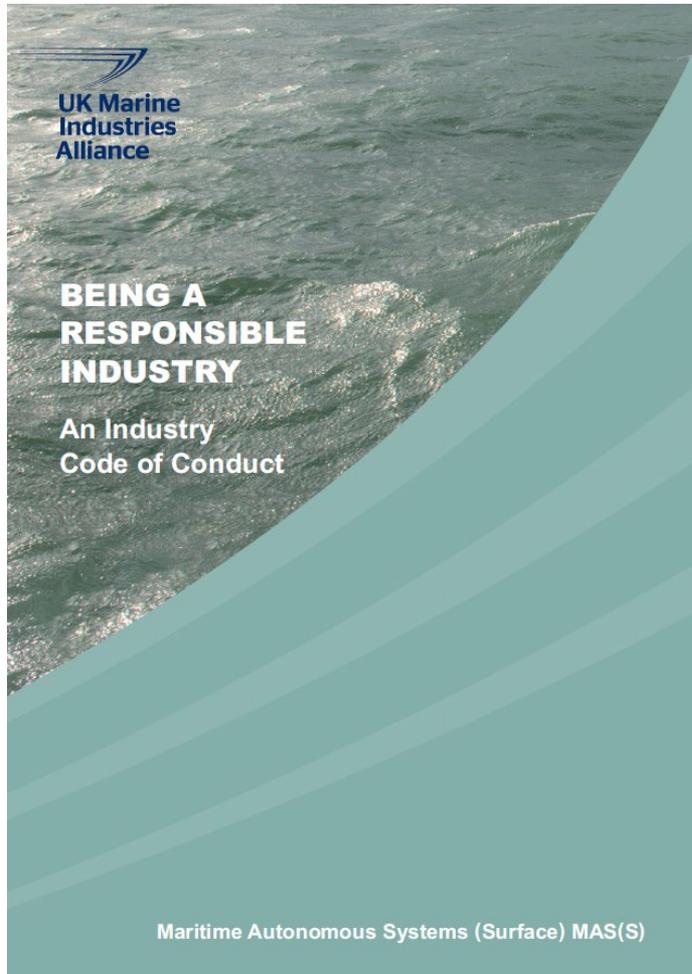
- The Organization should be proactive and take a leading role on this issue
- RSE to review IMO's international regulatory framework and to:
 - Determine which provisions apply or not to MASS and may preclude or not MASS operations (as currently drafted)
 - Identify gaps or issues and analyse the best way to address
- Need to take into consideration the human element and legal aspects
- Not a “drafting exercise”
- The work on MASS should be user-driven and not technology driven
- LEG 105 (April 2018) RSE with a target completion year of 2023 for LEG instruments
- MSC to take a coordinating role

Henrik Tunfors – RSE Chair. Jan 2019

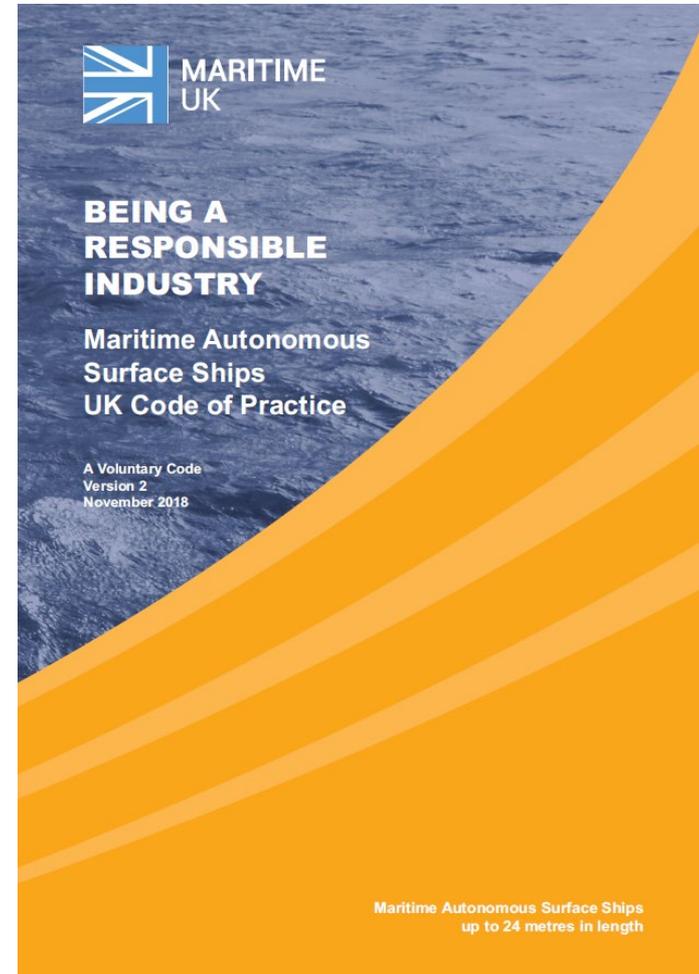
Industry Codes

- Pan industry agreement on aspects of MASS development, design, production and operation
- Best practice
- Assurance
- Safety and professionalism
- Training, conduct and personal responsibility
- Compliance and self-regulation
- Improved communications within the industry and the wider maritime community

UK Codes of Conduct & Practice



Published March 2016



Version 2.0 published 13 November 2018

<https://www.maritimeuk.org/media-centre/publications/>

The Human Element

- The Maritime industry needs to attract and retain bright people
- Considerable effort is being made to establish appropriate training standards, qualifications and accreditation
- It is no longer just a case of considering the ships on their own
- The maritime story starts at the factory and stops at the point of delivery and this needs good people
- Plenty of jobs but they will be different than today

Summary

- We must think multi-modal across all forms of transport.
- There are many ways in which Maritime Autonomous Systems can improve safety and efficiency.
- There are sufficient guidelines and relevant standards for the autonomous industry to continue to grow.
- Industry has a vital role to demonstrate responsible attitudes.
- We must keep autonomy in perspective and not make assumptions which are not accurate.
- There will always be a mix of vessels at sea.
- Humans are critical.
- Safety and security must come first.



James Fanshawe CBE

james.fanshawe@ukmarinealliance.co.uk

+44 7769 702031

www.maritimeuk.org/media-centre/publications