

desider

June 2012 Issue 49



MINISTRY OF DEFENCE

the magazine for defence equipment and support



Land Forces take the lead in DE&S industry show

Planning Round 12 – MOD balances the books [See inside](#)



F-35 full speed ahead



Carriers on the move



Nest of Vipers



Successor progress



First class delivery

We are on target to save the MOD around - - - - -



£1.9bn

- - - - - which is more than the anticipated £1.6bn of benefits during the 10-year lifetime of the DII programme

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FEATURES

18 DVD – the art of the possible

Defence Vehicle Dynamic 2012 is DE&S' key stakeholder event for the land community and an opportunity for the organisation to engage with industry to discuss technologies, current developments and to share aspirations and plans for the future

26 Sharing challenges and successes

Mastiff, Coyote, Husky, Jackal, Warthog and Wolfhound have all proved a success on operations and examples of each of the vehicles will be on show as DVD gets ready to show off the best equipment and technology in the land environment

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Chief of Defence Materiel Bernard Gray has told award winners at this year's Commendations event that they should be proud of what they have achieved as he congratulated them on their contribution to defence

40 In praise of the rotary world

Availability of support helicopters to the front line has made massive strides forward, thanks to the efforts of DE&S and industry colleagues, says Peter Luff, Minister for Defence Equipment, Support and Technology



cover image

Land equipment takes centre stage as DE&S holds its industry event at Millbrook this month. Pictured is a soldier from A Company, 1 Royal Anglian completing a final day of reception, staging, onward movement and integration in readiness for the move forward to the front line in Afghanistan.

Picture: Cpl Paul Robinson, RLC

JUNE 2012

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HMS Diamond has proved her fighting mettle by successfully testing her Sea Viper missiles system off the Outer Hebrides

Bernard Gray

Chief of Defence Materiel

‘The lengthy list of confirmed programmes is welcome news and gives us for the first time a firm foundation for our work’



THE Secretary of State’s announcement on 14th May that the MOD had brought the Defence Budget into balance was a defining moment for all of us in DE&S, because it puts us on a different and more challenging footing as we prepare for the future.

We in DE&S contributed significantly to the budget calculation representing the core equipment programme total contained in the Secretary of State’s announcement and we now have a major responsibility to deliver within that budget over the years to come.

That realism was also evidenced in the figures that DE&S supplied to assist the Government in making its decision to revert to the F-35B version of the Joint Strike Fighter for the *Queen Elizabeth* class aircraft carriers.

Those of you to whom I had the pleasure of speaking at a Town Hall session in Abbey Wood, after the Secretary of State had made his announcement, understand the considerable importance I attach to meeting the commitments we have made on cost control.

The Secretary of State’s announcement confirmed a total planned spend of £160 billion on defence equipment, support and data systems over the next 10 years. Within that total is £8 billion of uncommitted money and crucially a £4 billion contingency risk to deal with the unexpected. As we in DE&S are well aware, the unexpected does sometimes happen on equipment programmes. It is the first time to my knowledge the MOD has ever made such a provision, and it will help to ensure that we can deal with the kind of problems we may encounter along the way.

It’s also a great illustration of the type of change that Transforming Defence is all about, enabling us to plan with greater confidence to deliver the battle-winning Armed Forces that are at the heart of the new Defence Vision.

The lengthy list of confirmed programmes is welcome news and gives us for the first time a firm foundation for our work, as well as that of our partners in the defence industries, for the long-term.

Alongside these hugely important programme issues I was very pleased to lead the DE&S annual CDM Commendations Ceremony in London and hear about some of the extraordinary achievements and successes of DE&S teams, often in support of current operations and the delivery of Urgent Operational Requirements.

As I have said before, I always look forward to these ceremonies and the insight they give me into the professionalism of all of you in DE&S and the fantastic contribution you make to the defence of the UK. They make me, and I hope all of you, feel proud about your work and your many successes.

Finally, as I was pleased to explain to members of the House of Commons Defence Select Committee on 15th May, The Materiel Strategy continues to make progress on its analysis of the potential operating models and our work will be submitted to Ministers later this year. Alongside this activity, our studies are continuing on The Materiel Strategy Interim Structure and, as always, developments will be communicated to you as decisions are reached.

Budget bala



Scout included

THE MOD will have, for the first time, a core equipment programme that is fully funded and affordable.

That was the Planning Round 12 (PR12) message from Defence Secretary Philip Hammond as he announced that the department’s budget deficit had been wiped out for the first time in a generation.

Through a series of tough but necessary decisions combined with radical reforms of the MOD’s financial processes, the hole in the defence budget two years ago – estimated by some to be as great as £38 billion – has now been eliminated.

A fully costed programme provides the Armed Forces with the stability and assurance they need for the future. The MOD can now confidently invest in new equipment, knowing its delivery is guaranteed because the programme is accurately costed and affordable.

The core committed equipment programme amounts to just under £152

‘For the first time in decades, we have a credible, sustainable budget and we can confidently pledge to deliver to our Armed Forces almost £160 billion of equipment we know we can afford’
– Philip Hammond

anced as MOD unveils its programme



in £4.5 billion of new armoured fighting vehicles

billion over ten years, against a totalled planned spend of almost £160 billion. That £152 billion includes, for the first time, a centrally held contingency of more than £4 billion.

The programme also includes an extra £8 billion of funding over the next ten years which is unallocated. This means that the budget will have guaranteed headroom to respond to emerging equipment requirements.

Service chiefs have confirmed that this fully committed core equipment programme and the extra headroom will enable the MOD to deliver the capabilities required for Future Force 2020, as set out in the Strategic Defence and Security Review of 2010.

Mr Hammond said: "The Government is determined to get to grips with a legacy of poor project management, weak decision making and financial indiscipline within the MOD.

"We have made a symbolic break with the failed practices of the past and the vast black hole that blighted defence spending has gone.

"For the first time in decades, we have delivered a credible and sustainable budget and we can now confidently pledge to deliver to our Armed Forces almost £160 billion worth of equipment over the next decade that we know we can afford.

"This allows us to begin to put the uncertainty of the last few years behind us and build for the future on a solid foundation as we move forward with Defence Transformation."

His thoughts were echoed by Chief of the Defence Staff, General Sir David Richards. He said: "Taking tough decisions and dealing with unaffordable projects has given us clarity to plan.

"We are now on a firm foundation and building the Armed Forces of the future. We are now well-placed to adapt and respond to threats around the world and to deliver the capabilities

we need for the nation's defence.

"The Armed Forces Committee, which I chair, will prioritise future commitments and bring into service the equipment we are now getting."

Delivery of a number of DE&S

projects can now be guaranteed while a number of other projects will be brought into the core equipment programme.

Scrutiny and financial controls that have been put in place will allow the MOD to ensure projects deliver against time and cost. As they do so, the MOD will be able to release funds put in place to add uncommitted capabilities to the committed core equipment programme.

Reaching a balanced budget represents an important milestone in the transformation of defence which builds upon the recommendations of Lord Levene's review of the department.

Above: the Scout reconnaissance vehicle, second from right, along with the Recovery, Repair and Mobility Recce Support variants, while, below, a gearbox is installed into a prototype

❑ **Projects whose delivery can now be guaranteed and those which will be part of the core equipment programme: pages 6 and 7**

❑ **DE&S faces new disciplines: page 7**

❑ **CDM: page 8**



What PR12 means – guaranteed delivery for projects already underway

Maritime power



- BUILDING of the two *Queen Elizabeth* class aircraft carriers; the remainder of the Type 45 destroyers and the new Type 26 frigates; the Astute class and Successor nuclear submarines.



Helicopters



- 14 NEW Chinooks, life-extension of the Apache attack helicopter and upgrade to the RAF's Puma fleet, investment in new Wildcat helicopters, the Merlin upgrade programme and the assessment phase for Merlin marinisation



Air power and support



- INTRODUCTION into service of the Voyager air-to-air refueller and troop transporter, the A400M air transporter and the Air Seeker surveillance aircraft; the eighth C17 aircraft; continued investment in Typhoon and Joint Strike Fighter



Land vehicles



- A PROGRAMME of new armoured fighting vehicles worth around £4.5 billion over ten years, and a £1 billion upgrade of the Warrior Armoured Fighting Vehicle;

Complex weapons



- £7 BILLION invested in complex weapons – the smart missiles and torpedos that give the Navy, Army and RAF their fighting edge.

DE&S faces up to a world of new financial discipline

A NEW financial discipline is to be introduced to the equipment plan, the Defence Secretary has promised.

Philip Hammond told parliament on 14 May that the Armed Forces needed the confidence that, once a project is in the programme, it is real, funded and will be delivered so they can plan with certainty.

“There will be under-programming rather than over-programming, so that we can focus on value rather than on cash management,” he said.

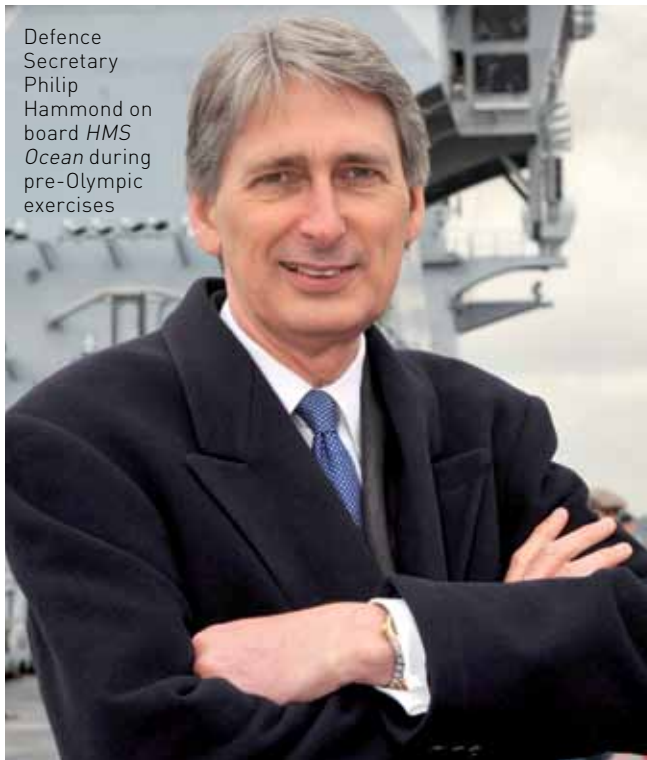
“The core committed equipment programme, which covers investment in new equipment and data systems and their support, amounts to just under £152 billion over 10 years, against a total planned spend of almost £160 billion. That £152 billion includes, for the first time ever, an effective centrally held contingency reserve determined by Bernard Gray of more than £4 billion to ensure the robustness of the plan.

“That programme represents the collective priorities of the Forces, set out by the Armed Forces Committee on which all the service chiefs sit. They confirm that the committed core equipment programme, together with the £8 billion of available unallocated headroom, will fund the capabilities that they require to deliver Future Force.

“That £8 billion will be allocated to projects not yet in the committed core programme only at the point when they need to be committed in order to be delivered on time, and only in accordance with the military assessment of priority at the time.

“No project will be allowed to be committed without a 10-year budget line to cover not only its procurement but its support costs. This is an innovation in defence procurement and individuals and contractors can expect to be held

Defence Secretary Philip Hammond on board HMS Ocean during pre-Olympic exercises



‘No project will be committed without a 10-year budget line to cover not only its procurement but its support costs. This is an innovation in defence procurement’

to account for the estimates on which decisions to commit to projects are based.”

Mr Hammond added: “The MOD is putting in place the behaviour-changing incentives and structures that will keep it in balance. It means that the politicians and civil servants in the MOD can look the Armed Forces in the eye, in the knowledge that we are delivering them the stable platform that they need to build Future Force 2020.

“We are delivering them a budget agreed across Government, across the department and by the service chiefs, and a firm baseline for the transformation

that is under way to Forces that may be smaller, but which will be adaptable, agile, equipped with the very best technology and supported by an MOD that is laser-focused on their needs.

“We are working alongside a defence industry that can invest with renewed confidence in an equipment plan that is actually deliverable.”

Mr Hammond added that professional skills in DE&S are crucial. “The new Chief of Defence Materiel is drawing up a strategy that will involve a radical change to the structure of DE&S. I hope to be able to make an announcement to the House on that matter before the summer recess,” he said.

He also added that further job losses were unlikely. “We have already announced the reductions in the size of the Forces and a reduction in the size of the MOD civilian service. As a result of what I have announced, there will be no additional reductions in head count. The downsizing that has already been announced is the limit of the downsizing that we need in order to deliver the programme.

“There are tens of thousands of jobs in the UK defence industries, and by introducing a sustainable equipment programme that will give industries the confidence to invest, we will protect those jobs and technologies and help those industries to build their export markets.”

What PR12 means – projects to become part of the core equipment programme



- A £4 billion-plus investment in intelligence, surveillance, communications and reconnaissance assets across the CIPHER Solomon, Crowsnest, DCNS, and Falcon projects;
- THE outright purchase of three offshore patrol vessels which are currently leased;
- CAPABILITY enhancements to the Typhoon;
- A RANGE of simulators, basing, and support equipment for the new helicopters and aircraft being introduced.

NEWSREEL

Kineton is honoured

PERSONNEL from Kineton, the largest munitions depot in Europe, have marched through nearby Warwick to celebrate being granted Freedom of the Town. Station Commander, Lieutenant Colonel Simon Hirst, said: "It is a tremendous honour for the base and we greatly appreciate the support we receive from our local community. It is a reflection of the high regard in which we are held by Warwick. A lot of work went into the event and the crowds enjoyed coming out to see us as much as we enjoyed our seeing them." Kineton specialises in training bomb-disposal personnel.

Centre opens its doors

CHAVASSE VC House in Colchester, a new, purpose built recovery centre, funded by Help for Heroes and the Royal British Legion, has been opened by Help for Heroes and the MOD. It will provide first class facilities for wounded, injured and sick service personnel. It will include accommodation, social areas, family rooms and a state of the art fitness centre.

Afghan costs

LATEST MOD estimates of the cost of military operations in Afghanistan since 2001-02 is around £17 billion, according to Parliamentary figures.

Stakes have gone up, the game has changed – CDM

THE Secretary of State's announcement that the MOD has balanced the books on the equipment programme for the first time in a generation means that DE&S has started on a new journey, Chief of Defence Materiel (CDM) Bernard Gray told hundreds of staff at a packed Town Hall session.

Mr Gray, speaking on the afternoon of the Secretary of State's announcement, told staff at DE&S headquarters at Abbey Wood: "We're starting on a journey today. The department has taken some difficult decisions in balancing the programme overall. That is a clear signal of how they want to turn this organisation around."

The Strategic Defence and Security Review had eliminated roughly two-thirds of the black hole in the defence budget and last year's Three Month Exercise had closed most of the remaining gap.

The Secretary of State's announcement set out what steps had been taken to achieve the final closing of the gap. This had enabled the Secretary of State to confirm that the MOD had now established an affordable and fully funded core equipment plan, with a contingency. As part of this work, DE&S had produced realistic figures for programme costs over the next decade.

"I was determined, through a number of exercises over the course of the last year, to try to get to the bottom of what we really think each of our individual large programmes are going to cost over the next decade," Mr Gray said.

"The numbers we have now



Point made: Mr Gray at his Abbey Wood session

are numbers that we are going to live with. We are under a significant obligation to deliver on those numbers – the stakes have gone up and the game has changed for us."

He explained that the process adopted to bring the programme back into line with the budget was based on the premise that programmes on contract would go ahead. Those not yet on contract would be re-evaluated in order to reach decisions on what was a priority and could be afforded.

Mr Gray told the meeting that these changes related to The Materiel Strategy in three ways. The first was the need for an appropriately robust interface between DE&S and the wider MOD, ensuring the military customer benefited from realistic advice on the costs of programme adjustments.

The second part is more significant management freedoms to run the organisation

in a way that suits the organisation.

The third component is an injection of skills from outside.

The new organisation would allow management freedoms to run the organisation in a way that suits the specific business of DE&S.

These include the ability to recruit, reward and train our staff in line with DE&S needs. Managers would have the freedoms they need to apply resources to projects, but would also be accountable for delivery.

"Ministers are clear that we need to be able to do our job well and that the MOD needs to hold its ground with the supplier base," said Mr Gray

CDM concluded by taking questions from staff about the up-skilling of DE&S staff, the declining size of the workforce, how the programme will be kept on track, on the Interim Structure and The Materiel Strategy options under study.

Advanced Hawks set to boost Saudi air force training

THE UK is to support the Royal Saudi Arabian Air Force (RSAF) officer and aircrew training for its growing fleet of Typhoon aircraft.

Under an agreement, the RSAF will receive 22 BAE Systems Hawk Advanced Jet Trainers (AJT), 55 Pilatus PC-21 advanced turboprop trainers, 25 primary training aircraft, and a variety of advanced aircrew training devices, upgraded training facilities and initial spares support.

Hawk AJT will eventually replace the RSAF's fleet of Hawk Mark 65/65a trainers, reflecting the Saudi Arabians' confidence in the capabilities of the Hawk family of advanced jet trainers and the UK's ability to

continue to meet Saudi Arabia's legitimate defence requirements.

Guy Griffiths, BAES Group Managing Director International, said: "We are honoured that BAE Systems has been awarded this contract. Through the Hawk AJT, the trainee fast jet pilots will have access to the latest in advanced simulation for radar, weapons and defensive aids training to enable a smooth transition to front line aircraft, including Typhoon."

Deliveries of the Pilatus PC-21, manufactured in Switzerland, will begin in 2014. The UK-built Hawk aircraft will be delivered from 2016.

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Numbers are set to reduce

THE majority of the 500 reduction in UK personnel numbers in Afghanistan by the end of the year will be made up of combat troops reflecting the pace of transition of this role to Afghan forces, Defence Secretary Philip Hammond has announced. UK headquarters in Nahr-e Saraj North and Nahr-e Saraj South will be merged to better align with Afghan administrative boundaries. Thirty-six of Task Force Helmand's checkpoints, patrol bases and military positions have been handed over to the Afghan Forces in the last six months, while 16 new posts have been occupied by Afghan Forces.

T26 plans

CURRENT planning assumptions will see 13 Type 26 Global Combat Ships (GCS) built, Minister for Defence Equipment, Support and Technology Peter Luff has confirmed. The programme is in its Assessment Phase, with the results expected by the middle of the decade. "As usual with equipment projects, the in-service date will not be set until the Main Gate investment decision has been taken," he said in a Parliamentary reply. "No decision has been made on the base porting of the Type 26 GCS."

Brize lodgers

OUR April story on the FAST cabin talked of the Joint Air Delivery Test and Evaluation Unit at RAF Brize Norton. The unit is a lodger unit at Brize but belongs to the Air Warfare Centre at RAF Waddington. We are happy to clarify.

Cutting consumption on the front line

Reducing the need for power: Cyprus hosted last year's PowerFOB event



A SUCCESSFUL demonstration of revolutionary power-saving technology has seen DE&S award a £1 million contract to BAE Systems.

The Power Operational Concept Demonstration contract from the Programmes and Technology Group tasks the company with delivering the first stage of a fuel reduction demonstration and includes completion of design, system procurement, UK integration and overall planning.

The trial follows work undertaken by DE&S, BAE Systems and others last year – the PowerFOB demonstration in Cyprus – which showed fuel consumption of Forces in the field could be cut by up to 40 per cent.

DE&S wants to reduce fuel consumption in deployed operations such as Camp Bastion, Afghanistan by 50 per cent. Fuel

required by forward bases needs to be delivered by protected convoys, themselves exposed to many risks – IEDs, insurgent attacks, poor roads and the weather.

Rob Eason, Head of Technology Delivery in the Programmes and Technology Group, said: "This is a key step in delivering a cost-effective operational base capability. Integration with the in-service equipment is fundamental to delivering immediate efficiencies to the front line.

"Equally important is the 'plug and play' approach that has been applied as it allows the use of renewables such as wind, solar and hydro, dependent upon the mission requirements and location of the operating base. This will ultimately reduce the burden on the supply chain and increase the availability of power to the end user."

The RAF's latest C-17, no ZZ178, makes a spectacular sight over Long Beach, USA

**Arrival of C-17 No 8**

THE RAF'S eighth £200 million C-17 transport aircraft has arrived at Brize Norton after its handover from Boeing in Long Beach.

Welcoming the arrival on 24th May, Defence Secretary Philip Hammond said: "We are proceeding with major equipment programmes with renewed confidence now that the MOD's core equipment programme is fully funded and affordable."

The commanding officer of 99 Squadron has welcomed the increase in capacity of his fleet, which has already passed 74,000 flight hours since the first entered service in 2001, a rate 15 per cent above projection.

"I'm honoured and delighted to deliver the RAF's newest C-17 to join the fleet where our seven

Latest aircraft delivered less than three months from order

C-17s are in constant demand flying missions in support of defence and other Government agencies' requirements," said Wg Cdr David Manning.

"It's a great feeling to know that we have the capability to deliver crucial supplies to front lines with little notice or to transport injured troops home with a better chance of survival because of the capability and flexibility of the C-17."

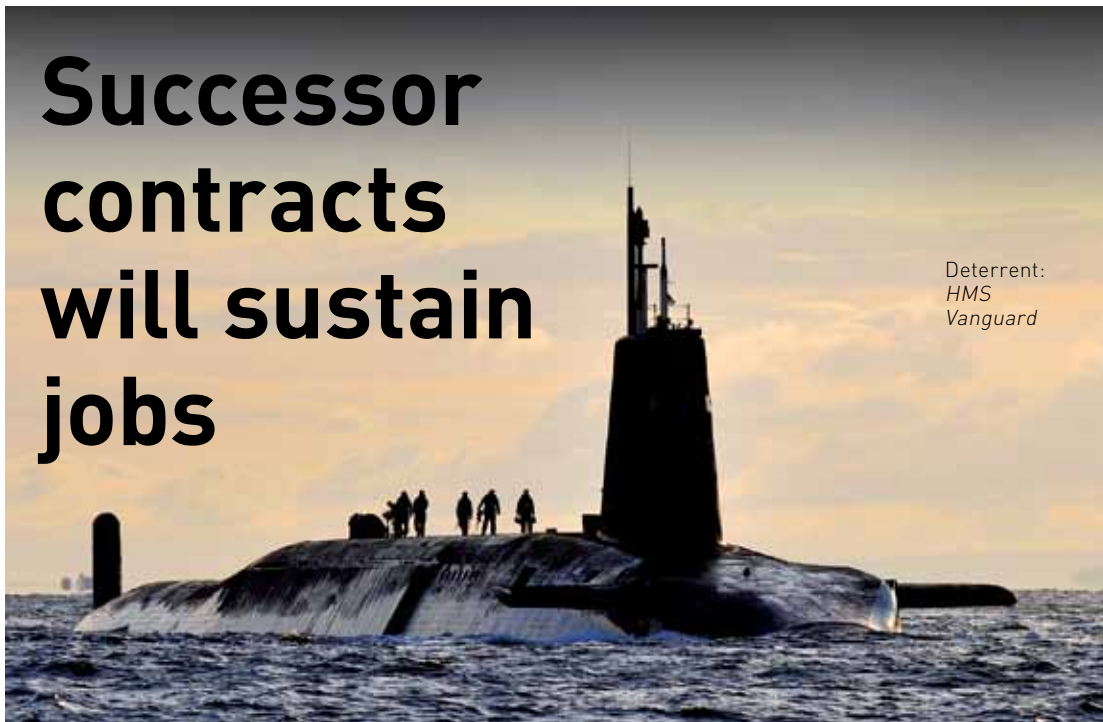
The order for the eighth

aircraft was placed by DE&S in February.

Bob Ciesla, Boeing Airlift vice president and C-17 programme manager said: "We're proud to support the Royal Air Force in their mission and we are grateful for the partnership with the UK Ministry of Defence and US Air Force that made this delivery possible, less than three months from the date of the order."

Boeing has delivered 243 C-17s worldwide, including 216 to the US Air Force active duty, Guard and Reserve units. A total of 27 C-17s have been delivered to Australia, Canada, Qatar, the United Arab Emirates, the UK, and the 12-member Strategic Airlift Capability initiative of Nato and Partnership for Peace nations. India has 10 C-17s on order.

Successor contracts will sustain jobs



Deterrent:
HMS
Vanguard

CONTRACTS WORTH £350 million have been awarded to UK companies to design the next generation of nuclear deterrent submarines, sustaining hundreds of British jobs.

The first Successor submarine is due to be delivered in 2028, replacing the *Vanguard* class submarines which carry the UK's nuclear deterrent, Trident.

Although a decision on the final design and build will not be made until 2016, detailed work has to take place now to ensure that the Successor submarines will be the most technologically advanced to protect UK national security.

Contracts have been awarded to BAE Systems, Babcock and Rolls-Royce, sustaining or creating 1,900 jobs at sites across the UK. Engineers at the companies will work with the

MOD on the design of the new submarines which will use a new nuclear propulsion system.

Defence Secretary Philip Hammond said: "We have a world-class submarine-building industry in this country and this programme will help to sustain or create jobs across the UK.

"By making the core equipment programme fully funded and affordable, we are able to confirm additional equipment projects which help safeguard our national security."

The largest contract, worth £328 million, has been awarded to BAE Systems Maritime – Submarines, which will work on the overall submarine design.

Babcock has been awarded £15 million and will focus on designing parts of the in-service support. More than £4 million has been paid to Rolls-Royce which will be responsible for the

integration of the reactor design.

Mike Owen, Future Submarines leader at DE&S, said: "We are delighted with the progress we have made so far during the design phase.

"The whole Successor team, which includes Future Submarines, Nuclear Propulsion and Combat Systems project teams, has worked extremely hard to achieve this milestone. It is only through their professional skills, dedication, and abilities that we have got so far.

"The well deserved award of a Chief of Defence Materiel commendation to the Commercial team is I believe but one of many to come to the whole Successor team."

In May last year the MOD approved the design phase, costing £3 billion. The latest contracts are part of that investment.

MOD sustains commitment to the nuclear deterrent

THE MOD is to sustain its commitment to the nuclear deterrent by continuing to invest £1 billion a year on facilities at the Atomic Weapons Establishment (AWE).

The AWE is central to the development and maintenance of the UK's nuclear capability, Trident. Scientists at the Berkshire site are involved from the initial concept and design of the warheads, through manufacture and support to their decommissioning and disposal.

Agreement has now been reached with AWE Management Limited (AWEML) – the joint venture contracted to manage and operate the site in 2000 – for a further priced period of work under its existing 25-year contract.

This agreement, which will see the MOD invest £1 billion a year over the next five years, provides important further investment in skills and facilities at the company's site in Aldermaston and Burghfield, Berkshire, where more than 4,500 staff are based.

Around 40 per cent of this money will be invested in essential capital projects, including production and research facilities. The remainder will be spent on operating and maintaining the AWE.

Defence Equipment, Support and Technology Minister Peter Luff said: "The Atomic Weapons Establishment is a centre of scientific and technological excellence, with some of the most advanced research, design and production facilities in the world. This investment will help maintain 4,500 jobs and a key capability, which is essential for our national security."

The investment will enable AWE to perform its vital work in support of the UK's nuclear deterrent until March 2018, when another priced period of work will be agreed.

Formed in 1998, AWEML is a joint venture between Jacobs Engineering Group, Lockheed Martin and Serco to manage AWE plc on behalf of the MOD. The current agreement came into effect in 2000.

NEWSREEL

Caroline faces bright future

THE MOD has agreed in principle to gift *HMS Caroline* to the National Museum of the Royal Navy, subject to a business plan for the ship and parliamentary approval. The World War One light cruiser has been a training ship based in Belfast and, until decommissioning last year, was the second oldest ship in the Royal Navy after *HMS Victory*. A decision on her future is expected soon.

Staff figures

ON 1 March 2012, there were 18,920 staff in DE&S, of which 7,930 service personnel and civilian staff were employed at Abbey Wood, according to the latest figures. The estimated annual gross pay cost is approximately £400 million.

Back in the air

NON-operational routine flying of the RAF's E-3D Sentry airborne early warning aircraft fleet resumed at the end of April following faults discovered in radome supports of two of the aircraft. Evidence relating to the aircraft shows no remaining safety concerns.

Aircraft costs

TOTAL expenditure on the Joint Strike Fighter is £1,825 million so far, according to the latest Parliamentary figures. That is made up of £1,495 million up to and including the development phase with a further £330 million on the production phase.

NEWSREEL

Approaching perfection

DESIGN of the approach channel to allow the Royal Navy's next aircraft carriers safe entry to and exit from their home port of Portsmouth has been validated. BMT Isis, a subsidiary of BMT, completed the work with final validation achieved using a full-mission simulator working in real time with Navy navigators in a realistic bridge environment. On completion, Navy personnel were happy with the proposed channel design and satisfied it would allow safe arrival and departure of the carriers.

DE&S learning road show

LT Gen Gary Coward, DE&S' Chief of Materiel (Land), will launch the Learning from Experience (LFE) Road Show in Neighbourhood Two atrium at Abbey Wood at noon on 20th June. Attendees will gain hands-on usage of LFE tools and be briefed on the recently published LFE Personalisation Model and shown a new look LFE Portal. All are welcome to attend.

Raytheon deal

RAYTHEON UK has received further orders under its contract with Northrop Grumman Italia (NGI) for its jam-resistant Global Positioning System antenna technology for Eurofighter. This latest order is for Eurofighter Tranche 3, valued at more than £2.8 million. It provides an additional 88 systems for the four nations of the Eurofighter consortium.

□ BK-1, the UK's first Lockheed Martin F-35 Lightning II STOVL production aircraft, has made its inaugural flight, a 45-minute sortie. DE&S will use the fighter for training and operational tests at Eglin Air Force Base in the US this year.

"This is a watershed moment for the Joint Strike Fighter programme, since BK-1 is the first international F-35 to fly. It also brings us one step closer to delivery of this essential capability for the UK," said Group Captain Harv Smyth, the Joint Strike Fighter UK National Deputy.

Picture: Tom Harvey



Government reverts to STOVL carrier aircraft

THE GOVERNMENT has decided to operate the short take-off and vertical landing variant of the Joint Strike Fighter from the new aircraft carriers in the next decade.

The decision moves the UK away from the Carrier Variant (CV) aircraft.

Defence Secretary Philip Hammond said the decision was being made because:

- Sticking with the Carrier Variant would delay Carrier Strike by at least three years to 2023 at the earliest;

- The cost of fitting catapults and arrestor gear ('cats and traps') to the *Queen Elizabeth* carriers to operate CV aircraft has doubled to £2 billion; and

- The STOVL aircraft offers the UK the ability to have an aircraft carrier available

continuously. Although no decision on budgeting for crew and support costs will be taken until the next Strategic Defence and Security Review in 2015, the second carrier would be able to provide capability while the first vessel is in maintenance.

The STOVL aircraft has made significant progress over the last 18 months. The UK will receive its first STOVL aircraft this summer with *Queen Elizabeth* due for sea trials in early 2017 and STOVL flight trials off the carrier from 2018.

The UK will also benefit from full interoperability with the US Marine Corps and the Italian Navy – both of which operate the STOVL aircraft.

Mr Hammond said: "The 2010 SDSR decision on carriers was right at the time, but the facts have changed and therefore

so too must our approach.

"This Government will not blindly pursue projects and ignore cost growth and delays. Carrier Strike with 'cats and traps' using the Carrier Variant jet no longer represents the best way of delivering carrier strike and I am not prepared to tolerate a three-year further delay to reintroducing our Carrier Strike capability.

"This announcement means we remain on course to deliver Carrier Strike in 2020 as a key part of our Future Force 2020."

Chief of the Defence Staff, General Sir David Richards, said: "Our Armed Forces have a successful history of operating short take-off and vertical landing aircraft and our pilots are already flying trials in this variant of the Joint Strike Fighter alongside our US allies."



Graham steps up into his new agency role

GRAHAM ELLIS, left, who has worked as a non-executive Main Board director at DE&S, is the new chairman of the Oil and Pipelines Agency.

The Agency operates the Government Pipeline and Storage System (GPSS) on behalf of the MOD. This comprises 2,500 kms of pipelines and 40 storage sites and supplies fuel to military airbases. The system also

supplies some civilian airports – its total throughput accounts for 40 per cent of aviation fuel use in the UK.

Peter Luff, Minister for Defence Equipment, Support and Technology, has announced that the GPSS does not need to be owned by the MOD and could benefit from private investment. Final decisions on sale will be subject to market conditions at the time.

Lancaster makes sleeker, faster return

A SLEEKER, faster *HMS Lancaster* is back in the Fleet following a year of extensive upkeep at Portsmouth.

The refit, part of a £17.9 million contract with BAE Systems, has significantly upgraded the war fighting capability of the 20-year old Type 23 Frigate, ensuring she is ready to fulfil future operational commitments.

Captain Andy Glennie, Superintendent Fleet Maintenance at Portsmouth naval base, said: "This has been one of the most difficult Type 23 refits in recent years and everyone can be really proud of the part they played in delivering Lancaster back to the Fleet, on time and with significantly more capability than when she left it 18 months ago.

"But that's not the end of the story as the newly-established Class Output Management (COM) will provide constant oversight of the ship and ensure she receives continuous engineering support in the years to come."

Having successfully returned *Lancaster* to the fleet, the naval base team is now focused on the next project, *HMS Iron Duke*, which will undergo a similar package of work during the course of this year.

With the establishment of the COM team lessons from the work on *Lancaster* have been carried forward and are already embedded in the specification for *HMS Iron Duke*.



Return:
HMS Lancaster

Contract continues Sentry support

IT COMPANY Mass has been awarded a five-year extension to its managed service contract for the Sentry Whole Life Support Programme (WLSP) at RAF Waddington. The scope of the support contract has also been extended to cover the Sentry Software Team.

WLSP is a partnership between the MOD and industry forming the Joint Sentry Support Team (JSST). The team is led by Northrop Grumman with MASS, AAR, BAE Systems and Cobham Aviation Services maintaining availability of the UK's fleet of Airborne Warning and Control System aircraft.

Mass provides and manages all aspects of the IT systems and secure shared data environment, and is responsible for ensuring that Northrop Grumman and its JSST partners can each work within their own corporate guidelines, while still being able to share classified information.

Ashley Lane, Managing Director of Mass, said: "We are delighted to have been selected by Northrop Grumman as their long term IT partner, and this extension is a significant vote of confidence in our capabilities and service provision as an interdependent partner."

LTPA

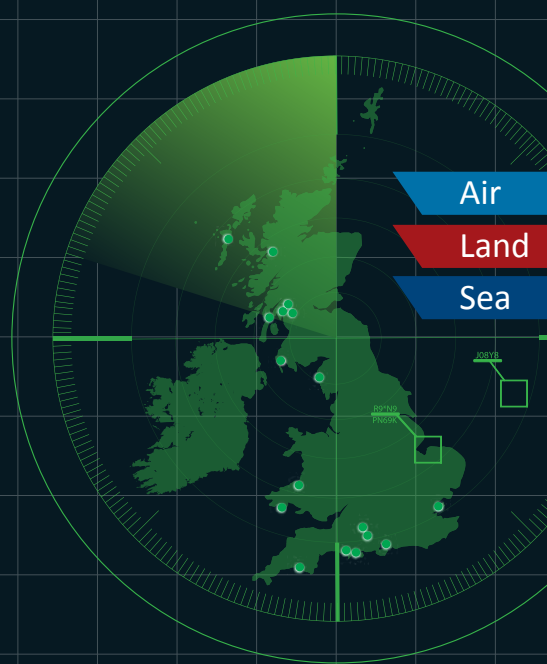
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Devonport leads way on recycling

DEVONPORT is continuing to lead the way on disposal of redundant submarine equipment.

Tonnes of ferrous and non-ferrous equipment suitable for recycling have been taken to contractor Metal and Waste Recycling at Hitchin.

Transportation was arranged by Defence Support Chain Operations and Movements (DSCOM) with planning by Devonport, Abbey Wood and Bicester.

The result has been a financial saving for the MOD and financial return for DE&S.

Devonport Disposal Recycling of Redundant Equipment Project (DRRE) staff also completed size reduction of a fifth Reactor Pressure Vessel Head which has been packaged in reusable transport containers.

Again DSCOM arranged transport to Babcock Marine's subcontractor in Workington for processing before disposal.

DRRE spokesman Peter Stacey said: "Recycling has involved co-ordination and co-operation of the local team and departments in Abbey Wood and Bicester and their respective contractors which has resulted in environmental and financial gains."

Refit heralds new way of supporting surface ships

NEW ARRANGEMENTS for surface ship refits come into play with the nine-month docking period of *HMS Somerset* at Devonport.

The Type 23 frigate's refit by Babcock is the first to be undertaken by the Surface Ship Support Alliance's Class Output Management (COM) Phase 2 arrangements which came into effect in April.

Phase 2 sees full implementation of COM across all existing ships, with greater delegation to industry on a performance-based 'contracting for availability' basis.

The COM approach by the Alliance (DE&S, Babcock and BAE Systems) is revolutionising the way warships are supported through life. Phase 2 emphasises building reliable knowledge of the material state of vessels before upkeep work and empowering industry to plan in accordance with this knowledge.

The docking period will see *HMS Somerset* receive a number of upgrades and improvements that will increase sustainability

□ The docking period for *HMS Somerset* will be a challenge for staff working to the new arrangements.

DE&S' Superintendent Fleet Maintainance at Devonport Capt Chris Saxby said: "*HMS Somerset's* docking period marks an important step forward in the MOD's relationship with our maritime industry partners as it transfers much of the responsibility for the delivery of output to industry.

"This change has been long awaited and carefully planned for and the potential for improvement in capability and cost reduction for the Royal Navy is significant. We wish all on this project at Babcock and beyond a 'fair wind'."

Babcock's Warship Support Head of Operations, Devonport, Mike Weeks, added: "The refit will be challenging and we will be managing a very complex integrated schedule containing all Babcock, ship's staff and MOD contractor activities."



Under cover:
HMS Somerset is docked at Devonport

and fighting capability. These include the new DNA(2) Command System integrating all existing weapons, sonar and radar systems to be carried out during the commissioning phase of this upgrade.

Other upgrades include the Seawolf missile system

mid-life upgrade comprising tracking, guidance and weapon management to counter evolving anti-ship missile threats; installation of the Defence Information Infrastructure (Future) enabling information sharing and collaborative working across the Armed Forces and MOD; and Nato Radial Filters to protect fresh air supplies from contamination in the event of an incident.

As Phase 2 comes into play, the improving knowledge of material state being built up by the Type 23 COM team will enable future refits to be increasingly well informed to achieve further efficiencies.

HMS Somerset will leave Devonport at the end of the year for sea trials.



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Panama - a real Forces lifesaver

Award-winning project sees Land Rovers used in the fight against the roadside bomb



On the hunt: the remotely-controlled vehicle, far right, searches out the IEDs, followed closely behind by the crew in the Talisman Buffalo. Below: the Panama team

A LIFE-SAVING capability to counter the threat of roadside bombs in Afghanistan has won two top awards.

The combined programme between DE&S' Manoeuvre Support Team (MST) and PA Consulting to deliver a key Counter-Improvised Explosive Device (IED) capability – in this case using remotely-controlled Snatch Land Rovers – for use on operations in Afghanistan triumphed at the Times 2012 Management Consultancies Association annual awards.

Project Panama was awarded The Times-sponsored MCA's top platinum award for the best overall project for the year. The award was based on a submission in the innovation category, where it also won gold in its class. The awards recognised the groundbreaking work by Manoeuvre Support and PA Consulting in developing and delivering Panama within urgent timescales while saving £17 million by using innovative procurement techniques.

Project Panama resulted from an Urgent Operational Requirement to provide a mounted IED detect capability and was delivered to Afghanistan within a year.

"While there were off-the-shelf solutions available they were manned and I was keen to reduce the threat to our soldiers by putting the maximum degree of separation between the detector and the operator", said Lt Col Adrian Parker, the MST's Requirements Manager.

Panama met the urgent timescales without compromising on performance, through innovation in both solution and procurement. As well as applying accelerated procurement methods developed from the earlier Talisman

project, MST, supported by PA, took overall responsibility for design decisions, without the usual prime contract arrangements but with close collaboration among empowered and incentivised suppliers. This meant the MOD could better align accountability and responsibility, evolve the specification, making trade-offs between performance, cost and time while retaining funds that would normally go to the contractor to cover delivery risk.

In the absence of a prime contractor, risk was borne by the MOD. PA helped manage this risk through targeted technical studies, detailed programme modelling and early engagement with suppliers. To ensure progress was controlled and auditable, the team employed a formal 'risk gate' approach, which would not allow progress towards an investment decision until appropriate risks had been addressed. "Appointing a prime contractor was the traditional way of doing business," said Mr Jon Howard, the MOD Panama programme manager. "Controlling the

interface ourselves allowed us far greater control, enabling us to manage the risks in a far more intimate manner than through a third party."

This innovative approach to delivery has helped the DE&S save £9 million in procurement costs. Also by using existing military vehicles estimated savings of further £8 million are expected over the life of Panama.

Peter Smith, one of the judges of the awards, said:

'It is especially pleasing to see that, when benchmarked against the very best, DE&S can rapidly deliver innovative best in class projects'

"Despite strong competition from the 10 short-listed projects in the innovation category, Panama was outstanding. Innovation came from the way the project (including the consulting support) was run – remarkably quickly by any measure – and in the technology used to achieve the aims. The overall result is that lives are being saved – while the project came in under budget as well."

Mr David Walters PA Consulting's lead for Panama, added: "This competition is extremely tough at any time, but with the UK hosting the Olympics the standard was exceptionally high with a number of Olympics project under consideration and to the fore in everyone's mind.

"So to win both the innovation category and the top award for best overall project against such elite competition is an outstanding achievement."

Gp Capt Paul Ridge, MST leader, said: "We had the strength of our convictions to challenge convention and adopt an innovative procurement using novel technologies delivering the first operational unmanned ground vehicle in the land environment. This has been an outstanding team effort from everyone in MST, PA Consultants and our key suppliers MIRA, Exponent, Thales and Cobham. It is especially pleasing to see that when benchmarked against the very best, DE&S can rapidly deliver innovative best in class projects."



New deal delivers the post on time

THE PARTNERSHIP which guarantees rapid delivery of mail to UK Forces around the globe has been renewed for another three years.

The latest Forces Mail Settlement was signed on 14th May by Colonel Stephen Heron of British Forces Post Office (BFPO) and Royal Mail's chief customer officer Mike Newnham.

Mail for the Armed Forces, posted in letterboxes up and down the country, is rapidly delivered to BFPO who in turn transport it to bases and ships around the globe.

Colonel Heron said: "Our relationship is key to getting mail from anywhere in the UK to servicemen and women.

"Sometimes, the mail we deliver is the only form of communication for our people and it is always well-received."

Mr Newnham added: "We have in place a process to move mail from our own organisation into BFPO's sorting and delivery system to ensure that our Forces in the UK, at bases overseas and on duty around the world can get their mail."

One of the key communication channels open to friends and families is the e-Bluey created on a home PC, despatched electronically and printed by BFPO for hand delivery.

On a recent visit to BFPO headquarters at RAF Northolt Mr Newnham was impressed with the technology.

"There may be ways for Royal Mail and BFPO to share their learnings and experiences in using technology," he said.

"We have a good working relationship, and we should build on that in the future."

Loaded out – and on way to Rosyth



Major Portsmouth section heads off for assembly

Emergence: the largest block to leave Portsmouth makes its exit at BAE Systems while, below, Centre Block 02 makes an appearance at Cammell Laird on Merseyside

THE WORLD has been given its first look at a huge section of hull which will be a major component of *HMS Queen Elizabeth* during its four-day journey from Portsmouth to Rosyth.

The 6,000-tonne forward section of hull, known as Lower Block 02, was towed from BAE Systems' yard inside the naval base at Portsmouth to begin its journey north.



To celebrate the departure of the block, a team of 50 cyclists from across the Aircraft Carrier Alliance set off aiming to complete the journey in a faster time to raise funds for charity.

Steven Carroll, Queen Elizabeth class project director at BAE Systems, said: "There's a massive sense of achievement in Portsmouth, as the team has delivered two large sections of *HMS Queen Elizabeth* in less than four weeks.

"I am very proud of the team's achievements, with both blocks departing on time and built to an exceptional standard,

which is testament to the skills of our workforce here."

A 13,000-tonne section of hull already in Rosyth's dock will be floated out to allow Lower Block 02 to move into position and both sections to come together.

The block followed hot on the heels of the 1,820 tonne Lower Block 05 – the lower stern section of the first ship – which arrived at Rosyth from Portsmouth in early May.

Other UK shipbuilders are involved in the carrier project with parts of the first carrier's centre block being rolled out at Cammell Laird on Merseyside for transport to Rosyth.

HMS Queen Elizabeth and *HMS Prince of Wales* are being delivered by the Aircraft Carrier Alliance whose principle members are DE&S, BAE Systems, Thales UK and Babcock.

Carriers' phone systems are working well too

ROYAL NAVY trainees have carried out tests to make sure the carriers' telephone system can cope with large numbers of simultaneous voice and conference calls.

The tests at the Maritime Warfare School, *HMS Collingwood*, are a significant milestone for delivery of the ships' mission system and come after successful acceptance testing of part of the underlying network (Internal Network Electronics – INE) and the on-board television system (Media Reception and Distribution).

INE provides a common network infrastructure, based on blown fibre and commercial 'off-the-shelf' networking equipment, to host the varied on-board command and information systems. The

infrastructure has been designed to maximise reliability and survivability, while enabling the systems to be integrated where appropriate, or separated for security purposes.

Lt Cdr David Ellis, QEC MS Information Systems Client said: "Participation of the trainees assured us that the system could cope with much heavier loading than previously tested. They have contributed to progressing this very important programme for the service, while being exposed early on to a capability some of them will be using in a few years."

Networking equipment used for the testing will be installed on *HMS Queen Elizabeth* next year.

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DVD2012 – showing the art of the possible

DVD 2012 is Defence Equipment and Support's key stakeholder event for the land equipment community. It allows us to link up with industry in a single, focused land environment event. It's an opportunity for us to engage with industry colleagues to discuss technologies, current developments and opportunities in the sector and for us to share our aspirations and plans for the future.

Millbrook offers a unique environment that enables equipment to be seen and demonstrated in a practical setting, enhancing the scope to develop a better understanding of requirements and capabilities.

For 2012 we will be focusing solely on land equipment, retaining the focus of recent years on support to current operations in Afghanistan. As always, there will be a range of vehicles at the event including the new light protected patrol vehicle, Foxhound, in its production Theatre Entry Standard form. In addition to military vehicles, there will be equipment providing dismounted close combat capability, manoeuvre support, and deployed infrastructure.

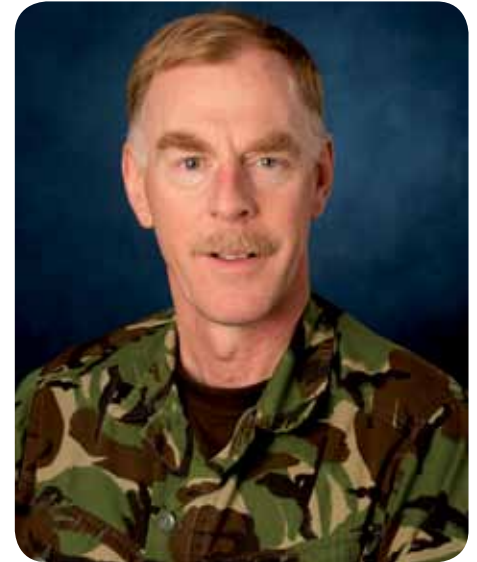
Our key theme for 2012 will be systems engineering in the Land environment. Recent experience in delivering complex Urgent Operational Requirements for Afghanistan has

Major General Carew Wilks, DE&S Director Land Equipment, looks forward to a wide-ranging and informative event

highlighted the importance of systems engineering across Land equipment, and we will be demonstrating how technology integration is being improved through the use of system architectures.

Progress in developing the Land Open Systems Architecture (LOSA) will be discussed at the 'Open Systems in the Land Domain' conference preceding DVD, and will be a theme throughout DVD. The engineering and technical challenges around integration will also be brought to life by the Bloodhound Supersonic Car team who will be displaying the vehicle which will attempt a new land speed record.

To make the LOSA ideas more tangible, we are building a simulated Forward Operating Base, hosted in the central display area, where we will show how we can link subsystems, such as those in a vehicle, on a soldier or within a base. I'm very much looking forward to seeing this first manifestation of LOSA, demonstrating how systems



can link together in an open way so we can develop technology and insert it incrementally, enabling us to connect different systems more effectively and efficiently. I will be looking to industry to contribute to this work at DVD2012 and to show us their ideas about how they can integrate their technology onto our platforms. We've already been discussing generic vehicle, soldier and base architectures with our industry





colleagues, including development of Defence Standards, but DVD2012 will allow us to highlight it further and for delegates to work together to look at the art of the possible.

On a more general level, DVD2012 will be a key opportunity for us to talk to industry and for visitors to see the equipment we support.

A major benefit of holding the event at Millbrook is the ability to demonstrate particular vehicles on Millbrook's test tracks, especially off road, where people

can experience the reality of their cross country capabilities and see how the technology of the equipment put on the vehicles is used in practice.

Unlike other exhibitions, DVD2012 is a very practically orientated event and it's a chance for my project teams and other stakeholders across defence, particularly those involved in force development and identifying capability requirements, to really understand how the requirements they specify affect the integration of technology and what that means for size,

weight and power. I hope DVD2012 will increase awareness of issues like that, make us a better informed intelligent customer and create a dialogue with industry so they can understand our requirements.

Finally, industry and the MOD will be jointly running a series of workshops at DVD2012 covering subjects like LOSA, acquisition challenges, exportability, and different logistics issues. These promise to be as interesting and informative as the rest of the event.





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The MOD is facing a highly complex challenge to meet the requirements of SDSR and current operations.

So what is needed in order to create an effective, auditable and organised eventual withdrawal of equipment from theatre? Clearly direction but also a full understanding of the start point. To quote W Edwards Deming and subsequently Brigadier Martin Boswell (incoming Director CSS) "In God we trust, all others bring data"

The data required in order to enable better decisions could be collated and produced by industry. It is MOD's role to provide a 'steer' of what will be required for FF2020 and what will definitely not be required – then Industry will be left to assist in the provision of "Proof of Good Order".

What does "Proof of Good Order" mean?

The concept as defined in a recent paper by LSC Group covers a series of activities which can be used to support the "map, repatriate, scrap (in theatre), sell or bin (in the UK)" decision – and is expressed in a 5-facet process and service which can be entered into at any stage, skipping over aspects which have been covered or are not required.

The 5 facets are:

Discover the current situation and establish the baseline from which to start the required changes.

This can be achieved by desktop analysis of existing databases or defining question sets to be answered in-Theatre; LSC Group has used CONDO staff to achieve this.

The second facet is to **Quantify** the desired outcome or user requirement, establishing what the MOD wants to be able to do in the future. Voice of the customer reviews would be critical at this point in order to ensure

stakeholders are identified and mapped.

The third facet is **Analysis** – understanding the gap between what is now and what needs to be, defining the options for the customer and assisting in the decision-making process.

Finally, the **Implementation** and **Governance** facets provide the supportability engineering services including technical documentation, complete DLODs analysis and mapping, codification (if required), return on investment analysis and complete COEIA.



Involving industry now in the eventual drawdown from Op HERRICK has several benefits to the MOD:

- Industrial resources are available often with personnel who have recently made the transition from Service life and therefore understand the imperatives of both the Services and industry (as well as being potential CONDO resources).
- Industry can provide an

auditable service.

- The benefit /cost ratio of using industry coupled with freeing-up military resources for more critical tasks and provides cost savings.

In conclusion, the involvement of industry to provide the extra specialist support and head-room during the coming period of major change for the MOD will help enable the MOD to reach its FF2020 endstate.



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Art of the achievable – why DVD2012 is key

Brigadier Peter Rafferty, Head of DE&S' General Support Group will be attending this year's event, along with key personnel from his team. General Support Group is responsible for Expeditionary Campaign Infrastructure, Deployable Infrastructure, Service Provision and General Support Vehicles.

Brigadier Rafferty said: "DVD is a key event for us as it means we can invest some time in meaningful engagement with our contractors and our customer base. I'm particularly anticipating the attendance of a number of Army units as it's important that our customers understand the nature of the business and our engagement with industry, and that they are clear on what is achievable and what isn't. That is the sort of thing that can be addressed at DVD, where customers can also have a dialogue with industry on current and future capabilities. This engagement is what I find most enthusing about DVD – it's not just about procurement, it's about capability delivery."

As well as general engagement with customers and industry at the event, General Support Group will be heavily involved in the key theme of DVD2012 – Land Open Systems Architecture. For General Support Group, the Generic Base Architecture (GBA) aspect of LOSA is the focus. GBA seeks to introduce generic open standards for infrastructure, power, data, water, waste and fuel, enabling delivery of modular, integrated and more efficient bases.

Linking closely with Generic Vehicle Architecture (GVA) and Generic Soldier Architecture (GSA), the standards are developed by MOD and industry working together and will mean that different companies can work together to provide sub-systems, which can then be added quickly and efficiently to the infrastructure.

"You can describe LOSA as being like an aircraft carrier system," Brigadier Rafferty explains. "GBA is the carrier itself; GVA is like the aircraft that flies off it and GSA is like the pilots that fly the aircraft."

"Using that analogy, it's clear how important GBA is to the whole land capability and to the success of LOSA. I'm very much looking forward to engaging

with industry and our customers on GBA at DVD and gaining a greater shared understanding on what GBA is designed to do.

"GBA will mature this summer, so DVD is well-timed for us as it will set the scene and cement understanding in industry that LOSA is an architecture of architectures, and that GBA is the key part of it. If you like, GBA is the chassis of the system of systems approach we are trying to bring to the land battlespace."

Aside from GBA, Brigadier Rafferty and the other GSG teams will also be looking at tactical, logistic and utility vehicles at DVD.

He said: "DVD2012 is an important and timely opportunity for us to deepen our understanding of the potential candidates in the market place for possible future projects. While we are at the very early stages of thinking about these, we can start doing some of the pre-concept intellectual work to understand the art of the possible and potential capability solutions."

Primarily, DVD2012 will be an opportunity for DE&S, industry and customers to share experiences, ideas and solutions and for Brigadier Rafferty, that is the key.

"This year, as we are not exhibiting, we will have more time to engage with industry and, indeed, that is our main purpose for attending. We will certainly benefit from that and I hope industry will too.

"Key project personnel will be able to spend time with customers and industry colleagues at their demonstrations, discussing matters of real significance and making it a truly worthwhile experience for us.

"Also, on a personal note, DVD will be a good chance for me to deepen my understanding of this business area. I've only been in post for a couple of months, so I am very much looking forward to seeing a broad spectrum of the various industrial players and capabilities for which I am now responsible."



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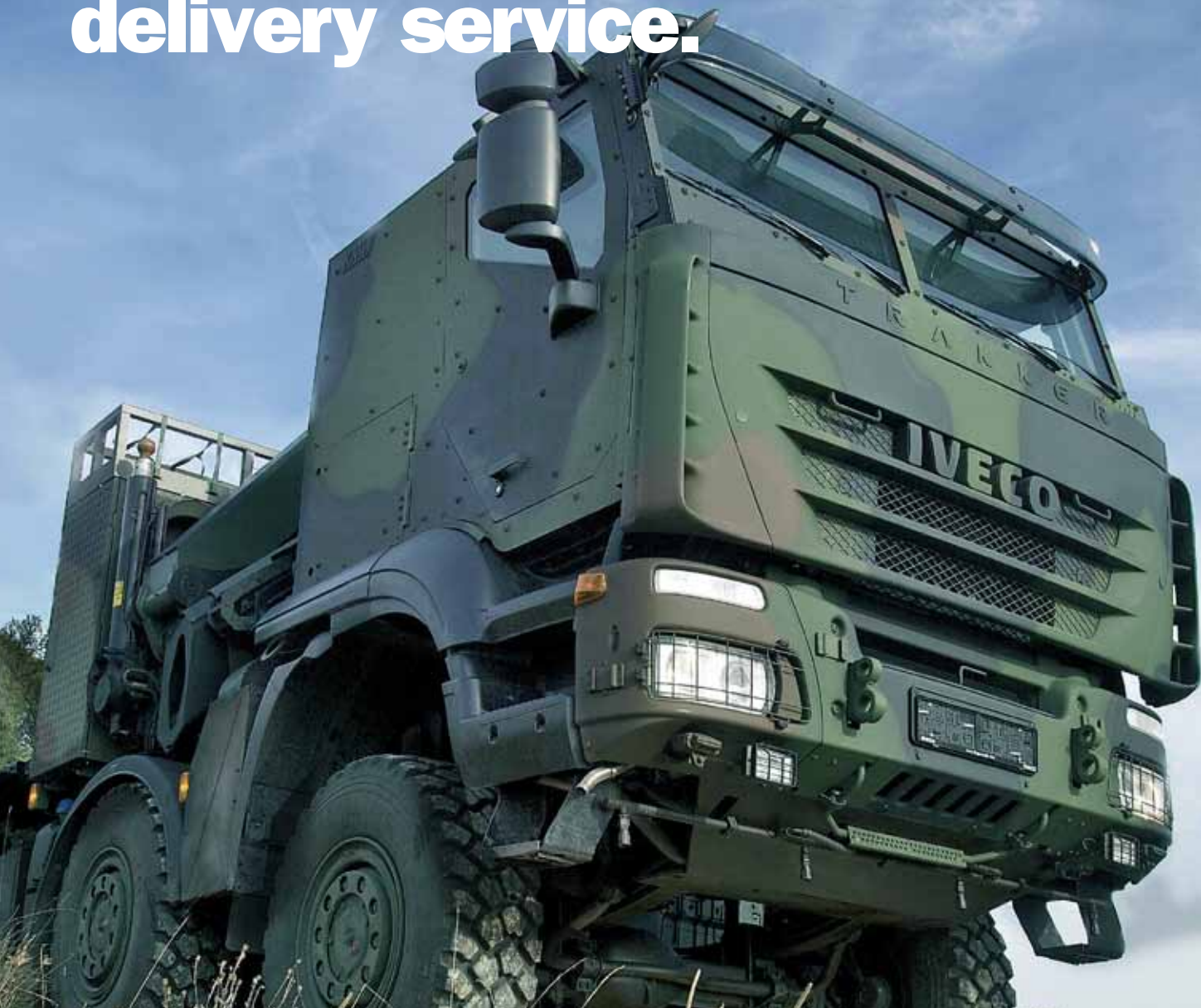
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mers' needs, we aim to identify or anticipate at an early stage how requirements are likely to develop.

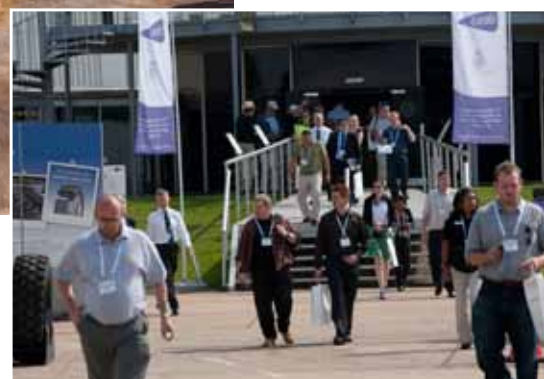
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Foxhound



Jackal

Sharing challenges – and the successes

A range of protected patrol vehicles will be on show at this year's DVD2012 event at Millbrook Proving Ground.

Protecting the troops in high threat situations, a variety of patrol vehicles continue to prove their worth in theatre, supporting commanders and troops on road patrols and in convoys.

Mastiff, Coyote, Husky, Jackal, Warthog and Wolfhound have all proved a success on operations and troops in Afghanistan will soon receive the latest addition to the protected mobility family, Foxhound, which is at the cutting edge of protected patrol vehicle technology.

The vehicles provide a range of capabilities, from acting as ambulances to carrying the latest weapon systems – but all put protection of troops as the number one priority.

The DE&S team responsible for procuring the vehicles is Protected Mobility. The team leader, Colonel Nick Wills, is anticipating DVD2012 as a key event in his team's calendar.

"DVD is always an important event for us as it allows us to share our successes and challenges and to meet our colleagues in the protected mobility world," he said.

"Visitors will be able to see and touch the vehicles we are working on – a rare opportunity, which I hope will enable them to appreciate the sheer scale of our

work both in terms of the size and number of vehicles.

"DVD2012 is also extremely useful from a business point of view as it enables us to network with suppliers from all over the country in one place. It's an excellent place to swap ideas, see new kit and even get a glimpse of future capabilities.

"The business to business opportunities are of paramount importance as this enables key suppliers and the supply chain to engage and interact in an environment tailored to their needs."

Protected patrol vehicles on show at DVD2012 will include:

- Foxhound,
- Husky
- Jackal
- Coyote
- Mastiff
- Ridgback

More than 4,000 delegates are expected at DVD2012, from defence acquisition and military personnel communities to industry.

The theme for DVD2012 will be the application of open architectures and systems in the military land domain, and the two days will feature informal discussion and briefings focused on land equipment platforms, systems and technologies. Exhibitors will also demonstrate existing and emerging capabilities.



Coyote



Ridgback



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Feedback helps teams provide continuous kit improvement

MEMBERS OF DE&S' Deployable Infrastructure (DI) team will be at DVD2012 discussing the range of in-service equipment and utilities they provide.

Two days of informal discussions and briefings will provide a vital opportunity for the DI team to interact with operational infrastructure stakeholders, including members of the defence acquisition and military personnel communities and industry organisations.

The DI team delivers and supports such capabilities as power generation, fuel and water processing/handling, deployable workshops, and measurement and test equipment.

On show at DVD2012 will be the latest developments from the team and its suppliers, including a display by Marshall SV of the modified 'Fitter Section in a Box' (FSIAB), a containerised system that provides deployable technical

infrastructure within patrol bases. Mobile, adaptable and operated from a 20ft ISO container, FSIAB allows vehicle maintainers to conduct a much deeper level of engineering in austere environments while maintaining the required levels of engineering hygiene that modern systems require. Recent modifications to the system are currently on final trials with engineers in Afghanistan.

DVD2012 will allow the team to share information and reflect on challenges faced, with a particular focus on Land Open Systems Architecture and Generic Base Architecture.

The DI team will be working with the defence community and industry during the event and discussing current and future equipment, including potential improvements to capabilities.

DI leader Richard Holloway said: "We are looking forward to DVD2012 and the opportunities it presents

for engaging with a wide range of our stakeholders including our suppliers, wider industry and the rest of the defence community. We will be reflecting on the lessons we've learned over the past year and anticipating how we can improve the delivery of deployable infrastructure to operations and beyond.

"The range of informal discussions, exhibitions and presentations that take place at DVD2012 are a great opportunity for us to share information with our colleagues in defence and industry, and for us to come up with ideas on how we can continue to improve kit for personnel on operations.

"The updated FSIAB is just one example of how we take account of the feedback deployed personnel give us and consequently work with our military stakeholders and industry to deliver improvements that make a real difference on the front line."

DVD2012 is a great opportunity for us to share information with our colleagues in defence and industry, and for us to come up with ideas on how we can continue to improve kit for personnel on operations – Richard Holloway, DE&S

Fitter Section in a Box will be at DVD to show deeper engineering in austere environments





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Architecture builds up the themes for DVD2012

ADS AND DE&S are holding a one-day conference on 19th June – the day before DVD2012 begins – to discuss the application of open architectures and systems in the military land domain.

The conference aims to bring together representatives from military staffs, Government procurement agencies, research and development staffs, academia and industry from around the world and is seeking wide national and international participation.

The conference keynote address will be by Major General Carew Wilkes, Director Land Equipment at DE&S, and Lieutenant General Gary Coward, DE&S' Chief of Materiel (Land), will speak at the ADS reception following. DE&S will be opening the conference with a presentation on LOSA.

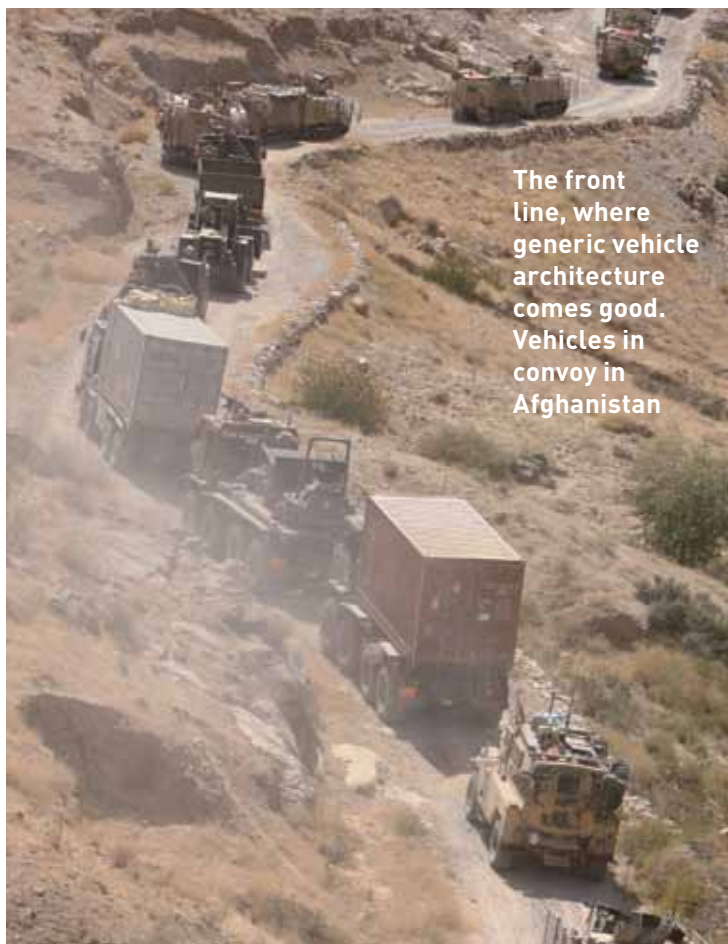
The UK's Land Open System Architecture (LOSA) is the major theme of DVD this year and it is planned to run a series of workshops on related themes during DVD.

Contributions will be along three themes:

❑ How can common open standards (such as the MOD's Generic Vehicle Architecture) be effectively implemented and managed internationally?

❑ What are the benefits and risks to industry of MOD's adoption of open, modular and scalable architectures including viewpoints of Design Authority and Intellectual Property Rights?

❑ How can open systems be implemented in a way that is safe and complies with security requirements? How can each system be verified and validated both in initial build and after subsequent upgrades?



The front line, where generic vehicle architecture comes good. Vehicles in convoy in Afghanistan

For more on DVD2012 visit www.theevent.co.uk

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Thousands to head for proving ground

MILLBROOK'S 700-acre site again hosts DE&S' DVD event, expecting to play host to more than 4,000 delegates from the defence acquisition and military personnel communities, as well as industry organisations.

In addition to the exhibition, DVD 2012 features a conference and workshop programme designed to present and discuss equipment intended to improve the safety and capabilities of soldiers on operation.

This year's event will feature a standalone conference hosted by ADS and DE&S on 19th June to discuss the UK's Land Open System Architecture (LOSA). The conference will bring together representatives from the

hosting DVD again this year; it is a real tribute to the Millbrook Events team that such a prestigious client as DE&S has chosen Millbrook to host its key event since 2003.

"DVD forms an essential part of the support mechanism to current operations, as it brings the MOD customer and industry supplier together in a way that is just not possible in an office environment.

"The Millbrook team has been busy planning new and creative ways in which DVD can use our unique mix of exhibition space, conference facilities and the proving ground tracks to ensure the event builds upon the success of 2010."



For more on
DVD2012 visit
www.theevent.co.uk

Foxhound at Millbrook



military, government procurement agencies, research and development, academia and industry from around the world.

Millbrook's extensive off-road facility offers an ideal setting for participants to understand and familiarise themselves with the capabilities of equipment in an interactive environment, a feature of DVD that is not replicated by any other industry event.

More than 230 exhibitors showcased their products and services at DVD in 2010 – and 2012 is set to be just as comprehensive.

Kevin Leaver, head of events at Millbrook, said: "We are delighted to be

□ To find further information about DVD 2012, visit the official website at www.theevent.co.uk

□ Millbrook is one of Europe's leading locations for the development and demonstration of every type of land vehicle, from motorcycles and cars to commercial, military and off-road vehicles - www.millbrook.co.uk

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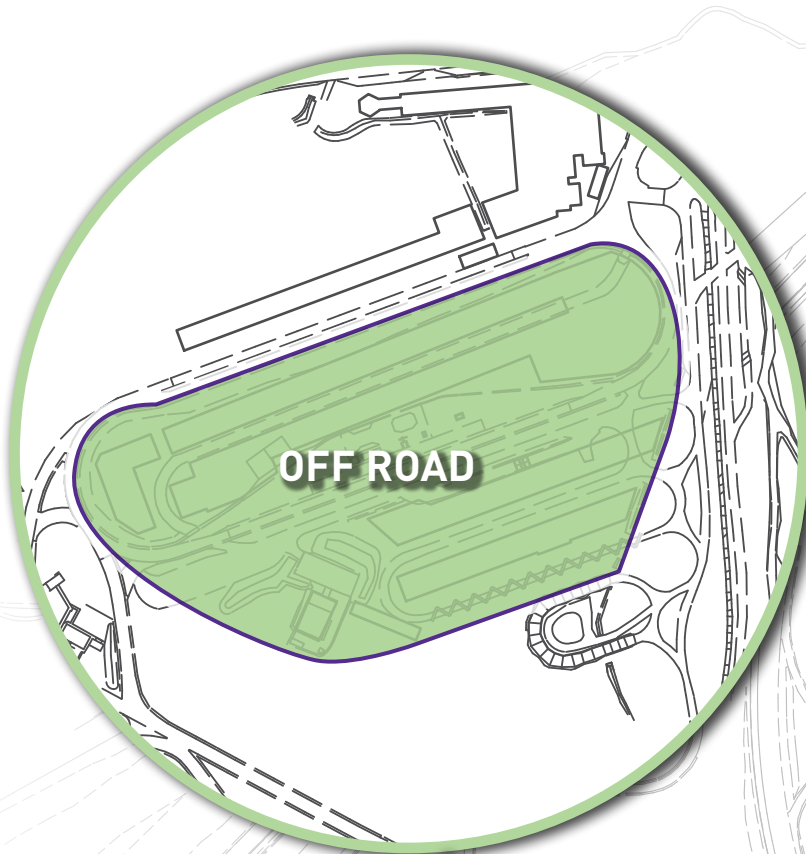
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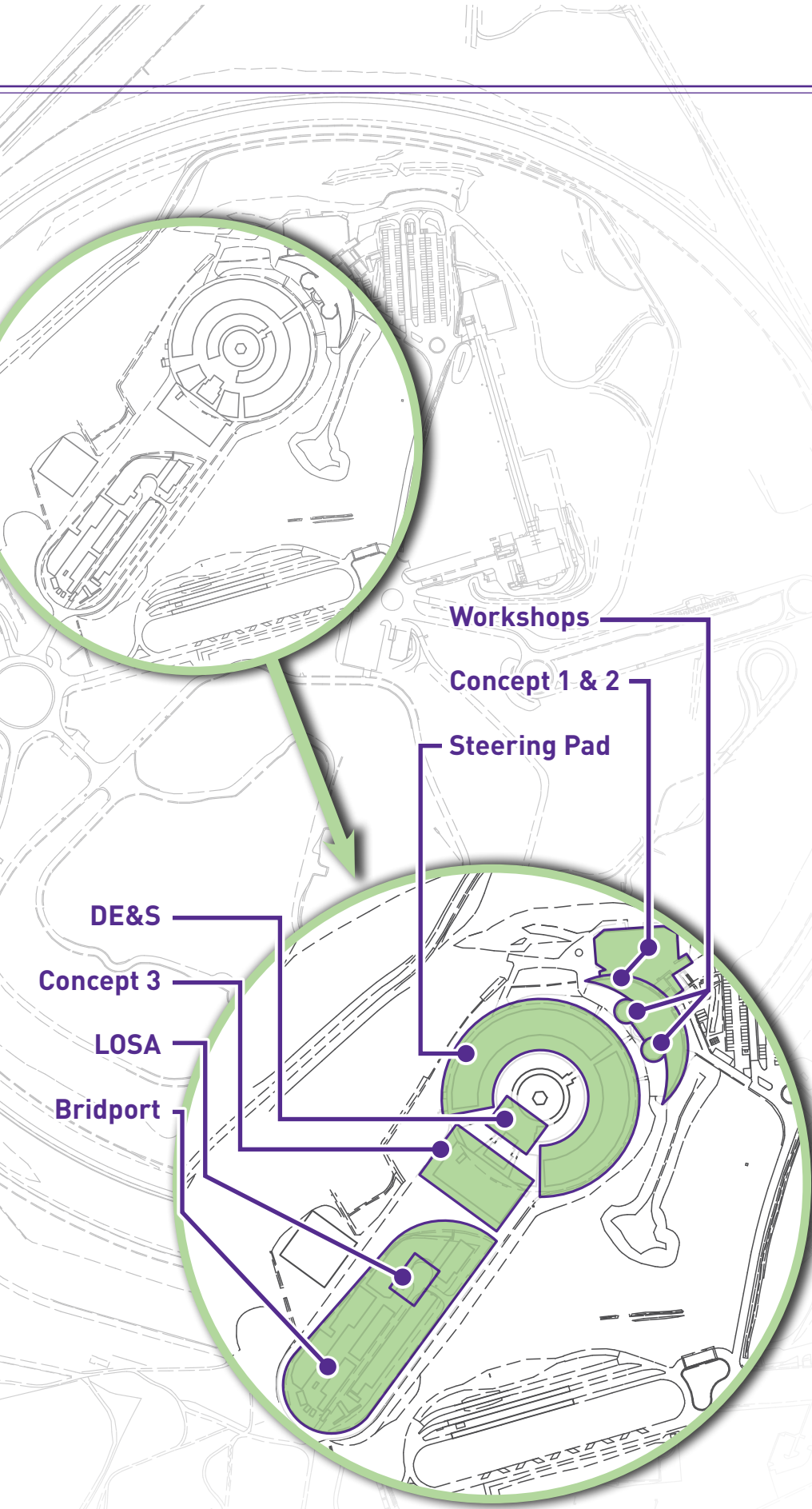
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'Be proud, I value what you do'

Commercial staff have been praised for their professionalism by keynote speakers at their first conference in four years. *David James reports*

ALMOST 300 members of the MOD's commercial function have been reminded that they are at the sharp end of delivering defence capabilities.

Peter Luff, Minister for Defence Equipment, Support and Technology, said it was often MOD civil servants who were in the firing line of criticism.

"I'm aware that the constant drip of criticism from organisations such as the Public Accounts Committee and National Audit Office often seems to be – quite unfairly – directed at civil servants," he told the conference at the Defence Capability Centre in Shrivenham.

Mr Luff acknowledged that commercial officers are continuing to deliver despite ever-growing demands. "Resource pressures and manpower constraints are having an impact on Commercial (due to) tough times across the department," he said.

However vital areas of work that were key to defence included strengthening the role of small and medium-sized enterprises, Anglo-French collaboration and implementation of the National Security Through Technology White Paper.

Les Mosco, Director Commercial, spoke of benefits from last year's Grimstone reforms and how commercial has become an increasingly strong functional community. "Although domiciled in DE&S, we serve all of the MOD," he said.

Susanna Mason, Director Corporate Commercial and Exports, presented on Defence Transformation. She explained how



Keynote speakers at the conference included, from left, Richard Smart, Susanna Mason and Les Mosco

Pictures: Andrew Linnett

transformation will take place to achieve the maintenance of battle-winning Armed Forces and a smaller and more professional MOD which is more hard-headed about what it can afford.

A major contributor to reform is The Materiel Strategy with a presentation from Richard Smart and Andy Baker. Focus on the commercial community included their work to establish how best to upskill and sustain the function, how commercial staff should be deployed, how commercial processes and tools should be developed, and to define how the function will look in the future DE&S.

David Shields, Chief Executive of the Government Procurement Service (GPS), and Mike Greatwich, Director Commercial Services spoke about the Government procurement agenda.

Mr Shields explained GPS delivers the centralised

procurement of common goods and services. GPS has more than 2,000 suppliers and 14,500 customers with total savings for the financial year estimated to be £2 billion.

Mr Greatwich focussed on how the MOD is a major player in continuous improvement of procurement, whether it be working with GPS to deliver centralised procurement, promoting lean sourcing and transparency, or strengthening the UK supply chains.

Mr Luff provided the final endorsement to the MOD's commercial officers. "I value what you do," he told them. "You have every right to be proud."

□ This year's Gold Commercial Award was won by the RAF Catering, Retail and Leisure commercial team – Andrew Swaby and Alan Langston are pictured, far left – for development of a contract for a pay-as-you-dine catering system.

The Silver award went to the C* UOR commercial team – Tammy Brown, Ruth Sims and Nicola Roberts, left – with the Bronze award going to Doreen Reeve of DE&S' Ships commercial team, centre.

Awards were presented by Minister for Defence Equipment, Support and Technology Peter Luff.



CDM commendations 2012

Chief of Defence Materiel Bernard Gray told award winners at this year's DE&S Commendations event that they should be 'justly proud of what they have achieved' and congratulated them on the fantastic contribution they make to defence.

Opening the ceremony in MOD Main Building on 4th May, Mr Gray said: "The skills I see when visiting any of our sites are extraordinary and the diversity and quality of what we do is also extraordinary and central to our national defence. Congratulations to all of you. You are the pinnacle of what we have achieved over the last six months. Thank you for all your hard work, skills and achievements."

Board members and senior staff from DE&S and elsewhere in MOD also attended the day, paying tribute to the work of various teams and individuals.

Air Officer Commanding 1 Group, Air Vice-Marshal Stuart Atha, thanked

the Fast Air Support Team/Harrier for the dignified way they had conducted the Harrier disposal which was achieved within challenging timescales and ensured no impact on other programmes, in particular those engaged in operations.

DE&S Land Equipment Portfolio and Programme Support Head, Mr Tony Ashton, commended the work of Warrant Officer Class 2 Marcus Waugh who had displayed a technically excellent level of engineering professionalism and provided timely and apposite recommendations arising from incident investigations which had undoubtedly saved lives.

DE&S Submarines' Chief Strategic Systems Executive Director, Rear Admiral Steve Lloyd, congratulated the Explosive Handling Jetty Continuous Availability team for successfully delivering the mid-life refurbishment of Clyde naval base's Explosives Handling Jetty; a unique capability and critical to



the delivery of the deterrent programme. The project was delivered on time, to budget and without any interference to the programme.

Capability Head of Deterrent and Underwater Capability, Cdre Mark Beverstock, paid tribute to the work of the Submarine Dismantling team highlighting the importance of this project and the team's role in designing

Report: Katrina McCabe



'I hope you are proud of what you have achieved; we are' – Chief of Defence Materiel Bernard Gray

and completing a successful public consultation on dismantling nuclear submarines. The project was delivered on time, on budget and can be considered as an exemplar for public consultation.

PJHQ Chief of Staff (Ops), Major General Gordon Messenger, praised the work of the Operation Spoken radar team for their role in planning and introducing a replacement Air Traffic Control radar at Camp Bastion. The project was delivered on time, under budget and critically, our reputation was enhanced at Bastion.

DE&S Director Finance, Mr David Noble, was delighted with the efforts of the Defence Inventory team who commissioned, directed and scripted a 20-minute video which has helped raise the profile on inventory management across DE&S, particularly as controlling spend on stock purchase will be a major financial issue over the next few years.

Air Vice-Marshal Atha commended the efforts of Chief Technician Anthony Wilson from the Surface Attack (Heavy) team, acknowledging his dedication, commitment and organisational skills pivotal in ensuring RAF Marham met its operational tasking during Operation Ellamy.

DE&S Director Commercial Services, Mr Michael Greatwich, congratulated

the DE&S Commercial Systems team for its role in successful delivery of the European Union Defence and Security Public Contract Regulations 2011 on behalf of the UK.

DE&S ACDS (Log Ops), Air Vice-Marshal Graham Howard praised the work of Lieutenant Commander Rob Cogan in helping to shape the route home for troops in Afghanistan, adding that Lt Cdr Cogan's work had been instrumental in influencing UK foreign and security policy in support of operations and had made an outstanding contribution to one of the MOD's key strategic objectives regarding Afghanistan.

Mr Ashton commended the work of Mrs Wendy Stowe of the Joint Battlefield Trainers, Simulations and Synthetic Environments team for her role in the delivery of an Urgent Operational Requirement for a Rocket 66mm High Explosive Anti Tank Shoulder Launched Direct Weapons marksmanship trainer, integrated with the Dismounted Close Combat Trainer. This UOR was achieved inside seven months instead of the normal two years and was an exemplar of how UORs should be delivered.

DE&S Director Submarines, Rear Admiral Simon Lister, congratulated Commander Barry Tarr for his role

in managing a myriad of safety and availability issues in migrating the support of *Astute* class equipment into the Fleet Wide Equipment organisation and was an excellent example of the expertise within Director Ships and a shining example of the skills we need in DE&S.

Major General Messenger praised the work of the UK Tomahawk British Flight Test 10 Planning and Execution Team made up of DE&S, CMSA UK and the Royal Marines for their role in proving the warfighting utility of the United Kingdom Tomahawk System by ensuring clear demonstration of UK Tomahawk Land Attack Missile's robust capability in a call-for-fire role in support of ground troops. The trial was complex and an enormous success.

Mr Gray presented certificates and posed for photographs with each of the winners.

In his closing remarks, he acknowledged the fantastic contribution by all award winners. He said: "We have seen this morning the breadth and depth of what we do in support of our Armed Forces. There is a huge range of activity; I hope you are proud of what you have achieved, we are. You are tremendous professionals; congratulations to you all."

Commendation Winners

INDIVIDUALS

- Mr Dave Tomlin – Special Projects CISR team
- Lieutenant Commander Rob Cogan – Defence Logistics Operation and Plans team
- Commander Lanny Vogel – Defence Logistics Operation and Plans team
- Mr David Farmer – Capital Ships team
- Commander Barry Tarr – Maritime Equipment Systems team
- Mr Matthew Holbrook – Chief Information Office
- Chief Technician Arthur Buckton – Fast Air Support team
- Mr Dale Coxon – Weapons Finance team
- Chief Technician Anthony Wilson – Surface Attack (Heavy) team
- Mrs Wendy Stowe – Joint Battlefield Trainers, Simulations and Synthetic Environments team
- Flight Sergeant Anthony Stock – Defence Supply Chain Operations and Movements
- Warrant Officer Class 2 Marcus Waugh – Land Systems Serious Equipment Failure Investigations team

TEAMS

- Bowman Combat Infrastructure Platform Fielding team
- Combined Information Data Network Exchange team
- Special Projects SCM Supply Chain Management team
- Project Hammer team

- Force Protection Delivery Team – In-Service Support
- Operation Spoken Radar team
- Submarine Dismantling team
- The Strategic Weapons Project Team – Programme Approvals Group
- Afloat Support – Safety Case Improvement team
- Afloat Support – Fleet Time Support and Design and Construction team
- Defence Equipment and Support Commercial Systems
- Defence Equipment and Support Submarines Commercial – Future (Successor)
- Nimrod Disposal team
- Non Signature Rotary Wing Delivery team
- Shadow team
- FAST – Harrier
- Explosive Handling Jetty Continuous Availability Project
- Brimstone In-Service Support team
- UK Tomahawk British Flight Test 10 Planning and Execution team
- Warrior Theatre Entry Standard (Herrick) UOR team
- Technology Delivery – Land
- Dismounted Soldier Systems – Surveillance and Target Acquisition team
- Combat Vehicle Reconnaissance (Tracked) team
- Defence Inventory team
- Support Chain Management Compliance team
- Sentinel Project team
- 2011 Winter Rider team

In praise of the rotary world

A few years ago 'helicopter availability' was a pretty loaded term. In 2009 it seemed that barely a day went by without gloomy media headlines denouncing a lack of helicopters in Afghanistan, and claims that this shortage was undermining our operational effectiveness.

I'm delighted to say that we're now looking at a very different picture. I was in Afghanistan earlier this year visiting Lashkhar Gar and Bastion. I was impressed and heartened by the availability and capability of UK airframes. And this was also borne out by commanders I spoke to on the ground.

The work being done by the Chinooks responding to medical emergencies, for example, is incredibly humbling.

The fact that we have enough of these vital assets performing at an optimum level daily is I believe a testimony to the improved and effective partnership working of defence and industry.

I have met members of the Royal Navy and RAF who had been involved in Operation Ellamy over and near Libya. Among them were the deck hands of *HMS Ocean* who got the Apache helicopters off and safely home – black helicopters on a black deck on a black night on a black sea. Their story really brought home to me once again just how critical rotary power is for our operations.

And industry's responsiveness has been particularly striking on the Urgent Operational Requirement front. AgustaWestland's upgraded Lynx Mk9a has been a real success. We now have a vastly more capable airframe able to cope with the demanding environment of Afghanistan. Twelve helicopters delivered to the front line in just 18 months was an enormous achievement – and the now fully converted fleet is continuing to turn in a star performance in theatre with more than 4,000 hours flown. I talked to some of the aircrew when I was in Bastion. They raved about it. And they can't wait for Wildcat.

Of course, not all UORs are on this scale, but they are just as important – the kind of emergency practical stuff that's

so essential for keeping our fleet airworthy and effective. The protective floor covering on Chinook and Merlin used on the Medical Emergency Response Team flights, for example, took just 10 weeks to be fitted.

And that's 10 weeks, by the way, from initial concept and drawing board stage to deployment in theatre. A terrific achievement, and one that is helping ensure this lifesaving capability is maintained. A match indeed for Brunel's mobile theatre for the Crimea.

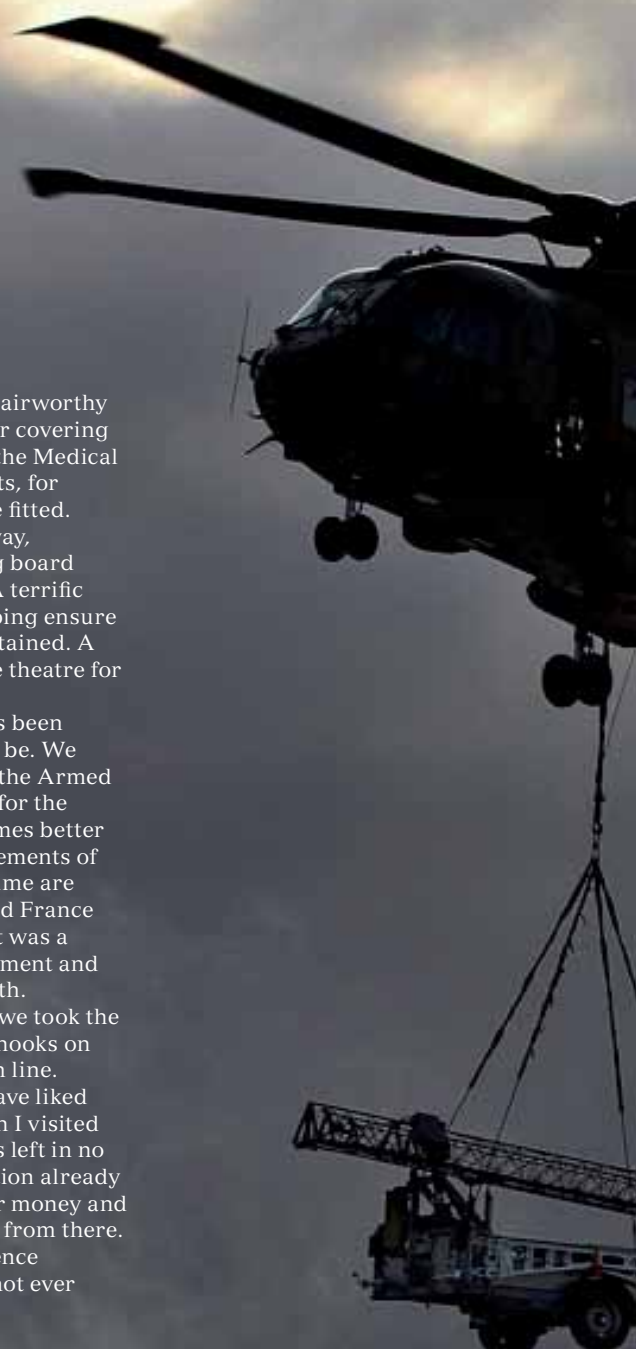
Our Defence White Paper has been described as pragmatic. It has to be. We have to get the right solution for the Armed Forces at the best possible price for the taxpayer. This means it's sometimes better to do work outside of the UK – elements of the Puma life extension programme are being undertaken in Romania and France rather than on these shores. That was a decision taken by the last government and one I am entirely comfortable with.

And that's why, for example, we took the decision to build our 14 new Chinooks on Boeing's Philadelphia production line.

There are those that would have liked these built in Somerset. But when I visited the Boeing factory last year I was left in no doubt that the scale of the operation already in place means that best value for money and lowest risk can only be delivered from there.

These are the realities of defence procurement in 2012. But has it not ever been so?

Defence Minister Peter Luff paints a brighter picture for helicopter availability





the first Wildcat to start Army training. And we are looking at options to upgrade the Merlin Mk3.

For future defence work, the opportunities for many will lie in support and training. Keeping the Wildcat flying should sustain hundreds of engineering and technical jobs at AgustaWestland and in Yeovilton over the next few years.

And looking ahead there will be opportunities for industry to contribute to our Total Force Support concept which will include a sizeable number of contractors.

We know there's more that can be done when it comes to providing expert support on the ground – in fact this sector is already leading the way, with Vector Aerospace and Boeing UK already deploying engineers in theatre doing vital work keeping our Chinooks airborne.

I used the word pragmatic earlier to describe our approach to making sure we have a balanced and affordable equipment programme. That's an approach I would also commend to all as companies plan and invest for the future. Because while defence here in the UK may be a shrinking market, there are plenty of other opportunities out there – in the civilian sector as well as overseas.'

Below: Mr Luff on a visit to RAF Benson

Lord Drayson's 2005 Defence Industrial Strategy had a pretty clear and realistic position on helicopters reflected in the reality of Wildcats assembled in Yeovil, Pumas modified in mainland Europe and Chinooks being built in America. And as I've seen at RAF Benson, increasingly effective support for the Merlin fleet in the UK.

The SDSR clearly set out our long term plans for a helicopter fleet based on four core platforms from 2025. These platforms are already part of the rotary lexicon: Apache, Merlin, Chinook and Wildcat. I am pleased to say that we have recently secured the release to service for



'Industry's responsiveness has been particularly striking on the UOR front' – Peter Luff

Booking travel speeds up at DE&S

BOOKING DUTY travel will be quicker and easier for DE&S staff from next month with changes to on-line booking.

From 2nd July, duty travel will be booked on business travel provider HRG's own on-line booking tool, called the HRG I-Suite.

The replacement Defence Travel contract, part of the Central Government Travel Management Service (CGTMS), brings all Government travel under one contract.

It is expected to save the MOD around £1 million per year; with greater savings if more bookings are made on-line. Greater use across Government will result in cheaper air and hotel prices.

The new on-line booking tool will be easier and faster to register and use.

Military and civilian staff using the current system will have a profile created on the I-Suite, accessed through the Enterprise Gateway Service, which they will be asked to update before booking travel. Access to the tool is only permissible with line management authority. Training will be available at Abbey Wood and selected defence units.

Bookings by phone, e-mail or fax will still be taken by HRG but will cost more and will only be for MOD travellers without a valid staff number, group travel or complex travel itineraries.

Further information is available on the 'Use Defence Travel' intranet pages under CGTMS.

Software firms get up to speed on DII

COMPANIES WHO supply software applications to work alongside the MOD's main communication and information system will soon have access to a valuable on-line information website.

The Applications Development Guide is hosted by the MOD and developed by

partner company Atlas.

It helps providers understand parameters their applications should adhere to to make integration onto the Defence Information Infrastructure (DII) easier.

"The guide is the single authoritative source for this information," said Dave Neale,

assistant head of applications governance with DE&S' Defence Information Services team.

"Application developers are advised to have access to the website and MOD sponsors are encouraged to make suppliers aware of this resource and how to apply to access it.

"Developers seeking a 'right first time' level of service need to understand thoroughly the DII infrastructure within which their application operates to optimise the likelihood it will work successfully and receive accreditation."

Mr Neale added: "The unwelcome alternatives arising from compatibility problems during systems integration include additional costs, lengthier timescales before deployment and damage to supplier reputation."

More users go on line in latest milestone

THE NEXT increment – 3a – of the Defence Information Infrastructure (DII) achieved its target of getting the last user onto the live system by the end of March.

This completes delivery – around 40,000 terminals across about 600 sites – to the timescales the DII team agreed with Atlas almost 18 months ago and is a huge achievement.

Increment 3a replaces outdated and expensive legacy systems, supporting around 60,000 personnel, notably the Royal Air Force at Joint Helicopter Command and other MOD sites.

The Site and User Services team includes dedicated staff from the Atlas Consortium and has received extensive support from the DII client team in Corsham and elsewhere throughout planning and delivery.

The project is set to close down a number of legacy systems this year and is on track to do that by its September deadline.

DE&S delivers a better picture of Olympic security

THE RAF has been given a crucial upgrade to its air surveillance system, well under budget and delivered in time for the London Olympics.

The UK's Air Surveillance and Control System (ASACS) equipment allows operators to maintain a 24-hour watch on the skies over the UK and its approaches. It can now use Mode S data from its radars, following a system upgrade by IBM UK.

Mode S is a means of communication and identification mainly used by civilian aircraft providing detailed information to the operator on an aircraft's identity and intentions.

It is an important enhancement as it has increased the accuracy and richness of the recognised air picture and will give better situational awareness to the system's operators.

The Category D project has been managed by DE&S' Air Command and Control Systems team, delivered eight months early and around 25 per cent under budget.

"I am very pleased that the delivery team, ASACS Force



Air surveillance:
by the RAF

Command and IBM UK have worked together to bring this project in ahead of schedule," said Graham Richards, programme manager for the team's Air Defence Command and Control Installations.

"It gives the RAF a much-needed boost to its capability, enabling it to provide a better service for the defence of the UK."

UK ASACS comprises

a variety of radars, communications equipment and a command and control system. The command and control system, known as UCCS, is a critical component of ASACS. It allows the operator to build a recognised air picture using connected radars and now also Mode S information meaning RAF operators will be able to continue discharging this important task.



Diamond unveils her nest of Vipers



WITH A flash of orange and an ear-splitting bang *HMS Diamond* has proved her fighting mettle by testing her missile system off the Outer Hebrides.

The third of the Royal Navy's Type 45 destroyers blasted her Sea Viper missile out of the silo at three times the speed of sound, destroying the jet drone target.

The successful firing is excellent news for DE&S' Medium Range Air Defence team and means *HMS Diamond* is now ready to take her place as a fully operational warship.

"I am delighted that *HMS Diamond's* firing has been such a success which is a testament

to the hard work and dedication of the joint trials team from DE&S, Navy Command, ship's staff, QinetiQ and our industry partners," said team leader Richard Murray.

"This is the third successful in-service firing of Sea Viper from a Type 45 destroyer and is the first following completion of full qualification and acceptance of the system in January 2012."

The ship's commanding officer, Commander Ian Clarke, added: "I am immensely proud of what my ship's company has accomplished in such a short space of time.

"Ever since I took command of this ship in 2010 my focus has been to see the ship declared

ready for operations within this time scale." Sea Viper combines Aster missiles, Sampson radar, combat and command system and the silo on the forecaster containing the Sylver vertical missile launcher.

In the test, *HMS Diamond's* prey was a Mirach drone – a 13ft remote controlled jet that can fly at speeds of up to 600mph at altitudes as low as 10 feet or as high as 14,000ft for 90 minutes.

The firing is the culmination of a busy year for *Diamond*. She was accepted into the Navy 11 months ago and is due to deploy later this year – making her the fastest warship in recent memory to go from 'joining up' to deploying.

Sea Dart can still prove a point too

DESTROYER *HMS Edinburgh* has carried out the last planned firing of the Sea Dart system in the build-up to a major exercise.

The ship successfully fired seven missiles off Scotland's Outer Hebrides ahead of Exercise Joint Warrior, which tests Britain's military ability to respond to a crisis.

The firing was carried out to show the system could still be used, as *Edinburgh* will serve as the UK's final Type 42 destroyer as the new Type 45 destroyers enter service.

A booster rocket helped the missiles accelerate to twice the speed of sound in seconds. It can take out a target up to 80 miles away. In this instance, its target was a Mirach pilotless drone.

Sea Dart has proved its worth, not least in the 1991 Gulf War when *HMS Gloucester* shot down an Iraqi Silkworm missile as it headed for the American battleship *USS Missouri* – the first time a missile has shot down another missile.

Edinburgh's commanding officer, Commander Nick Borbone, said: "The new destroyers with the Sea Viper system are well placed to provide air defence this century but Sea Dart still packs a punch, and this firing is an important step forward for *Edinburgh's* preparations for operations."

Geoff Wragg of DE&S' Medium Range Air Defence team added: "It is testament to all the Sea Dart project team members over the past 40 years that the system is still as capable as it ever was."

Dragon takes a railway journey

HMS DRAGON will feature on BBC TV's *Great British Railway Journeys* presented by former Defence Secretary Michael Portillo.

Mr Portillo was filmed on board serving breakfast to some of the 190 crew and interviewing the Commanding Officer, Commander Darren Houston.

Mr Portillo said: "It was great fun. I expected the food to be good quality and it was. And I expected the guys serving the food to be cheerful and they were. It was a hectic day but also a very enjoyable one."

The programme sees the presenter travelling the British railway network guided by a Victorian guidebook.

The episode will be broadcast early next year.



Boxing clever: vehicle maintenance can be done in the workshop and its inflatable shelters

Vehicle maintenance in a box!

MORE DETAILED maintenance of patrol vehicles will soon be carried out closer to the front line – thanks to a workshop all packaged up in a box.

FSIAB – Fitter Section in a Box – is a containerised system which will allow engineers to do a much deeper level of engineering on patrol vehicles in forward bases in Afghanistan.

The system is made up of a workshop – a 20-foot ISO container – along with two inflatable shelters. It comes with its own generator which supplies an air

compressor, internal lighting and shelters as well as extra electrical items such as power hand tools.

The container provides bench working space as well as storage for spares and tools.

“This will allow vehicle maintainers to conduct a much deeper level of engineering in austere environments while maintaining the required levels of engineering hygiene that modern systems require,” said Major Oli Morgan, requirements manager with DE&S’

Deployable Infrastructure team.

FSIAB is designed to support Foxhound, Husky and Jackal vehicles.

Technology demonstrator trials took place in February followed by acceptance trials in May with HQ Joint Force Support (Afghanistan).

“There is one FSIAB deployed in Helmand Province and it is already making a difference,” said Major Morgan.

“Early indications are that this is exactly the sort of technical infrastructure that is required.”

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“Where will our knowledge take you?”

New lab helps fight against terror

THE ATOMIC Weapons Establishment has cemented its crucial role in nuclear deterrence by hosting a new nuclear forensics laboratory, officially opened by Government Minister James Brokenshire.

Mr Brokenshire, pictured right, minister in the Home Office for crime and security, visited the company's Aldermaston site on 22nd May.

The Conventional Forensics Analysis Capability lab has the capability to receive some radiological, nuclear and explosively contaminated evidence, and then analyse the evidence for traditional forensics purposes.

He said: "I am delighted and proud to open the new laboratory. Successful

delivery of this laboratory is as a result of the strong collaboration between the Home Office, our MOD colleagues and the AWE project team.

"This unique, world-class facility plays a major role in how we respond to nuclear and national security threats and sets international standards in incident response. It will make a significant difference to our understanding of forensics, helping us to bring to justice those people involved in terrorism, ensuring we keep our country safe."

Refurbishing an existing building at AWE and providing associated equipment has been sponsored by the Home Office and the MOD.



DE&S signs on to a new ship signature centre

A NEW maritime technical advice centre to increase the survivability of warships has been opened at Rosyth.

The centre has been jointly funded by DE&S and QinetiQ through long-term contracts between the two.

It was opened by Tony Graham, DE&S Director Ships, and will ensure future availability of leading edge signatures, structures and survivability for maritime customers needing advice, assessment and analysis.

The event was a chance for those attending to understand the work of the skilled staff at Rosyth, who are focussed on helping to ensure that Royal Navy crews, their ships and equipment are well protected. Staff also support elements of the merchant fleet and the growing energy industry.

Mr Graham said he took pleasure in opening a new building dedicated to giving the

Royal Navy its military fighting edge and its toughness in battle.

"That 'tough' reputation remains vital as our global maritime trade remains fundamental to the prosperity of the UK and we must therefore deter others from disrupting our trade or being aggressive

civilian industrial sectors as a result of the continual drive to improve safety or as a result of the spectra of terrorism.

"QinetiQ has a brilliant track record in the area of signatures structures and survivability and the new offices will help sustain those skills."



Signing on: Tony Graham opens Rosyth's survivability centre

to our allies or other peaceful states," he said.

"Science and engineering capabilities are also useful to our allies who must face such unwanted military threats. These technologies also have great relevance to many other

Centre is on Innova Campus at Rosyth.

Long-term contracts under which the funding has been made include the Maritime Strategic Capabilities Agreement and the Long Term Partnering Agreement.

□ The Signatures, Structures and Survivability Centre refreshes the existing capabilities and retains connections to the historical home of naval construction research.

□ Sarah Kenny, Managing Director of QinetiQ Maritime, said: "Every

ship and every energy production platform at sea generates "noise", be it audible, vibration, electrical, radar or magnetic. Running engines, operating standard equipment, passage through water, generating electricity or pumping oil - all these create a detectable signature.

□ "The noise signature can also be thought of as a measure of wasted energy, and as increased wear and tear.

□ "To maintain effective capability, operational units must sustain high levels of signature hygiene. It makes the naval ship less likely to be detected by the enemy, and reduces waste. Less vulnerability to detection increases the probability of survival. Sensing equipment, whether in a mine or as part of an aggressor's combat system, may be countered and even negated by an effective signature control regime.

□ "As well as helping the Navy avoid detection in the first place, our team at Rosyth works on maximising the survivability of its ships against actual attack. We analyse the survivability of ships and submarines against likely threats. Our structural analysts also provide specialist advice that means the platform isn't burdened by very heavy steel construction."

Successors to the Board are announced

BERNARD GRAY has named the successor to current Chief of Materiel (Air) Air Marshal Sir Kevin Leeson, who is due to leave the MOD on retirement later this year.

Air Marshal Leeson is to be replaced by Air Vice-Marshal Simon Bollom, currently Director Combat Air in DE&S, on promotion to Air Marshal in October.

Chief of Materiel (Land) Lieutenant General Gary Coward, is also due to leave DE&S on completion of military service later this year. He is to be succeeded by Major General Chris Deverell, currently Director Materiel Strategy, on promotion to Lieutenant General from next month.

Mr Gray said: "Both General Coward and Air Marshal Leeson will be greatly missed by me and by their colleagues on the Board and I am sure more widely in DE&S when they leave at different times later this year.

"They are both continuing to contribute enormously to the complex and demanding task of helping to reshape this organisation for the future at a time of considerable financial stringency.

"General Deverell has led The Materiel Strategy team for over a year of what I believe to be the most comprehensive and thorough transformation exercise that has been undertaken in the area of MOD acquisition and support.

"Air Vice-Marshal Bollom has an exemplary career in DE&S, most recently as Director Combat Air for four years, and will be able to bring this long experience to bear when he joins the Board later this year."

Major General Deverell, previously Director General Logistics, Support and Equipment at Headquarters Land Forces, said: "My focus for now remains entirely on the continued development of our work on The Materiel Strategy but I am hugely honoured to be joining the board in succession to General Gary later this summer."

Air Vice-Marshal Bollom, latterly leader of the DE&S Tornado project team, said: "I have had the privilege of working with a huge range of excellent colleagues, both military and civilian, in DE&S over many years as we have dealt with constant change and the pressure of continuous operations. I am looking forward to using this experience when I join the DE&S Board later this year."



Mr Gray, centre, and the DE&S Board with others in attendance, pictured in Portsmouth. Trevor Woolley, sixth from right, was attending his final board meeting

Portsmouth staff told of strategy progress

BERNARD GRAY has reaffirmed to hundreds of staff at a Town Hall briefing in Portsmouth that the future of the naval base is secure, as confirmed in the last Strategic Defence and Security Review.

The Chief of Defence Materiel said: "This is where the carriers are coming – whatever else happens this is going to be their home port and that underpins Portsmouth as a naval base going forward."

Mr Gray and the DE&S Board spoke to DE&S staff, Royal Navy personnel and other Portsmouth staff in a briefing on The Materiel Strategy.

Underlining Portsmouth's key role, Mr Gray said the carriers would have a lifetime of up to 50 years

and represented a huge investment. Carriers, Type 45s and other naval vessels based in Portsmouth needed support and that secured the base's future, he said.

"The carriers are going to be a vast and amazing sight and they allow for the removal of uncertainty that has been around for a long time," he said.

He added he was fully aware of the good work in Portsmouth and was delighted to hear all surface warship refits at the base were completed on time and to budget.

But he was also aware of the general perception of MOD procurement in the wider world.

"Defence procurement never turns up in the media in

a positive light – you don't read about the good things that are happening and I am pretty fed up with our reputation in the outside world," he said.

During an hour long presentation and Q&A session, Mr Gray said he was proposing some straightforward solutions:

- only items that can be afforded should be ordered;
- improved interfaces between DE&S and MOD;
- development of skills to match the private sector.

He said: "The DE&S Board is meeting here because we want to make sure we are speaking to as many people in the organisation as possible. If we are going to move this organisation forward we need to do it as a group of people."

Levene analysis kick-starts business improvement

WORK HAS begun to build on the strong cultures and loyalties in defence to help business improvement.

'Be-Think-Do' is the high level framework for the work being driven as part of Transforming Defence in regard to Behaviours and Business Improvement (BBI).

Its origins lie in Lord Levene's analysis in the Defence Reform Review of critical shortcomings in the way defence works outside the operational environment.

Levene sought to design a model that gets

the right incentives and behaviours in the right places. But he acknowledged that people in the organisation, at all levels, needed to make it work.

The BBI team will use Be-Think-Do as the guiding principles that will drive the underpinning behaviour and process change needed to support implementation of Defence Transformation.

Be-Think-Do: Be a leader, Think defence, Do it better. This slogan reflects the top level message about business leadership, innovation and efficiency and central to all of this corporate, joined up thinking.

Upgrade ushers in shared computer world



Step forward: *HMS Ocean* heads up the Thames past the O2 Arena towards Greenwich last month

AN UPGRADE to the Combat Management Systems on board three of the Royal Navy's biggest warships will mark a big step towards a common network architecture across all the service's ships.

BAE Systems has secured the £19 million contract for *HMS Ocean*, *Albion* and *Bulwark*. It will mark the first operationally deployed Shared Computing Environment in the surface fleet.

A common network architecture will also include the proposed Type 26 Global Combat Ship in the next decade.

Captain Dain Morritt, Deputy Head of DE&S' Maritime Combat Systems, said: "The Shared Computing Environment is an essential step to achieving multiple combat system software applications running on a shared hardware infrastructure.

"This builds on the commercial approach, taking

it into the more challenging military environment. The technology delivers cross-business savings but, more importantly to the front line, a faster and more flexible means to insert military capability into our ships when they really need it."

Building on architectures BAE Systems is developing for the *Astute* submarines, the Shared Computing Environment was first demonstrated last year on board Type 23 frigate *HMS Argyll*.

The technology will allow future upgrades quickly and easily, helping to reduce through life costs and the length of time ships spend in refit. Less equipment means a reduction in crew training times.

Mark Townley, Combat Systems Director at BAE Systems, said: "This innovative approach will deliver significant

cost savings to the Royal Navy and will ultimately mean all combat systems on the Royal Navy's surface fleet will operate from a single computing infrastructure."

The first upgrade on *HMS Ocean* is scheduled for completion by the end of next year

A BAE Systems-led industry team, which includes Thales and QinetiQ, will also progress a number of architectural and technology projects to consolidate capability from across industry and MOD onto the Shared Computing Environment and common hardware.

These initiatives aim to develop a more affordable core combat system solution, which is easier to support throughout life and can be rolled out across the fleet in future years.

NEWSREEL

Helping team performance

BMT Hi-Q Sigma will implement a risk management change programme for DE&S' Joint and Battlefield Trainers, Simulations and Synthetics Environments team. The programme will help deliver projects to stringent performance, cost and time targets. The company recently completed work to help procurement of a training solution for the Warrior Capability Sustainment Programme and SV Scout.

System boost

THALES UK is to upgrade major Royal Navy ships with a new fully digital Radar Electronic Support Measures (RESM) system. *HMS Daring* has entered service fitted with new digital antennae as part of the electronic surveillance system MOD 2.0 programme. Under the new contract similar advanced technology will be introduced to RESM equipment across the surface fleet.

Facility opens

A medical and dental centre for Royal Marines of 42 Commando at Bickleigh near Plymouth has been opened. The building will provide enhanced clinical care. Cost of the new sickbay was £3.1 million.

Four-year deal

THE RAF has awarded Thales a further four-year contract to support the UK's Intelligence, Surveillance Target Acquisition and Reconnaissance Mission Support System.

Contract sees Hellfire missiles restocked

LOCKHEED MARTIN will re-stock and support the UK's supply of Hellfire II missiles.

The contract is an Urgent Operational Requirement worth £29 million.

The missiles, a mix of variants, are a follow-on order from an existing one which is due to be completed this October. This latest contract calls for delivery throughout next year.

They will be cleared and certified for use on the Apache AH64D helicopter flown by the Army Air Corps, while Lockheed Martin UK at Amptill has also been awarded a supplementary contract to provide missile system support.

The Hellfire II missile is a

combat-proven tactical missile system which has been used successfully in Afghanistan and Libya that can be launched from multiple air, sea, and ground platforms.

It offers multi-mission, multi-target capability and precision-strike lethality and is the primary 100lb class air-to-ground



precision weapon for the British Army.

The news comes as Army Apache helicopters, launched from *HMS Illustrious* off the Scottish coast, fired Hellfire missiles in the UK for the first time during one of the biggest exercises of the year.

"The Hellfire missile firings conducted from *HMS Illustrious* once again proved that the potent combination of Apache helicopter and Hellfire missile can be successfully delivered by a UK warship at sea," said *HMS Illustrious*' Commanding Officer, Captain Martin Connell.

Left: Hellfire missiles being loaded onto Apache during Exercise Joint Warrior



Pictured above at the launch are Rear Admiral Simon Lister with Chief Strategic System Executive Rear Admiral Steve Lloyd, and the Business Services Group staff, right.

Submarines' new business services programme is off to a flying start

DE&S' Submarine Operating Centre launched its Common Business Services change programme on 14th May.

The Centre has changed the way it runs its administration support from embedded project team administrative staff to a Centre-wide services team – the Business Services Group.

Director Submarines Rear Admiral Simon Lister said: "I am really pleased that everyone has worked so hard to get Common Business Services to initial operating capability; this is a great opportunity for staff to embrace the change and drive it forward. I look forward to offering my support as we work towards full operating capability."

Fiona Miles, Business Services Group leader, added: "The launch has represented a considered journey to take this change programme from inception to

implementation. I am tremendously proud of my team and their efforts."

The Business Services Group is divided into three sections, two Points of Presence (POP's) delivering administration services and the Business Hub delivering information management, budget management and occupational health.

The team will work towards full operating capability in December.



Quality tells in the end

Team looks back to learn lessons for the future

THE DEFENCE Quality Policy turned back the clock to learn the lessons of history.

Abbey Wood hosted a historical look at quality in the early Medieval age and Napoleonic period to see what lessons could be learned.

Peter Mogridge and Ray Parfitt from the Defence Quality Team donned clothing and wielded weapons from those eras to brief the audience.

The aim of the historical briefing was to investigate whether equipment, clothing and weapons were of sufficient quality for the time and were able to counter any threats that they faced. Briefings also included a section on contracting in those periods.

"One of the first things you discover is that the equipment is not particularly comfortable to wear, let alone fight in," said a team spokesman.

"Advances in armour in the medieval period were usually matched by advances in weaponry and so, as is the same today, you end up playing catch up to meet the emerging threats.

"Chain mail was effective for a short time, mainly against sword cuts but proved less effective against arrows. The helmet provided some protection for the head but limited protection for the face as Harold was rumoured to have found out at Hastings.

"With the Napoleonic period the emphasis was on looks rather than protection. The uniforms offered no protection and the quality of their equipment varied. Some, like the French Charleville musket, were improved over time and were in use from 1717 to 1850 in one form or another."

The event gave the audience an insight into the quality of the clothing worn from those periods and the advantages and disadvantages of the equipment.



DE&S' Peter Mogridge is resplendent in medieval armour while Ray Parfitt demonstrates the uniform and weaponry of the Napoleonic infantryman

Hazard-spotting earns Brian his just reward

AN MOD police sergeant at Clyde has netted a health and safety award for his work with the base's rigid inflatable boats.

The Institution of Occupational Safety and Health (IOSH) West of Scotland Branch have given Sgt Brian McArdle its Certificate of Merit.

The annual awards celebrate people who, despite not working in health and safety as their career, have made a difference to staff morale, have boosted wellbeing, or reduced injury and ill-health in their workplace.

Branch chair Douglas Connell said: "We think it's vitally important to recognise the contributions of those people who improve health and safety for colleagues, perhaps without even realising that what they're doing is going above what is expected of them. Brian exemplifies these qualities."

Brian was praised for hazard spotting, highlighting the extra

hours he has put in to measure noise and vibration levels on behalf of the occupational hygiene section on high speed water craft.

Brian was nominated by Philip Johnson, Senior Occupational Hygienist at Clyde's Medical Centre.

Brian said: "It's an honour to be nominated for this award, especially by a health and safety expert who really knows how crucial it is to make sure people are kept free from injury and ill-health in the job they do."

"No one should go to work feeling as though their health and safety is at risk and what I do is to make sure people feel that the tools they use in their job won't fail them."

Mr Connell added: "Our winners represent what health and safety is all about – creating schemes and ways of working that take a proportionate, unstuffy approach to making people's lives better."



Lt Jim Howard shows Robert Read a submarine bunk 2012-style

Rob makes emotional return

DEVONPORT HAS hosted a special guest to present newly qualified Royal Naval submariners with their 'Dolphin' badges.

The sailors of the Plymouth-based submarine *HMS Trenchant* were honoured to be presented with the customary badge in the form of two dolphins by fellow submariner Lieutenant Commander Robert Read, 92, a veteran of World War Two.

Rob was a former navigator of a previous *HMS Trenchant* submarine in 1944 and 1945. He was a returning as a familiar guest, having attended the launch in 1986 and commissioning into the Royal Navy in 1989 of the current *HMS Trenchant*.



Igniting the Olympic dream: David Beckham lights the cauldron at Culdrose, where the Flame first touched down far right, before being taken to Land's End, right

MOD helps ignite Olympic passions

THE OLYMPIC Flame touched down on British soil in Cornwall at the beginning of its 8,000-mile journey around the UK.

RNAS Culdrose provided the starting point as the British Airways A319 aircraft, specially named Firefly, arrived from Greece on Friday 18th May.

A ceremonial cauldron was lit



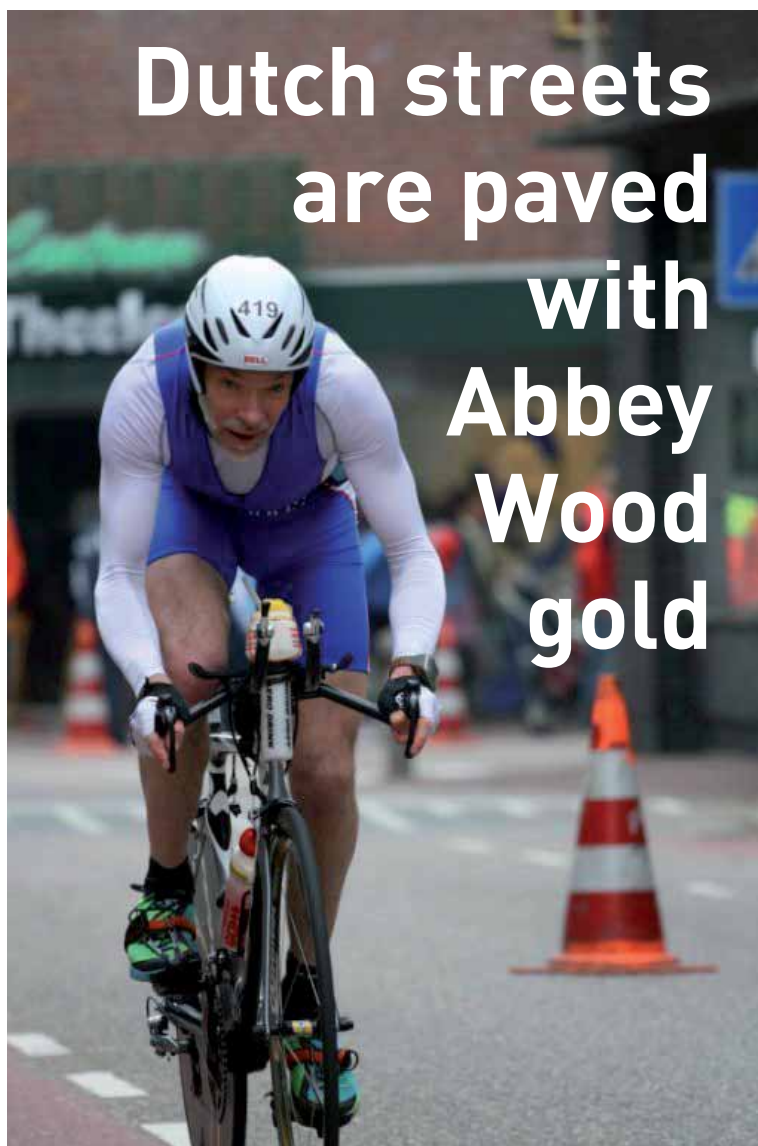
on the airfield to celebrate the arrival of the Flame.

The relay made its official start at Land's End, with the Flame carried there by a Sea King of 771 Naval Air Squadron.

The Flame passed close to Abbey Wood on Wednesday, 23rd May on its way through Bristol.

DSRA LOTTERY WINNERS March

£10,000: Peter Brown (Abbey Wood). **£5,000:** Rebecca Davis (Abbey Wood). **£2,000:** Christopher Hull (Bassingbourn Barracks). **£1,000:** Julie Norman (Andover). **£500:** Melany Mason (RAF Benson). **£300:** Cara Biggs (RAF St Mawgan), Ian Fraser (Kentigern), Richard Bicknell (St George's Barracks), Colin Currie (Bicester). **£200:** Henry Cook (RAF Cosford), Majorie Wilson (AWE), Peter Robertson (Portsmouth), Amanda Harrison (Catterick Garrison), Valerie Walker (Bicester), Joan Goode (RAF Mildenhall), Patrick McGunnigle (Helensburgh), Rachel Wilson (Newcastle), Christopher Cowan (Abbey Wood), Caroline Baker (Enisleigh), Robert Adams (Shropshire). **£100:** Marjorie Slade (Camberley), David Light (RAF Menwith Hill), Stephen Frankish (Beverly), Alan Turner (Manchester), Carole Palmer-Gayle (London), Nigel Maggs (Abbey Wood), Christopher Rodgers (Beverly), David McCartney (Holywood), Christopher Reigate (RAF Cosford), Christine Titterington (RAF Leeming), Paula Sharpe (Swindon), Anne Ruscoe (Dstl), Elizabeth Ayres (London), Carole Kelly (Liverpool), Eric Barbero (Newport).



Dutch streets are paved with Abbey Wood gold

Iron will: Peter is pictured battling his way round Horst town centre

Picture: Jolekha Shasha

ABBEY WOOD'S very own 'iron man' turned silver into gold as he overcame Europe's best duathletes – combining running and cycling – on his latest outing in the Netherlands.

Peter Wheddon put an injury-hit 2011 behind him – he still achieved silvers at the European and World Duathlons – to win the Horst-based run-bike-run event.

The Powerman event was part of an international series akin to triathlon's Ironman series.

But at 15km for the first run, followed by a 60km bike ride and a further run of 7.8km the event was still 50 per cent greater than Peter had done before.

In a field of more than 500, he took on the best at the 55+ level and broke away from the pack on the first run along with Austria's Franz Gruber and 65-year-old Dutchman Bert Streumer.

"I was really pleased with my first run and got into a good rhythm on the bike but I had no idea how big a gap I had on my rivals," he recalled.

"I felt good for the first mile of the second run but the distance soon started to take its toll. I was struggling to maintain pace but got to the finish by breaking the circuit down into short sections to take my mind off the distance to the finish."

Peter finished in 3 hours 11 minutes 36 seconds to take the European title, two and a half minutes ahead of Denmark's Karsten Olson, with Gruber holding onto bronze.

Lucy Gossage won gold for Great Britain in the elite women's sprint duathlon.

"Since taking up running and duathlon when I reached 50, I have represented Great Britain at five European Duathlon Championships and four World Championships with either silver or gold medals at each," said Peter, of the Defence Safety and Environment Authority.

"My next target is the World Championships at Nancy, France in September. To compete at this level has required a lot of dedication, sacrifice and expense. I am grateful for the support Laurels and the Defence Sports and Recreational Association have shown me and it's great to repay this support by winning medals."

London cash helps Ghana villagers

RAF RUNNER Simon Bell put his best foot forward as runners from DE&S pounded the streets of London in the annual marathon.

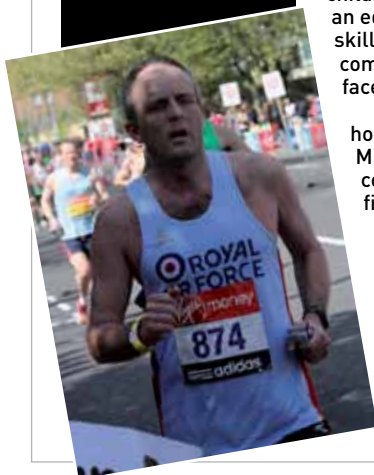
Simon, left, a squadron leader with DE&S' Air Defence and Air Traffic Systems team, has competed in half a dozen London Marathons, and was raising money for the Atorkor Development Foundation.

This foundation aims to combat poverty in the village in southern Ghana and support the children within its community to benefit from an education, together with providing many skills and building developments to help combat the immense poverty many families face.

Simon finished well up the field. "I can hold my head high, as yet again, Spiderman, Mr Blobby or any other costumed competitor did not manage to cross the finish line before me," he said.

Simon raised £500 for the charity.

Jonathan Hawkins of DE&S' Secretariat and Lorraine Collins of DE&S Ships Acquisition Type 26 GCS raised more than £2,300 from their London Marathon run for Backcare, a charity supporting and advising those suffering with mild to chronic back pain.



Plymouth's Forces pledge

PLYMOUTH HAS promised a first class programme for Armed Forces Day later this month.

Lord Mayor of Plymouth, Councillor Peter Brookshaw, accepted the flag on behalf of the city and said the city would do the Armed Forces proud in a series of events to honour personnel of the Army, Royal Navy and RAF, past and present.

Plymouth will host the national celebrations on Saturday 30th June in a spectacular event on Plymouth Hoe which will provide a unique opportunity to see the Armed Forces up close and will feature displays on land, sea and air from current personnel, veterans, cadet forces, the Merchant Navy, support agencies and charities.

The event programme will include the opportunity to visit *HMS Argyll* at anchor in the Sound, a moving Drumhead Service on the Hoe, a parade of Armed Forces past and present, an air show including a Typhoon and historical flights, an impressive steam past of British Naval vessels in Plymouth Sound and will culminate with a display from the Red Arrows.

There will also be a packed programme of music and entertainment including performances from the Military Wives Choir, a cadet band competition and highlights from the ever popular Music of the Night event.

The Armed Forces Day national event will be the grand finale of Plymouth's



A Sea King of the RAF's A Flight, 22 Squadron pictured at Plymouth Hoe to promote Armed Forces Day at Plymouth later this month

Armed Forces Week (25th June to 1st July), and will see visitors honour and celebrate the dedication of UK Armed Forces and their families.

This national event has become a regular feature in the British summer

calendar, having been held in Edinburgh and Cardiff in the last two years.

For more information on Armed Forces Day national event 2012 visit www.armedforcesday.org.uk or www.plymouth.gov.uk/armedforcesweek

DINs - released this month

Defence Instructions and Notices (DINs) are defence-wide instructions, guidance and notices for military and civilian staff, containing up-to-the-minute information to help people carry out their duties. Some of the latest issued on Defence Equipment and Support are:

2012DIN04-070: This instruction advertises the central enabling contract for purchase of MOD photographic equipment and associated peripherals.

2012DIN04-075: This details the latest procedures for the Joint Support Chain Requirements Change Process and the revised form used to request additional services from Logistic Commodities and Services. The process and associated form is a fundamental element in management of the Storage and Distribution User Requirements Document being populated.

2012DIN04-079: This describes the aircrew and groundcrew headsets and ancillary attachments to be considered obsolete. Air Defence and Air Traffic Systems delivery team will stop supporting headsets listed in the DIN's Annex A.

2012DIN04-081: This is to advise units of the new policy for implementation of high performance mooring and towing equipment, including demand, inspection, retirement, training, also new berthing and mooring techniques within the RN/Afloat Support platforms.

Further information and more details on the latest DINs see:

<http://defenceintranet.diiweb.r.mil.uk/DefenceIntranet/Library/CivilianAndJointService/AtoZ/DinsIndex2012.htm>

Our UK employees are proud to provide kit for Britain's armed forces. We design, manufacture and maintain fighter jets, armoured vehicles and naval vessels including the Typhoon aircraft, Scimitar light tanks and the Astute Class of submarine. But we're prouder still of the contribution and sacrifices made by our armed forces every day. Thank you.

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