



Maritime &
Coastguard
Agency

Maritime and Coastguard Agency Looking to the future



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Introduction

The Maritime and Coastguard Agency was established in 1998. Since then it has evolved into a lean, forward looking organisation, continually striving to be the best maritime safety organisation in the world. It has a professional, pro-active and highly trained workforce that delivers maritime regulation, safety, counter-pollution and search and rescue. The Agency is highly cost-effective and internationally respected.



A modern risk-based regulator

The MCA is a modern, risk-based safety regulator for the whole of the UK. Feedback (such as the recent Maritime Growth Study and Flag Panel work) stresses the importance of the maritime sector to the economic wellbeing of the country. Feedback to this work shows that the Agency has an excellent reputation as the centre of technical skill and expertise on maritime safety and ship standards. And its high quality maritime surveyors exhibit this skill and professionalism in their work.



Working with ship operators to understand their business needs

The UK Ship Register is based at the MCA and the Agency plays an active role in building the register, supporting economic growth and ensuring that the UK has a strong international voice. It works with ship owners and operators to understand their business needs and to seek ways of attracting more ships to the UK Flag in support of a vibrant maritime sector. This is supplemented by the MCA's leadership of the Red Ensign Group.

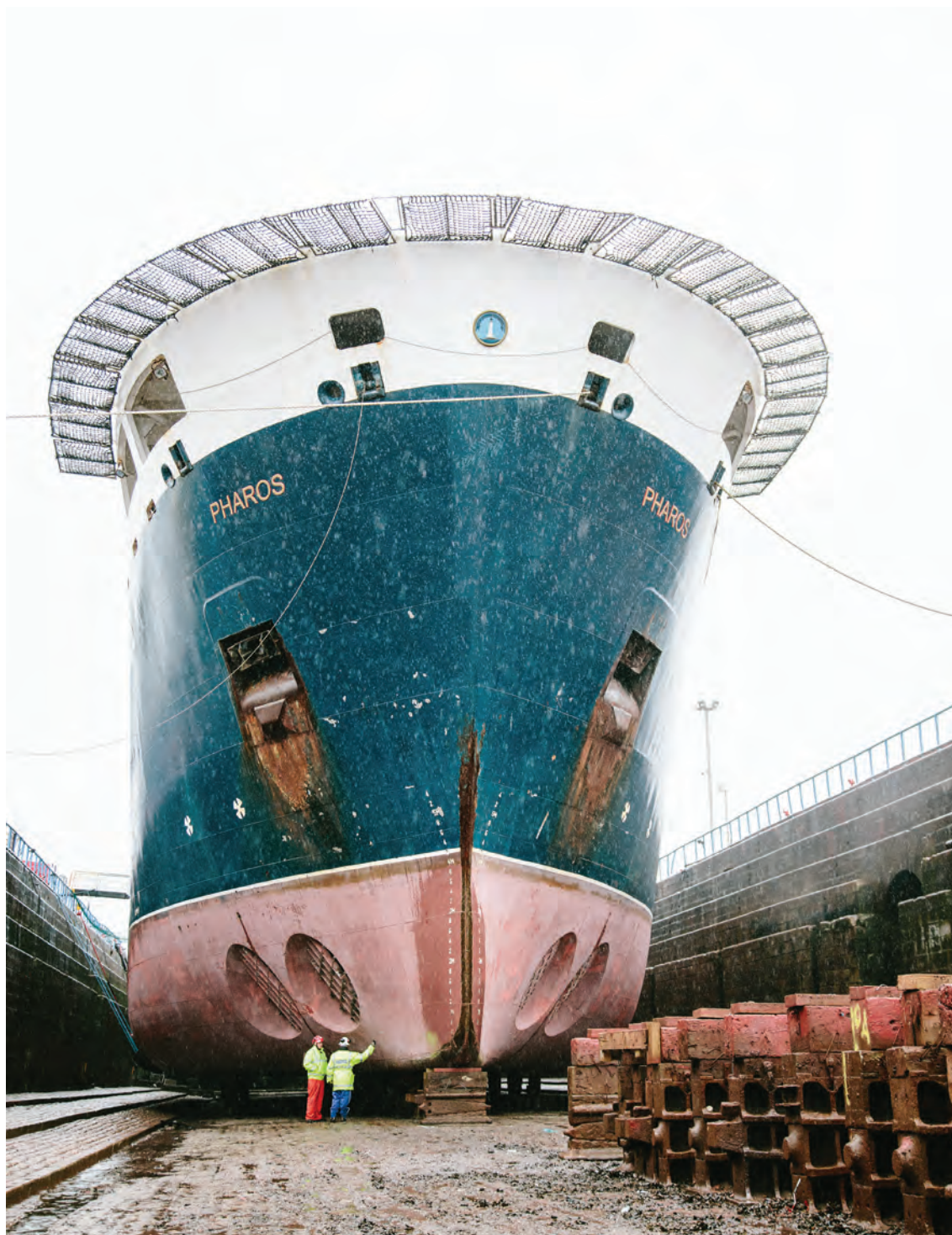
Transformation programmes

The MCA has shown that it has the appetite for, and has proven success at, achieving big transformation programmes including the following:

- As an integral part of the Agency, HM Coastguard has rightly earned a global reputation for excellence in maritime search and rescue co-ordination and coastal rescue. The Future Coastguard Programme, which completed on 31 December 2015, modernised the way in which civil maritime rescue co-ordination, vessel traffic monitoring and coastal search and rescue are delivered. It also exemplifies the use of volunteers through active management of 3,500 well trained and capable people in the Coastguard Rescue Service.
- The Search and Rescue Helicopters (SAR-H) Programme is also transforming the manner in which the UK meets its international rescue obligations within its land and maritime search area of responsibility. SAR-H has now been completely handed over by the military to HM Coastguard and is operated on our behalf by Bristow Helicopters Ltd.
- Coastguard operations are now centred on a national network with the state of the art National Maritime Operations Centre at Fareham at its heart. This has now been joined by the Air Rescue Co-ordination Centre which transferred from the MoD in 2016.
- The third and final leg of maritime modernisation is currently being conducted within the Survey and Inspection Transformation Programme which will lead to significant improvements in the manner in which the UK delivers its already world leading Flag State, Port State and wider maritime safety responsibilities.



Alongside vital supporting functions such as civil hydrography, navigation policy and selling the UK Flag, the transformation programmes are improving delivery, enhancing the safety of ships and citizens and delivering better value for money for the tax payer. None of this is delivered in isolation and extensive stakeholder engagement occurs with industry, international partners, bodies such as the RNLI and National Coastwatch Institution, and academia as well as across government.



The Maritime Growth Study

Such continuous improvement combined with modernisation of functions such as information technology will enable the MCA to deliver recommendations from the Maritime Growth Study that enable marine and maritime industry growth. We will work with organisations such as the Marine Management Organisation, to rationalise operations further and to strengthen the MCA's commercial approach and relationships with industry.

Improving safety culture

As well as the transformation programme, the MCA is working closely with the fishing industry to promote an improving safety culture, including the wearing of personal floatation devices by fishermen. Alongside partners in the National Water Safety Forum, social media and targeted campaigns are used to encourage the general public to keep themselves safe whenever they are in or near water. Rescue of recreational users absorbs 70% of the SAR capacity annually.



Providing value to the tax payer

All this needs to be accomplished in a way that provides good value to the taxpayer. The MCA has achieved savings of £39.5m since 2010 whilst taking on additional responsibilities. Overhead and administrative costs have been reduced whilst the Agency continues to re-invest in operational delivery.

Commercial customers receive a substantial service from the MCA, but fees must reflect the actual cost to the taxpayer for this service in order to maintain viability as a world-leading organisation.

The MCA provides a vital role in the successful continuance of UK maritime activity. It provides essential services to the public and to industry; fulfils statutory duties on behalf of the government; has shown itself ready for future challenges; has already modernised extensively to meet 21st Century expectations; provides excellent value for money and is ready to adapt to play an ever larger part in maritime growth, regulation and safety. The following annexes provide greater detail on specific aspects of the Agency.

Annexes

- A:** Coastguard modernisation
- B:** UK Search and Rescue Helicopters Programme
- C:** Survey and Inspection Transformation Programme
- D:** Additional functions of the MCA
- E:** Networks, Communications and IT
- F:** Meeting the challenges of MGS and the UKSR Advisory Panel

Annex A: Coastguard modernisation

The proud history of the Coastguard over the past two centuries has seen regular change and necessary modernisation to keep pace with changing demands, technologies and the nature of the UK economy.

By 2010 the technology that was cutting edge when it was introduced was becoming outdated. The perception amongst staff that pay had not kept pace with other emergency services had led to a prolonged period of industrial action short of strike. There was a real opportunity to redesign the HM Coastguard operating model to improve the service and make it much more efficient.



In November 2011 the government announced a modernised structure for HM Coastguard. This followed two rounds of UK wide public consultation over the previous 11 months. Delivery of the Future Coastguard Programme started in 2012 with completion at the end of 2015 followed by a period of consolidation of skills and expertise. The modernised coastguard structure operates as a single national network. At its heart is the National Maritime Operations Centre (NMOC) in Fareham with Coastguard Operations Centres (CGOCs) in Shetland, Aberdeen, Humber, Dover, Falmouth, Milford Haven, Holyhead, Belfast and Stornoway. In addition, London Coastguard looks after the River Thames. The Maritime Rescue Co-ordination Centres in Forth, Clyde, Yarmouth, Solent, Portland, Brixham, Liverpool, Swansea, and Thames have closed.

As a single networked organisation HM Coastguard deals with the inevitable seasonal and diurnal peaks and troughs of activity. Similarly, in the event of a major emergency, it is possible to rapidly direct a greater number of officers to the task to ensure a capable and appropriate UK co-ordination response wherever their geographical location. The NMOC provides strategic oversight of all UK Coastguard operations; it ensures that tasks are distributed within the networked system to best effect and that the overall network and maritime picture are monitored at all times to maintain situational awareness, balance of work and service delivery.

All regular coastguards working in the new centres, wherever they are located, use the same systems, have access to all the same data and are able to use all available aeriels and other links to communicate with those needing assistance anywhere in the UK. Every coastguard officer is also being trained in a wider skill set than previously. This includes the broadening of site specific expertise across the entire workforce as well as developing new competencies to address emerging missions such as Vessel Traffic Monitoring. Improvements to coastguard ICT are delivering multiple layers of resilience never previously available. The technical infrastructure underpinning the national network is building the most robust operational arrangements ever enjoyed by HM Coastguard.

Support to the volunteer Coastguard Rescue Service is being strengthened by an increase of 50% in the number of regular officers available for operational attendance, leadership and advice.

This allows much more flexibility in the management, support and training of our volunteers. It also gives a greater presence of coastguard officers in coastal communities and provides increased opportunity for interaction with other emergency services and coastal leisure and commercial bodies.

When fully implemented the project will deliver a modernised coastguard service that is nationally integrated, effectively commanded, resilient to the challenges of the coming decades and staffed by motivated, skilled professionals who will enjoy improved pay and career structures.

Annex B: UK Search and Rescue (SAR) Helicopters Programme

The UK's SAR helicopters have historically been provided by the Ministry of Defence (MOD) and the MCA, from eight and four bases respectively.



A contract was awarded to Bristow Helicopters Limited (BHL) in 2013 to replace the current mix of military and civilian arrangements to a fully civilianised service. This represents a £1.9bn investment in a vital frontline emergency service that rescues or assists around 2,000 people a year. BHL operates this new service on behalf of HM Coastguard with 22 brand new, state of the art, helicopters that can fly further and faster than the Sea Kings they will replace, reducing average response times across the UK by up to 20%.

The new aircraft will be a mix of Sikorsky S92s and AgustaWestland 189s that enjoy a generational improvement in sensors and avionics over the helicopters that they replace. The service will operate from ten bases, a reduction from the previous 12 (8 military and 4 Coastguard), but still improving overall average response times. Seven of the ten bases will have been purpose built for these new arrangements, with each new base representing a £7.1m investment for the local community.

Work has been conducted with both medical and aviation regulators to ensure that civilian crews can provide the same level of service as their military counterparts. Further, two thirds of the aircrew at each base will comprise former military SAR personnel that have secured employment with BHL, converted to the new aircraft types and gained civilian licences. This managed transition of personnel will safeguard the service while also transferring important skills and knowledge.

This contract also offers considerable financial savings. It was let following the cancellation of an MOD led Private Finance Initiative (PFI) in early 2011. The cost ceiling for the procurement that led to the award of a contract to BHL was set at £3.1bn. This figure was based on the cost of the PFI over an 8 to 10 year period. However, the contract was subsequently awarded for £1.9bn (inclusive of VAT). Whilst assuring the standard of service delivery, these savings arise from having fewer bases, a different aircraft fleet mix, use of civilian crews and lower financial risk in salary projections.

Operations under the new arrangements began successfully on 1 April 2015. Some delays have been experienced with the regulatory certification of the AW189, a brand new aircraft to the SAR role. Nevertheless, contingency arrangements are in place to ensure the continuity of service using a mix of proven S92 and AW139 SAR aircraft. With effect from 1st January 2016 all UK search and rescue is conducted by HM Coastguard.

Annex C: Survey and Inspection Transformation Programme

The Survey and Inspection Transformation Programme (SITP) builds on a previous review that assessed the work undertaken in this role, how and where this was carried out and what improvements might be made to improve efficiency and effectiveness. The SITP began in January 2015 and is looking at all aspects of the work carried out by the survey and inspection teams from development of policy through to front-line activity.



The SITP assesses what work MCA does under statutory requirement, such as that specified within the legislative framework from the UK, EU or IMO, or as a result of a recommendation made by, for example, the Marine Accident Investigation Branch, National Audit Office or Public Accounts Committee following an incident. It will then be determined what must be carried out by MCA and what can or should be delegated in the future. Where the survey shows that activities can be delegated, the necessary monitoring and management arrangements will be put in place. This will continue to provide all stakeholders with the confidence that vessels are safe and that they present minimal risk to the lives of those working on and around them as well as to UK and international coastal environments and habitats.

The SITP has investigated the underpinning infrastructure, systems and processes to ensure efficient operation and flexible and responsive customer support.

From this, the people needed to deliver the business will be determined and in particular:

- the level of expertise and experience required
- the numbers required
- when they must be available
- how quickly they must be able to deploy
- where they will be located
- how they will be managed and structured, and
- what reward package is needed to deliver a modern, capable workforce.

A training programme will be devised to ensure that we can develop the skills needed to support the business model and then ensure those skills are maintained.

The SITP delivered its business case in October 2015 detailing the changes needed to ensure that MCA continues to deliver the high levels of service and professionalism expected by both UK and international customers, as well as a timetable and costs for that delivery. Work continues to gain the necessary approval.

Annex D: Additional Functions of the MCA

Receiver of Wreck

The Receiver of Wreck carries out a variety of functions for and on behalf of the MCA, the Secretary of State and the Crown. These range from incident response to the salvaging of wreck, dealing with dangerous wrecks and the removal and disposal of stranded Royal Fish. Whilst these functions are rooted in history, they have been adapted to recognise and accommodate the modern maritime environment, from customer engagement to remote sensing technology.

The Receiver of Wreck's customer base is wide ranging and international for which the Receiver aims to provide a versatile service to meet the very different needs of our customers and to grow new areas of business whilst ensuring compliance with the law.

To deliver an efficient and cost-effective service, the Receiver has developed working relationships across government and internationally. The first ever successful prosecutions under Part IX of the Merchant Shipping Act 1995 were a result of this, pulling together different branches within the MCA plus those of the police and heritage organisations. The Receiver is building on these relationships and a 26% increase in droits (reports of wreck and salvage) received during 2014 demonstrates the value of this.

Counter pollution and salvage

The UK Exclusive Economic Zone (UK EEZ) encompasses a sea area of some 300,000 square kilometres with a complex offshore oil and gas industry and one of the busiest international shipping lanes in the world. Whilst oil pollution is a major source of environmental damage, vessels transporting other hazardous and noxious substances also present a pollution risk. The UK has obligations under the 1973 International Convention for the Prevention of Pollution from Ships (the MARPOL Convention) and the 1990 Oil Pollution Preparedness, Response and Co-operation (OPRC) International Convention. Detailed UK regulations stem from these to cover both shipping and the offshore oil and gas industry.

After saving human life, the MCA's key purpose is to protect human health, the marine and terrestrial environment and UK economic interests. Counter Pollution and Salvage Branch prevent, strongly support or deal with pollution from both ships and offshore installations as the 'National Competent Authority', delivering scientific and technical support and operational response to actual, or threats of, pollution in the UK EEZ as well as international assistance under a variety of regional agreements. The branch also considers and formulates policy in support of these response activities. In addition, it maintains and implements the UK's National Contingency Plan for Marine Pollution which covers marine pollution from oil or other hazardous and noxious substances. The plan explains the circumstances in which the agency will deploy national resources and sets out a framework for dealing with major pollution incidents that threaten UK interests.

Permanent Representative to IMO

The MCA provides the Permanent Representative to the International Maritime Organization (PRIMO) helping to deliver the UK contribution to producing standards that ensure the safety of seafarers and passengers and cleaner seas. The IMO also contributes to economic growth by promoting better regulation principles and reducing unnecessary administrative burdens on the shipping industry. The UK wishes to see efficient shipping that meets trading needs alongside high standards of safety and environmental protection that directly map with the core roles of the MCA. It also adds to the synergy of this effort that the UK continues to play an active role in a wide number of safety, security and environmental technical issues at IMO.

Navigation safety

Navigation Safety Branch (NSB) is responsible for leading the UK implementation, policy and standards for maritime navigation and radio communications in UK waters. Advances in global offshore development and technology in recent years, spurred on by UK marine spatial planning policy, have led to a hitherto unseen demand for safe, navigable sea-space within and around UK waters.

To mitigate this competition, NSB efforts have focused on:

- establishing the MCA as a statutory consultee for marine spatial planning – ensuring that navigational concerns are fully addressed
- augmenting the UK Civil Hydrography Programme to provide crucial reference marine mapping to support changing navigation patterns, and
- taking a lead role within government in supporting the emerging Maritime Autonomous System (MAS) sector as it matures to develop cost effective unmanned maritime solutions.

UK Civil Hydrography Programme (CHP)

Efficiencies under the CHP are delivered through focused, smarter working. Economies of scale are delivered through long-term five year contract arrangements, informed buying and tailored programme management plus through specifying state of the art survey technologies. In addition to this, extensive collaboration with other government departments to co-fund and adopt CHP standards, plus securing of multi-year EU grants, have enabled the MCA to augment the CHP's baseline budget by up to 20% per year.

To augment the CHP through 2011-2014, MCA secured an additional £2m to survey four key areas in UK waters under an EU INTERREG 4A grant. With seven partners from the UK and Ireland, MCA leads the INIS Hydro seabed mapping project to survey areas around Scotland and Northern Ireland.

In a bid to further maximise efficiencies under the CHP, MCA have developed in-house programme management software to cost and prioritise future survey effort. From a navigational safety perspective, this provides a robust and repeatable methodology to ensure that maximised risk mitigation is being secured for the mariner at best value for money to the tax payer. The MCA is currently preparing a third EU grant bid under the INTERREG 5 programme.

With up to €11m available and a match-funding requirement of just 15%, the MCA is working with 10 project partners to secure an award of around €5m for a 2016-20 work programme to further augment survey effort under the CHP.

Enforcement

The Enforcement Unit is a specialist investigation unit which acts in support of the aims of the MCA. It follows up on reported significant breaches of the safety and environmental aspects of merchant shipping legislation in order to determine what action is appropriate. A significant breach is defined as a contravention of legislation appertaining to ships, other watercraft or seafarers which has, or has the potential to cause, loss of life, serious injury, significant pollution or damage to property or the environment. The unit consists of five officers based in Southampton and Glasgow who are trained to carry out criminal investigations. The unit investigates approximately 120 cases per annum. On average 66% of investigations result in no further action by the unit. 22% result in action other than prosecution. 12% of investigations result in prosecution which are almost always successful.



Annex E: Networks, Communications and IT

The ICT area has achieved considerable success in both organisational and operational terms. Co-ordinated ICT enabled solutions and services deliver value for money and tangible benefits for our customers by allowing much better planning and prioritisation of funds and resources. Currently over 100 different work streams are being tracked and delivered utilising external expert partners overseen by in-house design and integration teams.

Examples of work include: information management analysis to design a new reporting solution as part of the corporate network replacement project to consolidate and manage data across the business. The GroupWise email service has also been replaced with Microsoft Exchange servers plus Outlook end user clients. This new email service will migrate to the Microsoft Office 365 cloud to reduce maintenance activities and increase business continuity. More widely Microsoft Office 365 cloud services will allow MCA wide collaborative document management, remote working, email, instant messaging and video chat and will be exploited to enable the transformation of business areas.

We have taken the opportunity to be more commercial in our approach to IT by breaking down old-style large contracts into much smaller, more flexible and logical packages in keeping with using the G-Cloud and the government ICT procurement strategy. We are also using this approach when it comes to the procurement of technical products for Shared Services.

In Cyber Security, a new security analysis network led to successful DfT security accreditation of the Blue Light network for which system patching and updating continues. A new corporate Security Incident Event Management (SIEM) service will be delivered this year and email scanning, monitoring and anti-spam services improved. The legacy GSi network has been decommissioned. Ceasing legacy support contracts and maintenance activities has achieved cost savings, and eliminated risks to business continuity and security.



A separated and secure Blue Light network is managed from the new National Maritime Operations Centre (NMOC) and supported by a new service contract with ANS Group. The new nationally networked coastguard function is co-ordinating rescues, running vessel traffic management arrangements and monitoring maritime activity around our coast. The new DS3000 communication system with local and geographic redundancy is available to all operators on the Blue Light network. All VHF marine band radio infrastructure together with paging repeater infrastructure has also been replaced and the new command and control system has been designed as a single UK national database.

It is configured for both high availability and redundancy, with cross-site synchronisation for business continuity purposes and disaster recovery. Each operator within the operational network can see all incidents, resources, messages and information required, have access to the latest version of SARIS (Search and Rescue Information System), and apply Digital Selective Calling to rationalise emergency calls. Telephony will migrate to VOIP in accordance with government policy. Further integration of the Channel Navigation Information System (CNIS) into the national Blue Light network will follow as will the Aeronautical Rescue Co-ordination Centre (ARCC) and MOD Mission Control Centre (MCC) functions when they transfer from the MOD to MCA in 2016.

Aging laptops and desktops have been replaced with modern equipment running Windows 8.1, hybrid touch screens and Office 2013. Network file servers have also been replaced and smart phones introduced accompanied by remote core internet connectivity and increased bandwidth, making remote worker laptop connections a simple and less onerous process. In addition, coastal operations team members are being issued with new Laptops, remote connectivity, printing, projection, radios and smart mobile phones.

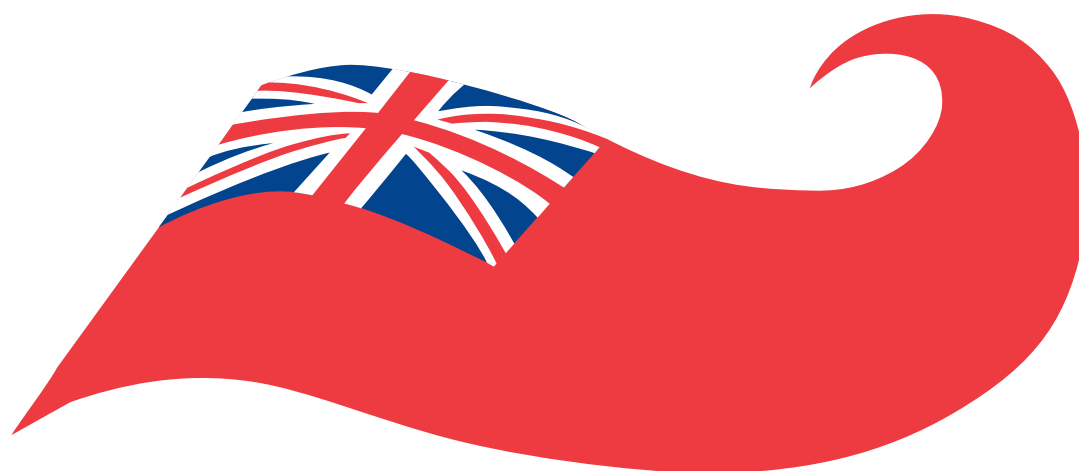
Annex F: Meeting the challenges of the Maritime Growth Study and UKSR Advisory Panel

A successful UK Flag provides a strong indicator of the strength and vibrancy of the UK maritime sector on the international stage and also contributes directly and indirectly to the economic vitality of the wider UK maritime sector which accounts for £9.9bn of GDP.

In November 2014, a 'Maritime Growth Study' (MGS) was launched by the Minister of State for Transport, Rt Hon John Hayes MP, with the aim of helping the British Maritime Industry continue to compete in a global market. A key element of the MGS was to look critically at the UK Ship Register (UKSR) to see what reforms are necessary to halt and reverse the declining trends in both the number of vessels and the tonnage registered on the UK Flag. The role of the UKSR, in flying the Flag and the MCA as the regulator of UK maritime activity are both integral to the success of any maritime growth strategy.

In September 2014 the MCA commissioned the 'UKSR Advisory Panel' - an independent group of industry representatives tasked with reviewing the current performance of the UKSR and considering the conditions which will enable the UK Ship Register to become more internationally competitive and to be the obvious first choice for owners and managers of high quality ships.

The panel dedicated time to review, discuss and analyse the current performance of the UK Ship Register, and consider the desired vision for the future, including the actions and principles needed to achieve and underpin this. The broad coverage of industry representatives enabled the MCA to exploit the knowledge and experience of the wide interests of the shipping industry, ensuring that a holistic view was taken into consideration when assessing current performance and determining the desired 'to-be' position for the UK Ship Register. Both industry and government agree that there is an opportunity to put the UK Ship Register on a more sustainable and profitable long term footing, generating wider economic benefits to the UK. The status quo model is not an option if we, as a strong maritime nation, wish to arrest the decline of tonnage registered to the UK Flag.



The UKSR Advisory Panel concluded their review in June 2015 with the submission of a formal report to the MCA which included a final set of recommendations of actions needed to improve the appeal of the UK Ship Register together with a proposed new vision and a set of guiding principles to arrest relative decline. This report was considered by MCA in terms of how changes can be made internally to make necessary and sustainable improvements to align the UKSR with the needs, requirements and expectations of our customers. The report was then submitted to DfT to form part of the evidence base for the wider MGS, (which was published on 7 September 2015) a key focus at London International Shipping Week.

The MCA are already taking action on a number of recommendations within both the MGS report and the UKSR Advisory Panel report. A new director of the UK Ship Register has been appointed. In addition, a non-executive Chair of the MCA Board with relevant industry experience will be appointed in 2016 to drive change and champion the UK's wider maritime offer. The requirement to examine the future shape and structure of the MCA also has high level attention and will be on the agenda for the newly established cross Government Ministerial Working Group.

The MCA are cognizant of the fact that there will be barriers ahead in implementing change, however the need for this change is imperative and the MCA is optimistic about the opportunities to create improvements and achieve growth. In the approach to doing this, the MCA appreciate and are supportive of the fact that a strong partnership between industry and government will deliver the best outcome for the UK Flag and the wider UK maritime economy.



Front cover helicopter image courtesy of the Royal Navy