DEFENCE COMMITTEE REPORT ON FUTURE MARITIME SURVEILLANCE: GOVERNMENT UPDATE

As part of its response\(^1\) to the House of Commons Defence Committee’s inquiry into ‘Future Maritime Surveillance’, the Government gave a commitment to provide updates on a number of issues. This included the work being done as part of the Air ISTAR\(^2\) Optimisation Study (AIOS), which is looking at Defence’s requirements and capabilities in air-based ISTAR to inform resource decisions ahead of and as part of the Strategic Defence and Security Review planned for 2015 (SDSR15). In subsequent correspondence\(^3\) the Ministry of Defence (MoD) also stated that it would provide further information on cross-Government work and the governance of maritime security issues. The information below has been collated by the MoD but, given the wide-ranging nature of the subject, the response represents views from across Government, including the Home Office, Foreign and Commonwealth Office, Department for Transport and other Government agencies. Given the Committee’s stated intent to maintain a close interest in this area and its desire for the Department to be more forthcoming, the update also includes information that the Committee has not specifically requested, but that the Government thinks is relevant. The Government welcomes the Committee’s work on this important subject and will remain engaged with the Committee as more work is done in advance of SDSR15.

Initial findings from the AIOS

The AIOS interim findings have highlighted operational and concurrency risks across the current and planned air ISTAR force mix; Wide-Area Maritime Surface and Sub-Surface Surveillance represents key subsets of the overall UK ISTAR capability under consideration. These risks have also been confirmed by recent Capability Audits conducted separately by Joint Forces Command (JFC) and the other Single Services. It should also be noted that, specific to maritime surveillance, while Allied support to Anti-
Submarine Warfare (ASW) operations has been made available when requested, it cannot be guaranteed for all UK operations.

A classified version of the AIOS initial findings will be provided. Notwithstanding, all options for delivering the range of desired Air ISTAR capabilities have been considered, including small, medium and large manned platforms, hybrid air vehicles, unmanned vehicles and space assets. Although subject to further work, the study has indicated that the introduction of a multirole platform, capable of undertaking several concurrent ISTAR roles (including maritime surveillance) could offer a long-term cost-effective method of mitigating some of the major capability risks. The study has also confirmed that there are various potential aircraft options, sometimes known as Multi-Mission Aircraft (MMA) that are either currently available or in concept, that may be capable of fulfilling some or all of this multi-mission role. The study has also indicated that while Maritime Surface Surveillance shortfalls could be partly mitigated by Unmanned Air Systems (UAS) in the short to medium timescale (now to 2025), unmanned ASW may be more challenging before 2035. However, in all cases, the MoD would need to consider fully pan-Defence Lines of Development integration and Air Worthiness Certification issues before committing to any prospective procurement. Moreover, affordability will be critical and therefore options include tolerating the capability gap, acquiring a lower cost interim solution, or a fully funded programme.

Therefore, there remain significant areas for further work, including the affordability and feasibility of a MMA that can cover all, or parts of, the air command and control, and air, maritime and ground surveillance roles. This analysis will form part of the next stage of AIOS, which will inform priorities, potential requirements and options for Defence to mitigate capability gaps and shortfalls, with a final output planned for April 2014. Throughout, affordability of the optimal mix of ISTAR platforms and the supporting information, intelligence processing and dissemination systems will be the key consideration.

Other work on the delivery of maritime surveillance capabilities

In addition, Navy Command is developing a Maritime UAS Strategy paper describing the requirement out to 2050. It will define decision points by character and time, to enable the procurement of increasingly complex and capable unmanned air vehicles, including lighter-than-air vehicles.

Recent activity to examine the use of unmanned systems for local Force Protection as opposed to Wide-Area Surveillance includes a successful trial of a Scan Eagle system from a Royal Fleet Auxiliary vessel in the English Channel in December 2012 as a concept demonstrator. Separately, in response to an urgent operational requirement, a decision has been taken to contract Boeing Defence UK to provide a number of Scan Eagle systems for local Force Protection and surface surveillance to ships in the Gulf, by January 2014. In addition, Air Command, as the lead service for the PJHQ-directed C4ISR Concept of Operations, is assessing the utility of Reaper in the Maritime Surface Surveillance role in the period 2015-18.

*Including Remotely-Piloted Aircraft Systems (RPAS).
*Training, Equipment, Personnel, Information, Doctrine and Concepts, Organisation, Infrastructure and Logistics
*Novel procurement mechanisms, including lease, could deliver new solutions against capability gaps, noting that this approach would still probably involve substantial capital costs and increased operating costs.
*Command, Control, Communications, Computers, Intelligence, Surveillance, Reconnaissance.
The MoD is also planning a research project to explore how a rotary wing UAS might be used to fill a range of maritime roles when operating from a frigate or destroyer-sized vessel. The military tasks that will be investigated are maritime surveillance, mine hunting and hydrographic data collection. This project will lead to a Rotary Wing Capability Concept Demonstration being conducted from an RN frigate in October 2014. In addition, the RN is working with UK industry to establish whether unmanned systems, operated in recent land campaigns, can provide maritime surveillance from ships. The possibility of operating unmanned systems from the Queen Elizabeth Class Aircraft Carrier is being considered as part of the wider RN Maritime UAS Strategy.

**Update on discussions with allies about maritime surveillance and the potential for collaborative projects**

There are Memoranda of Understanding that are intended to enhance cooperation on ‘Air and Maritime Surveillance’ with Norway and Denmark, but no guaranteed MPA sharing agreement is in place, and we are not participating in the NATO pooling and sharing initiative led by Germany. Although allied MPA support is not guaranteed, we continue to believe that allies would be willing to consider contributing MPA assets if a potential ASW operation or incident requiring Wide-Area Maritime Surveillance arose. However, it still remains possible that some UK operations, especially in the overseas territories, will require sovereign capability.

The UK is still participating in the NATO Smart Defence scoping initiative Project 2.37, which is considering the future NATO procurement of an MPA. The UK announced on 4 June 2013 that it intends to lead this scoping study, renamed to Long-Range Maritime ISR, thus expanding the proposed investigation scope to include multi-mission aircraft to align it further with the initial findings from the AIOS. This does not commit us to any future procurement strategy, but the potential benefits of a collaborative approach are worthy of more detailed consideration.

**MPA Seedcorn**

The MPA Seedcorn programme continues, with 32 RAF personnel currently on exchange overseas in Australia, Canada, New Zealand and the US.

This initiative was originally funded to Financial Year 19/20 to permit the rapid regeneration of a sovereign UK MPA capability by 2020. This required at least two rotations of personnel to support the evolution, the first of which is deployed. An Annual Budget Cycle 2013 (ABC13) measure has recently aligned the Seedcorn programme with the SDSR15 consideration of the future of the UK’s MPA capability. The Seedcorn initiative will be re-focused and absorbed into the subsequent project if the UK intends to regenerate an MPA capability, but it will stop in 2016 if SDSR15 maintains the current position. ABC13 activity confirmed that UK personnel can continue to be employed in maritime roles within allied nations, but that the Seedcorn initiative was unsustainable in its original form. Lessons identified thus far indicate that a Seedcorn-style initiative, that fills the gap from 2016 to entry into service of an MPA, could be highly effective, provided it is appropriately resourced and supported by our coalition allies. The four allied Seedcorn nations hold the deployed RAF personnel in particularly high regard. The programme has allowed the RAF to both retain the skills required to operate an MPA and to assist our allies with their own MPA capability development.

*Intelligence, Surveillance and Reconnaissance. MPA need to be able to conduct surface and sub-surface attacks, as well as ISR.*
CROWSNEST

CROWSNEST is the RN's organic helicopter-based air surveillance replacement for the Sea King Mark 7, which will go out of service in 2016. This capability has two main components: airborne early warning, (long-range radar air surveillance, specifically covering low-altitude air threats such as attack aircraft and sea-skimming missiles); and battlespace management, directing combat aircraft on to threats. It recently gained approval to enter the third element of its Assessment Phase with a planned ISD of 2020. In making the approval the Investment Approvals Committee recognised the capability gap that will be created when the current Sea King Mk7 based system (SKASaCS) leaves service in 2016, and directed that opportunities to accelerate the programme be investigated in order to mitigate the RN's organic air surveillance capability gap.9 This is currently being undertaken by Navy Command and DE&S. Until CROWSNEST enters service, a modest area of surveillance will be provided by other platforms and systems working together in a layered defence to support the UK Task Group but these other platforms will not be able to eliminate the RN's organic gap in airborne early warning capability, which justifies the need to consider whether we can accelerate the CROWSNEST project, as does the development of the Carrier Strike capability beyond IOC.

Cross-Government work on maritime security

Government Departments and Agencies continue to develop the Maritime Risk Assessment (MRA), commissioned by the Maritime Security Oversight Group (MSOG). On current plans, the MRA will be used to inform the development of a National Strategy for Maritime Security.

The sub-group considering the potential for a single air surveillance contract has, as previously reported to the Committee, undertaken scoping work to consider market intelligence, business requirements and technical specification. Further work has been taken forward as to how cross-government command and control, planning, tasking, prioritisation and data sharing could be organised through ‘Project May’. This was an exercise co-ordinated at the National Maritime Information Centre (NMIC) between 7 May and 7 June, involving representatives from the Border Force, Marine Management Organisation, SOCA, MoD (Royal Navy), Special Branch, and the Maritime and Coastguard Agency. The project created a planning process to produce coordinated guidance for UK offshore assets, taking into account Government maritime risks and asset constraints. The project is now considering lessons learnt and next steps, including the potential for command, control and co-ordination of UK offshore air and surface assets to be used more effectively for cross-Government purposes in the future.

A study is currently being undertaken by Dstl and RUSI on the future requirements for maritime enforcement, surveillance and interdiction capability which, following stakeholder consideration, should be completed later in the summer. The report will be of value to departments and agencies in providing a national perspective as they discuss policy and take decisions regarding maritime assets.

The review of the role and remit of the NMIC is continuing. We still propose no changes should be made to NMIC's role and remit in advance of the conclusion of this work.

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9 The RAF's E-3D can provide Wide-Area Air Surveillance when tasked.
Search and Rescue (SAR)

SAR provision to the Falkland Islands and Cyprus. The RAF will continue to provide the SAR Service in the Falkland Islands until the Sea King Mk3/3A goes out of service in the Falkland Islands on 31 March 2016. The SPMAP Project Team is developing options to provide the future SAR Service in the Falklands. SAR for the Sovereign Base Areas in Cyprus is currently provided by 84 Sqn, which is part of JFC and separate to the RAF SAR Force. The aircraft and engineering are provided through a contract with FB Heliservices, which comes to an end in 2017 (with 3 one-year extensions available). Work is underway to fully define the subsequent helicopter requirements and a competition will follow to let a new contract, if the requirement endures. One issue facing 84 Sqn in the future is the provision of SAR-experienced aircrew capable of supporting Cyprus-based fast jet and maritime operations, once the RAF SAR Force has disbanded in 2016. However, the majority of the Squadron’s current tasking is support to Cyprus Land Forces and the assumption is that there will be an enduring requirement to provide a unit to train military helicopter aircrew in the maritime, mountain and SAR regimes (the SAR Training Unit (SARTU) at RAF Valley currently provides specialist SAR training, with basic training provided by Operational Conversion Units).

UK SAR Service. On 26 March 2013, a written ministerial statement was placed announcing the award of a contract with Bristow Helicopters Limited to replace the helicopter SAR service currently provided by the Maritime and Coastguard Agency (MCA), RN and RAF. The UK SAR Service contract with DfT will cost £1.68bn and provide helicopter SAR from 10 bases, vice the current 12 (the current SAR units at Portland and RAF Boulmer will not be replaced). Military SAR units will hand over to the new service in a phased transition between April 2015 and the end of March 2016 (when the service provided by the RAF in the Falkland Islands will also cease); the MCA bases will follow between April 2016 and July 2017. In order to help reduce the risk in the transition of the current military SAR service, the RAF and RN SAR Forces are working closely with their respective manning agencies and with Bristow to manage the transition of aircrew wishing to leave for employment in the UK SAR Service. From a military perspective, the most significant issues affecting the continuity of SAR are aircrew availability, retention of engineering experience (provided through a contract with Agusta Westland), maintaining the aircraft until the Sea King’s out-of-service (OSD) date of 31 March 2016, and providing capable crews to the Falkland Islands’ SAR Flight until OSD.

THE RT HON ANDREW ROBATHAN MP