

DIologue

The magazine of the Defence Infrastructure Organisation

Issue 4

June 2012



Defence
Infrastructure
Organisation



Spending to save

Featured in this issue of

DIologue



Trees for troops



On a re-basing note



Welcome

from Andrew Manley

Welcome to the fourth issue of DIologue magazine.

This is the first edition published since DIO's first 'birthday' – the organisation was established on 1 April 2011. So, now seems like a good time to take stock of just how far we have come in transforming the delivery of infrastructure to the Armed Forces and the MOD.

The pace of transformation over the last 13 months has been nothing short of incredible, and we have secured some major successes in our first year. These include obtaining Defence Board approval for DIO to explore potential future business models – you can find out what our Director of Business Partnering thinks about this on p6. We have also gained Defence Board approval to invest in upgrading DIO's Management Information System, and this is covered in more detail on p8.

The speed and the scale of the change programme mean that in DIO we are always managing several things at once – hardly surprising given that in relative terms our organisation is the size of a major FTSE company. In addition to the various strands of the transformation programme, we also run the day-to-day business of delivering Defence infrastructure; people are depending on us to provide them with somewhere to live, somewhere to work and somewhere to train.

So, over our first year, alongside working on our transformation programme, we have completed a number of key projects to deliver the support our Armed Forces need. These include upgrading 220 homes for soldiers at Bulford and providing the Kings Troop Royal Horse Artillery with new facilities. We have helped boost pre-deployment training by delivering a new grenade range on Salisbury Plain and been involved in a project which supports those injured on operations through training in archaeology. You can find out more about some of this work inside the magazine.

I believe that we have now reached "the end of the beginning" of the Defence Infrastructure Transformation Programme, and looking ahead, the coming months will see a period of implementation as we put in place the organisation's new operating model. So, for DIO the next twelve months are likely to be no less busy than the first!

Andrew
(Andrew Manley, CE DIO)



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DIologue

DIologue is the online journal of the Defence Infrastructure Organisation (DIO). It is available on both the DIO intranet and to external readers on the DIO website.

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PROJECT MoDEL COMPLETED AT NORTHOLT

The final upgrade to be made at RAF Northolt under Project MoDEL has been completed, with the replacement of the Military Working Dog Section facility.

Designed to rationalise the Defence estate in London, Project MoDEL has invested over £180 million in RAF Northolt over the last five years.



DIO integrated project team leader for Project MoDEL, David Salmond said:

“The delivery of the Dog Section has marked the end of over five years of construction works at RAF Northolt and the realisation of the vision to deliver a fit for purpose anchor site for Defence”.

MILESTONE REACHED AT ROYAL MARINE REHABILITATION FACILITY

A dedicated training facility for injured Royal Marines at Lymptstone in Devon has reached a key landmark in its construction.

The build has reached its highest point, traditionally known as ‘Topping Out’. The occasion was marked by a tour of the construction site with the Commanding Officer of Commando Training Centre for Royal Marines, Lieutenant Colonel Neil Willson RM.

Built by DIO in partnership with regional industry partner Debut Services, The Parker Hall Trainee Rehabilitation Project will provide state-of-the-art rehabilitation equipment for injured Royal Marines before returning them to mainstream training.



DIO DELIVERS HI-TECH OFFICES FOR US DEFENCE COMMUNICATIONS

DIO has delivered state-of-the-art offices for American military communications staff based at a North Yorkshire airbase.

United States Visiting Forces have moved into the £45 million facility at RAF Menwith Hill, near Harrogate.

Working with industry partners Balfour Beatty, Mott MacDonald and NG Bailey, DIO began construction of the building in spring 2009. The facility was completed on time and to budget in summer 2011.



SOLDIERS COME FIRST IN PADERBORN

Soldiers from 20th Armoured Brigade based at Normandy Barracks in Paderborn, Germany are benefiting from upgraded living accommodation delivered by DIO as part of ‘Soldier First’ – an initiative which aims to upgrade Army accommodation to improve the morale and general wellbeing of its troops.

The refurbishments have improved 110 bedspaces across ten blocks, as well as replacing equipment, renovating hallways and living areas and replacing old strip lights with energy saving lights.

MOD LAUNCHES FACILITIES CONTRACTS FOR ENGLISH REGIONS

Plans have been unveiled for the future provision of facilities management across the English regions and DIO has begun inviting industry to submit expressions of interest in three new regional prime contracts.

Developed under the Next Generation Estate Contracts (NGEC) programme, the contracts have an estimated combined value of up to £4.35 billion over a period of five to ten years with individual contract values ranging between £500 million and £1.8 billion. ■



The Defence Infrastructure Organisation:

ONE YEAR ON

Just over a year ago the Defence Infrastructure Organisation was born, heralding the start of a two-year programme to transform the way that facilities such as accommodation and military training areas are delivered to the Armed Forces.

DIOlogue has been looking back at the last 12 months to see how the transformation journey has progressed...

2011

April 2011: DIO launches

The Defence Infrastructure Organisation (DIO) is set up to deliver better strategic management of the Defence estate. Its formation brings together the majority of personnel working on MOD estate and



Andrew Manley with Dr Richard Freer, Defence Policy Advisor to the Prime Minister

infrastructure activity into a single organisation. Launching the new organisation, Acting CE DIO Andrew Manley says: "The creation of DIO will, over time, bring a radical new approach to the way we manage infrastructure and estates services across the MOD."

April 2011: Senior leaders get on board

DIO's senior leadership team attend a workshop to plan the next phase of the organisation's development, in what will become a regular forum. Andrew Manley comments: "While DIO launched last week, we have got to make clear that the next two years are a transformation journey. I don't think we will have the organisation operating as we really want it to until, probably, 2013."

April 2011: Andrew Manley announced as DIO Chief Executive



Permanent Secretary Ursula Brennan announces the appointment of Andrew Manley as DIO's new Chief Executive.

June 2011: Strategic Asset-management and Programme Team (SAPT) formed

The SAPT's formation will allow the MOD to manage its infrastructure assets at a strategic level.

August 2011: Industry consulted on future strategic options for DIO

Andrew Manley, comments: "Consulting with industry enables us to 'test' the options we have identified for running DIO in the

future. Some of the options currently on the table are quite radical, others are closer to the way we operate now."

September 2011: Head of Transformation appointed

Richard McKinney is appointed as DIO's Head of Transformation responsible for planning the transformation programme, monitoring its overall progress and ensuring the programme realises the defined benefits. ➤

A Service family outside their home at Bulford Camp



October 2011: DIO engages with Defence Infrastructure community

DIO's Executive Committee hold briefings to share details of the Defence Infrastructure Transformation Programme's (DITP) progress with those who use the facilities on a daily basis. The sessions enable DIO to understand their infrastructure requirements, risks and issues, ensuring that these factors can be considered within the transformation programme.



Permanent Joint Headquarters Northwood, was one of the locations for a briefing on the DITP

staff departures under the MOD's Voluntary Early Release scheme, DIO introduces a new process for recruiting for temporary business critical posts.

December 2011: Defence Board endorse proposals for DIO's Enhanced Operating Model and Technology Solution

The endorsement means that DIO can now press forward with designing the organisation's Enhanced Operating Model (EOM) and look into investing in the technology required to deliver business more effectively.



Refurbished Service Family Accommodation at Cavalry Barracks, Hounslow

November 2011: First temporary business critical posts advertised

To ensure that the organisation can operate effectively following



January 2012: DIO invites external parties to 'test' potential strategic business models

DIO issues a Prior Information Notice inviting the private sector to participate in a formal 'soft market testing' process to explore prospective roles for the private sector and review the commercial principles on which the private sector might be engaged.

January 2012: Director Business Partnering appointed

Dr David Marsh joins DIO in the new role of Director of Business Partnering, leading a team to look at options for future partnership arrangements for DIO.



Middlewick Ranges

February 2012: DIO staff start having 'Transformation Conversations'

The first DIO Transformation Conversation events take place at Wyton and Andover, giving staff an opportunity to discuss their ideas about the transformation with the organisation's senior leaders. One of the attendees says: "This event helped me to feel involved with the transformation and more prepared to support it." >

DIO staff participate in a Transformation Conversation at Warminster





DIO staff receive Leadership Awards from CE Andrew Manley

February 2012: More DIO staff presented with Leadership Awards

11 DIO members of staff are presented with Chief Executive Leadership Awards for work on both current business delivery and the Transformation Programme. The award scheme, started in December 2011, is designed to recognise staff throughout DIO and the Defence infrastructure community for their hard work and achievements in relation to the behaviours set out in the Defence Leadership Framework.

March 2012: Results of the soft market testing published

The results of the soft market testing exercise show that industry's preference is for DIO to transfer all operational activities to the private sector, and for a length of contractual term that would allow a Strategic Business Partner to fully transform the business and deliver long-term benefits.



RAF Boulmer



Air Commodore Alan Opie briefs staff

March 2012: DITP agree the high level organisation design

The Defence Infrastructure Transformation Programme Board (DITPB) agree the high level organisation design that DIO will move to by April 2013 as part of the Enhanced Operating Model. The design sets out the main different types of activity that the organisation will deliver.

What next?
 DIO will begin resourcing the organisation's new design later this year, with a view to establishing the Enhanced Operating Model in Spring 2013. This is also the expected start date for any future Strategic Business Partner to begin working with DIO. For more on this see page 6-7. ■

Breaking new ground

In establishing its radical new Strategic Business Model (SBM), that is expected to involve the private sector playing a more significant role in its business, DIO is preparing to venture into territory where the MOD has not gone before. Dr David Marsh, DIO's new Director of Business Partnering, has just signed up to lead this ground-breaking expedition and he explains to DIologue why he feels this is one journey well worth embarking on.



What skills and experience do you feel you will bring to this new role?

"Having worked in the acquisition community for the last 15 years, I have experience of major project and programme management and the interface with industry, which I think will be really important in terms of DIO's direction of travel with its SBM. I also have finance and IT management skills and from a personal level, I would say I have strong people management and change skills. This is something that I feel passionate about; it is really important for leaders to have those skills."

What attracted you to this role?

"There were several aspects which attracted me. First of all, I think it is an extraordinarily exciting project and clearly it is something that is at the cutting-edge of the changes that are going on within the civil service at the moment and it was an opportunity to come and be part of that very exciting change. I was also really attracted by the approach that DIO has taken to change, which is dynamic and all-encompassing. The fact the programme is looking at transforming all the key enabling aspects of the business at once – organisation, process, technology, and culture – is really impressive."

So what have you enjoyed most so far about working in DIO?

"I have to say the people have been incredibly welcoming; that's great for somebody new coming into an organisation. There is an impressive pace both to normal business and to the transformation that is going on and a really flexible approach to working; I find that incredibly energising."

What have you already identified as the key challenges in setting up a new Strategic Business Model (SBM)?

"There is a highly demanding timeline to implement the SBM."

And what makes that even more challenging, I think, is that this just hasn't been done before. So on top of what is a really huge ongoing transformation programme, we are working towards a radically different approach to the future management of Defence infrastructure. Getting that vision shared amongst the major stakeholders is going to be a big challenge and finding the appetite within that community to come with us on the journey is going to be equally challenging. That goes for industry as well; this is very new for them and so getting some clarity with potential bidders about what we are looking for and what we are actually trying to achieve is critical." ▶



In your opinion, what benefits do you think a new strategic business model will deliver?

"It is true to say that up till now the size of our Defence infrastructure portfolio has not reduced in line with the size of the workforce. So there is a lot of catching-up to be done, which will deliver benefits to MOD and then there is more development of the portfolio required because we have the current and future needs of a transforming MOD to deliver against too.

"The only way in which we can achieve the pace and scale of the change required is to have a dynamic and flexible approach in future. Bringing together the skills we have as an organisation with the skills and disciplines of private sector organisations is the way we will

get there. This is the thinking behind the SBM."

But how will a new SBM save the department money?

"A private sector partner will bring a more commercial culture and practice into the way we operate the business. It will also drive significant challenges back into the MOD – about how we manage our infrastructure. The flexibility, and commercial incentives of private sector practice will allow us to bring together the right people, with the right skills, at the right time. Together with the ability to implement reductions in the size and scale of the asset base much faster than we currently are, this is where the real opportunities are for saving significant amounts of money."

David Marsh in five questions

Where are you most likely to be found at the weekend?

Driving my teenagers to various sporting or social events.

Which of the Mr Men do you feel best reflects your personality?

I have no idea! I would like to think it's Mr Happy though.

Who or what has been the greatest inspiration in your life?

My parents.

If you could switch places with someone for a day, who would it be?

Bruce Springsteen – on a concert day!

Which football or sports team do you support?

It depends on the sport – Colstons Under 13A (rugby, hockey or cricket) or Downend Saints U13 (football), but there is a link! ■



Dr David Marsh

The Strategic Business Model: In Brief

Work following on from the 2010 Strategic Defence and Security Review identified that there were a number of potential models for managing DIO in the longer-term. Since its launch last April, the DIO has been looking at what these 'other models' might be.

In November 2011 the Defence Board reviewed the work DIO had undertaken and endorsed it to continue.

A Prior Information Notice (PIN) was issued in early January 2012 to seek industry's views on some of the options. This work suggested that DIO should work towards a full transfer of DIO's operations to the private sector. This March, the Defence Board reviewed this proposal and DIO will also be seeking permission to commence procurement for a private sector partner.



Getting IT right

In November 2011 the Defence Board gave DIO approval to invest in upgrading its Management Information System (MIS). The organisation is seeking to establish a fit-for-purpose, estate based MIS, which will allow DIO to maintain up-to-date data on the estate and to 'e-enable' some of its main processes.

Technology Solution Lead, Peter Lemon, and his team are charged with the complex task of sourcing and implementing the dynamic new Infrastructure Management System (IMS) that DIO needs. Peter explained to DIOlogue why better strategic management of the Defence estate and an integrated IT solution for MOD's infrastructure community, are just a few of the benefits that this new technology will bring.

What is DIO's current technology situation?

At the moment DIO uses over 100 different estate management systems, most inherited from Defence Estates. The incoherent and incomplete data provide no single version of the truth, and lead to a reliance on manual analysis of information. This also hinders properly informed decisions about the strategic management of the MOD estate.

What will the IMS bring?

The system, a 'commercial off the shelf solution' (COTS) will replace legacy systems and bring the latest

technologies and industry best practice to deliver new information capabilities to DIO. This will help DIO more effectively manage MOD infrastructure assets, prioritise investment, and maximize effective and efficient use of the MOD estate. It will draw on data held by industry partners and provide a single version of the truth.

What work is already going on and will it save DIO money?

We are currently verifying the DIO assets and in parallel we will carry out a major data cleanse over the next 12 months to ensure that only suitable, verified data is migrated to

the new system. Subject to Cabinet Office approval we aim to acquire the new IT capabilities by September 2012 and will implement them in increments starting in April 2013 and completing in April 2014. The technology will deliver savings for DIO by allowing us to 'e-enable' our processes and rationalising those we currently use.

How does the IMS fit in with the rest of DIO transformation?

Technology is a crucial part of the transformation of DIO. The Enhanced Operating Model (EOM) that our business will move to in 2013 will see our organisation design, business processes and technology radically change. Technology will underpin the new business processes, 'e-enabling' them wherever possible to make peoples' lives easier. IMS will also fill the information gaps outlined by the National Audit Office and the Public Accounts Committee in their reports into management of the Defence estate. ➤

Peter Lemon



How will the technology solution affect the way DIO staff work?

Everyone in DIO will use the new system to undertake their day-to-day tasks instead of a number of disparate systems and spreadsheets they currently use. It will be hosted on Defence Information Infrastructure (DII), the standard MOD IT system and accessed through a web browser. Full training will be provided to staff at the key 'drop points' (the stages at which capabilities go live).

Who has helped to draw up the new solution?

My team have engaged widely with DIO staff and users, including running around 100 workshops at which at least 300 people contributed to the design of the User Requirements, DIO Data Standards and Metrics Catalogue. This catalogue covers all the data that the organisation needs to function, e.g. project, space and facilities management and sustainability.

Are there any examples where DIO is already using technology?

Some processes such as housing allocations have already seen significant e-enablement. Instead

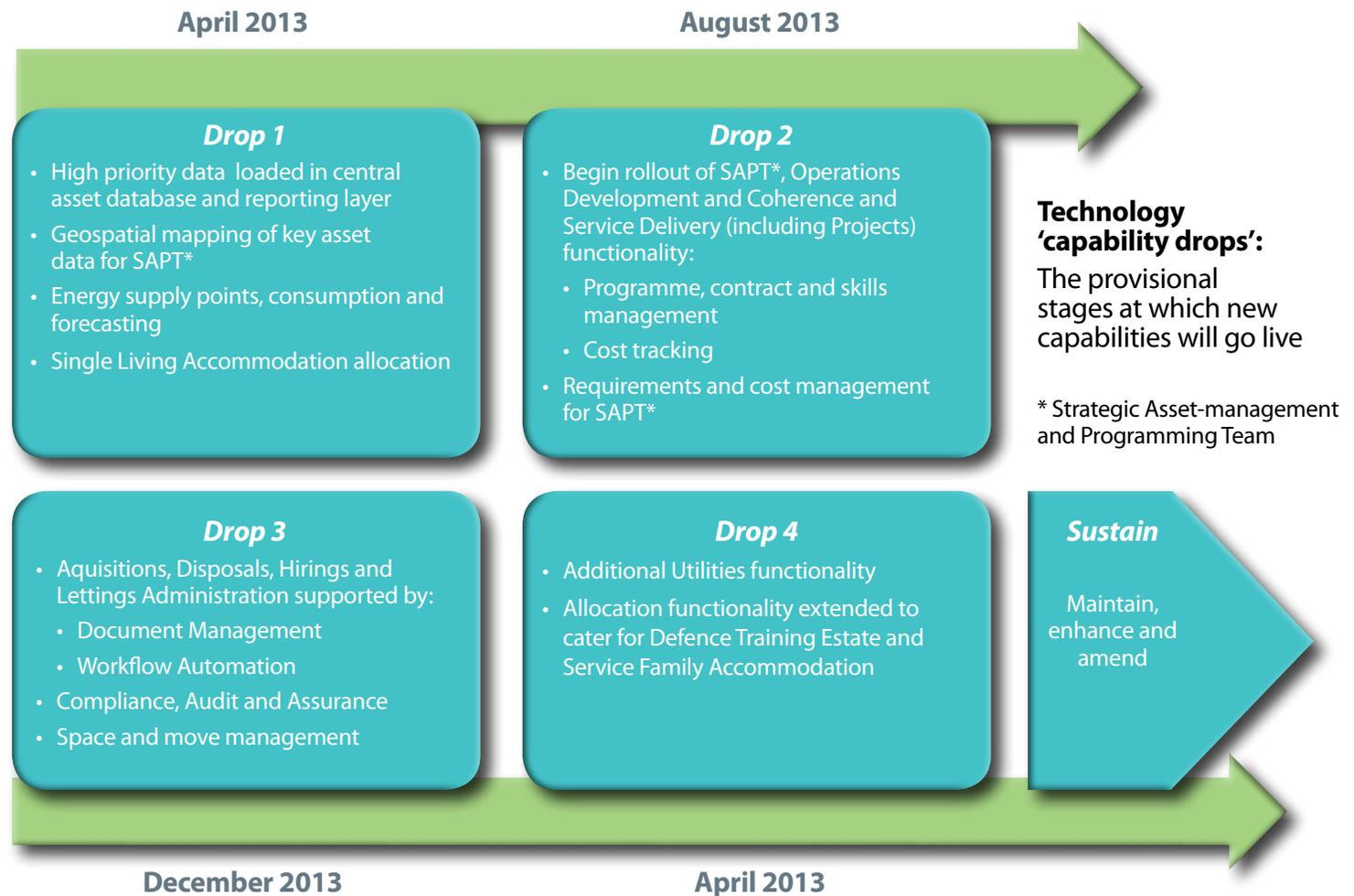
of 17 different ways to apply for a house, service personnel will now have a single, simplified method.

How will this help DIO's users?

The IMS will seamlessly connect our new processes with our people,

providing accurate and up-to-date information to our users. This will allow them to make evidence-based decisions about their estate requirements based on running costs, and to help meet government estate rationalisation targets.

The system will improve the current requirement management process and aim to increase user satisfaction. ■



Technology 'capability drops':
The provisional stages at which new capabilities will go live

* Strategic Asset-management and Programming Team





Marching to a new home

Question: Which state-of-the-art Defence facility is powered by the bedding of some of its occupants?

Answer: The environmentally friendly new home of the King's Troop Royal Horse Artillery (KTRHA) at Woolwich.

DIologue spoke to some of those who have worked on the project to deliver the KTRHA's new base, which the unit marched into earlier this year.

"There are 120 horses in residence for 42 weeks per year, producing approximately 50 cubic metres of equine waste – horse dung and bedding – per day, or 40 tonnes per week", says DIO Project Manager Clem Adekoyejo.

Utilisation of equine waste as a biomass fuel will significantly reduce the KTRHA's carbon footprint and fuel costs at their new location, by replacing the need to burn fossil fuel to provide hot water and heating. This is just one of a number of sustainability initiatives built into the

development – which also includes solar chimneys to ventilate the stables.

The unit's new base – which features modern equestrian facilities, with external training areas in close proximity on Woolwich Common – was delivered by the Defence Infrastructure Organisation (DIO) through a contract with Morgan Sindall, as part of a programme to relocate the KTRHA from St John's Wood Barracks to Napier Lines, Woolwich. ➤

HRH the Duchess of Cornwall meets members of the King's Troop Royal Horse Artillery



The unit had been stationed at St John's Wood Barracks since its formation by King George VI in 1947, and left the barracks on the anniversary of their royal creator's death in February 2012, following the end of the site's lease.

Work on their £16 million new home started in September 2010 and its recent completion has not been without fanfare; the unit's move to Woolwich involved a bustling array of galloping horses, marching soldiers, ceremonial bands and singing children and was witnessed by crowds of people. Following the march-in, the Duchess of Cornwall formally opened the facilities in March, unveiling a plaque to mark the naming of the KTRHA's new home as King George VI Lines.

Clem believes that the working relationships between those involved in the delivery of the Woolwich facilities were a critical factor in their success. "The delivery was made possible through constructive input from colleagues within DIO and the wider MOD, working in a positive manner with an enthusiastic and dedicated site team from Morgan Sindall," he says. "I am delighted that this project has come to fruition after a period of hard work for almost four years by the core Integrated Project Team (IPT), supported by Subject

Matter Experts as members of the wider IPT."

"This is a good value for money project which was delivered in time for KTRHA to move into before the lease on St John's Wood barracks expired."

DIO's contractor Morgan Sindall PLC, will be responsible for maintaining King George VI Lines during a seven year compliance period. David Sershall, Area Director for Morgan Sindall, also highlights the successful collaboration as key to the successful completion of the project. "The Morgan Sindall team is proud to have worked closely with DIO as their official industry partner on the KTRHA development. Together, we have successfully delivered a bespoke base for the Troop, complete with pioneering sustainable elements and state-of-the-art equestrian facilities. The success of this development has been based on a mutually respectful culture of collaboration and we are delighted with the outcome."

Accommodation has also been provided for King's Troop soldiers; two SLAM (Single Living Accommodation Modernisation) blocks, consisting of more than a hundred bedspaces and costing £7.2 million are based at the main Royal Artillery barracks. Members of the KTRHA who have moved into

these blocks are delighted with the improvement on their previous quarters.

"I am really pleased with the new accommodation," says Gunner Morrison. "My room is so spacious compared to my old room which I used to share with three other soldiers. We also now have an en-suite bathroom each which is fantastic. We all still socialise though in the common room which each set of flats have."

His colleague Lance Bombardier Duke agrees. "Living in the new SLAM block is such a change from the old accommodation. The ability to cook our own food and the privacy of our rooms has changed the way we all live." ■



King's Troop Royal Horse Artillery ride down St John's Wood High Street as part of a final farewell to the area

Ones to watch

Three things that DIologue readers may want to keep their eye on this quarter...

1 OPERATION 'STEP-CHANGE' LAUNCHED FOR LONDON 2012

The Government has committed its departments to 'positively change 50% of central government travel in London during the Olympic Games'.

As part of this, a new scheme has been launched to help ease congestion and ensure work can continue during the London 2012 Olympic and Paralympic Games.

Operation Step Change aims to change the way people travel to and from work by encouraging staff who work in London to consider alternative ways of travelling. This includes suggestions such as reduction of travel during busy times and alternative working patterns.

For more information, [click here](#).

2 CHANGES TO PADR PROCESS AND RECRUITMENT

The Defence Transformation and Reform agenda has placed great importance on making the right decision when it comes to recruiting and filling posts.

In order to facilitate this, from 2 April 2012, anyone who applies for a post from stage 0 (RDP matching stage) is required to submit a copy of their most recent Performance Appraisal and Development Report (PADR) with their application.

The PADR will then be used in conjunction with the competence evidence from the application form, as part of the sift selection process.

Most staff can find their PADRs on HRMS where they are available for download. They can also be obtained from the [People Services Centre](#).

3 2012 SANCTUARY AND ENERGY AWARDS

Nominations are being sought for the 2012 Sanctuary and Energy Awards which recognise the efforts of groups and individuals to improve the environment on land and property owned or used by the MOD.

The awards also recognise those who seek to raise energy awareness by helping to achieve carbon reduction targets and reduce the amount spent on energy.

The MOD Sanctuary Awards have been running since 1991 and recognise both group and individual efforts for projects on or within land and property that the MOD owns or uses in the UK or overseas. There are four categories of award: Environmental, Sustainability, Heritage and Individual, with the Silver Otter Trophy awarded to the overall winner.

The MOD Energy Awards were introduced in 2010 and aim to recognise individuals and teams for their efforts in the UK and overseas to conserve energy and cut carbon emissions.

For more information [please click here](#).



Spending to save

Sometimes, you have to spend money to save money. DIO is currently leading a programme which aims to do just that for Defence – by investing over a hundred million pounds on a range of initiatives that will cut the Defence energy bill by £70 million every year.

The principle behind the Energy Spend to Save programme is the same as – for example – replacing an out-of-date boiler at home with a newer, more efficient model. Although there is an initial outlay, the fact that an ongoing energy requirement is being met more cheaply and efficiently means long term savings.

The programme will pump £105 million into Defence energy saving projects over three years. The aim is to save £110 million by 2014, and £70 million each year thereafter – a savings target which was recommended in the Strategic Defence and Security Review study 'Rationalisation and Development of the Future Estate'.

The potential savings sound great, but there's no point in upgrading the hardware unless we all get even more switched on about 'switching off'. While the programme will take care of the investment that

is required, making the necessary energy savings will require everyone in Defence to do things a bit differently.

"Spend to Save alone will not deliver the full benefit and needs to be supported by behaviour change", confirms Matt Foley, DIO Head of Utilities, who leads the team responsible for delivering the programme, "The money is about investing in building controls, heating controls, different lighting, etcetera. All of that good work is potentially undone if you haven't got Defence personnel acting in a responsible and appropriate way. As an example, you can replace all the lightbulbs with low energy ones, but if no-one switches the lights off overnight, that undermines the benefit that you would otherwise expect."

Investment will be focused on MOD's highest energy consuming sites – not surprisingly these include the six main RAF operating bases, the

naval bases and Land Forces Barracks across the UK, Northern Ireland and the Permanent Joint Operating Bases. "We're linking in to the sites where we're making investment and using the fact that money is being spent as the traction we need to develop behavioural change around the sites", explains Matt.

So, if you are based at a Defence site that has seen Spend to Save investment, what can you expect? Changes may include heating control upgrades, insulation, lighting upgrades and new refrigeration facilities – all of which pay back their costs in 18 months or less.

The huge savings targets may sound ambitious, but Matt is confident that they can be met: "I've just presented the first year's results to the ➤



Defence Infrastructure Operating Committee (DIOC), and – based on the savings accrued to date and projecting forward – we are assured that we are on track to make the savings target.” DIO’s leaders agree – they have recently signed off the release of the £40 million investment for 2012-13.

Of course, it isn’t just money that is saved when energy usage is cut; the carbon reductions associated with the programme will be a major contributory factor in Government targets for the reduction of CO2 emissions. In fact, the first year of the programme alone will provide a 4.4 per

cent contribution towards the Department’s ‘Greening Government’ target to reduce carbon reduction by 25 per cent by 2015.

An added bonus resulting from the project has been the closer working relationships that it has built between DIO and its external partners: “One of the key successes that we’ve had to date is that we’ve got DIO industry partners and Defence estate users working together to identify projects” says Matt. “That collective approach has allowed accelerated delivery to be possible. Team working is critical in all of this.” ■



Energy managers monitor energy usage data

SPENDING TO SAVE IN ACTION: THE CENTRAL REGION ENERGY BUREAU

In support of the Spend to Save programme, DIO’s industry partners are delivering Strategic Energy Management Services across the estate. CarillionEnterprise is delivering a ‘Bureau service’ for the 35 highest energy-consuming Defence establishments in the Central region which is expected to save £2.6-£3.5 million over three years, after it has paid back its own costs each year.

The Bureau service monitors and controls the operation of systems that use energy – such as heating – at each site, records consumption and provides monthly performance reports showing how closely each site is meeting its energy reduction targets.

Each site is connected to the bureau via its Building Management System and on site metering. The data from each site is fed back to a central ‘hub’, where it is reviewed by a dedicated team on a daily basis.

This information allows the Bureau to identify where energy is being wasted on a site – for example, it can identify where the heating is on in an unoccupied building and can then switch it off remotely, with customer agreement. The data also enables the Bureau to identify further opportunities for investment to reduce energy use and carbon emissions.

The monitoring provided by the Bureau also enables estate managers to immediately identify plant and equipment faults via alarms. This means that the right maintenance specialists can be quickly deployed and reduces unnecessary call-outs and associated costs.



A 'Stirling' job

In May 1942, a Stirling aircraft returning from a mission to drop propaganda leaflets over enemy territory crash-landed in West Sussex. 70 years later, its remains have been excavated by soldiers injured in Afghanistan, as part of a ground-breaking project which is using archaeology to aid their rehabilitation.

Operation Nightingale is the brainchild of Sergeant Diarmaid Walshe attached to 1st Battalion, The Rifles. Since September 2011 the project has organised a series of archaeological excavations on the Defence estate, assisted by soldiers who have sustained injuries on operational duty in Afghanistan.

The excavation of the crashed Stirling was carried out by soldiers from 1st Battalion, The Rifles, who made a full survey of the crash site and the excavated aircraft. The Riflemen worked under the supervision of archaeologist Richard Osgood, Senior Historic Advisor of Defence Infrastructure Organisation and Sergeant Walshe, with support from a number of partners including English Heritage, Canterbury Archaeological Trust, Wessex Archaeology and the Army's survey unit, 135 Geographical Squadron.

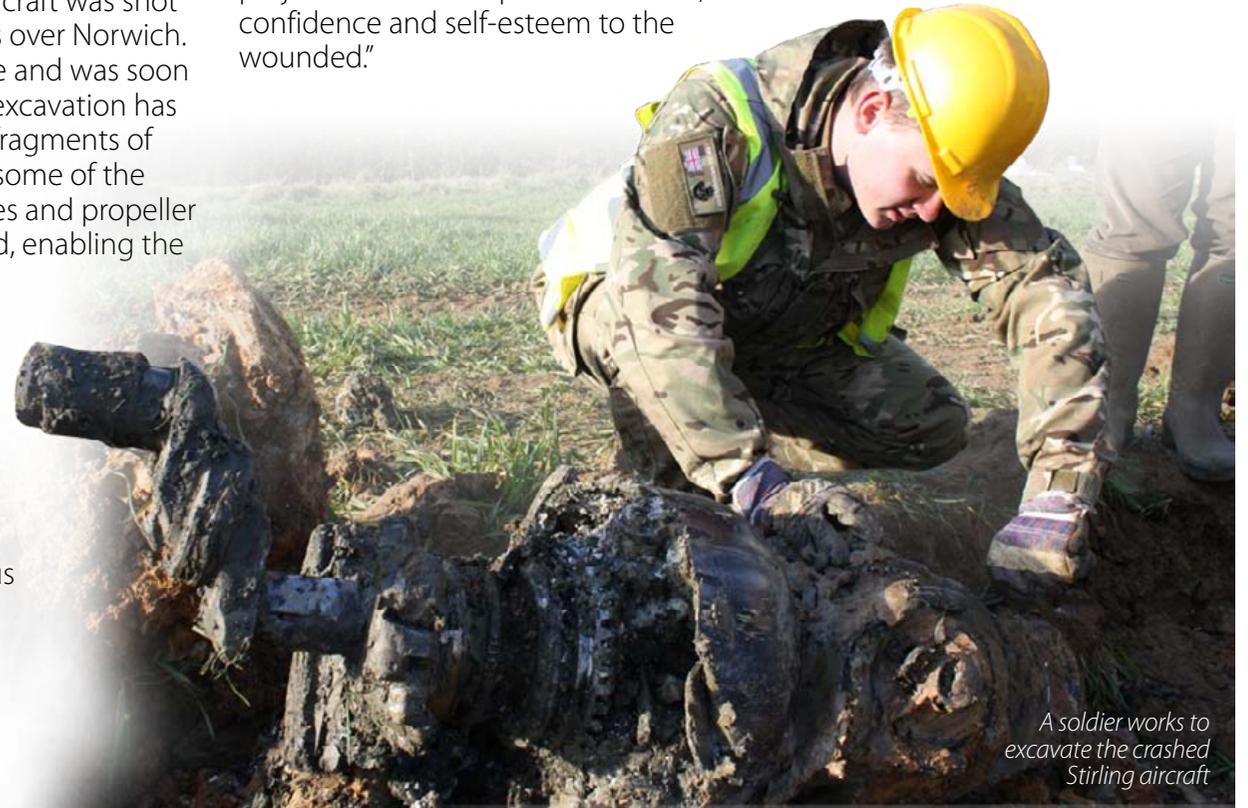
Records dating back to World War II reveal some details of the incident,

showing that although the Stirling's mission was successfully completed, it was brought down by so-called 'friendly fire': "...the aircraft was shot at by our own fighters over Norwich. The aircraft caught fire and was soon fiercely burning." The excavation has filled in some gaps – fragments of the aircraft including some of the Bristol Pegasus engines and propeller hubs have been found, enabling the team to establish exactly how the Stirling crashed.

Fortunately RAF records show that despite the bomber's fate its crew bailed out and landed without serious injury. Years later, the excavation is being carried out by those who have

been less lucky in a conflict of a very different nature. "These soldiers have all endured a lot during operational tours," says Sergeant Walshe, "Due to the complex nature of their injuries, both physical and mental, sustained in Afghanistan, the Army is always looking at new and innovative ways to promote recovery. We have a duty of care to those injured overseas in the service of the nation, in what has been termed the 'military covenant' and it's important to find projects that can help restore fitness, confidence and self-esteem to the wounded."

Operation Nightingale is very much a 'two-way street' – the soldiers involved in excavations get the opportunity to learn new skills while they, in turn, bring their military experience to the project. "The military skills of the soldiers are perfect for the study of archaeology", confirms Richard Osgood. "For example, the appreciation of landscape and topography, looking for objects in the ground and, of course, the ability to dig." ➤



A soldier works to excavate the crashed Stirling aircraft

The soldiers' skills and knowledge also gave them an invaluable insight to the discoveries made during the excavation of the crashed Stirling bomber. "As someone trained to use machine guns, one of the artefacts that particularly interested me was the remnant of a belted .303 round from one of the aircraft's guns," says Rifleman Wayne Birnie. "It had been chambered and was then extracted, unfired. You could imagine the relief of the air gunner on completing this task as he felt he had returned home safely, only for the aircraft to be brought down soon afterwards."

Operation Nightingale is an example of the support that DIO provides to military operations, which extends from the provision of suitable training facilities, through to aiding soldiers on their return from operations. The project means that the soldiers can continue to contribute to the military effort, by supporting the management of the Defence estate.

"Along with my colleagues in the Historic Environment Team, we are exploring how soldiers on Operation Nightingale learning field skills useful for their future career can assist us in protecting the MOD's historic environment," says Richard. "For example, soldiers learning new survey techniques could hone their skills on a historic building or scheduled monument and at the



Soldiers use archaeological techniques to excavate the remains of the Stirling aircraft

same time provide us with a product which enables us to better manage the estate."

So, what do the soldiers have to say about participating in the excavation? "This project has given me a real sense of achievement and purpose as I'm going to be medically discharged from the Forces," comments Corporal Steve Winterton, who was seriously injured in an

enemy contact in Afghanistan in 2009. "The project has opened a new career path within archaeology and with the skills I've been taught, I can now transfer them into archaeology.

"I left school at 15 with few qualifications but because of this experience, I can now plan to go to university to study archaeology.

"I have had the opportunity to work on a prehistoric midden, Roman

buildings and Second World War remains. I have had a long-standing interest in conflict archaeology and recovering the surviving sections of this historic aircraft was fascinating."

The excavation of the Stirling aircraft and the work of the Operation Nightingale team was featured in 'War Digs' on the Discovery Channel in May 2012. ■



Trees for Troops

Cadets help with tree planting at Jubilee Wood, Grantham

Woodland often plays a vital part in securing the success of military operations – whether soldiers use the sanctuary of forests to advance or to rest overnight to regroup and plan their tactics for the next day. DIologue looked at an innovative partnership which is creating woodland that can be used for military training across the Defence estate.

To use woodland effectively on military operations, soldiers need to train in surroundings that mirror what they will find on the ground in theatre. To help increase the opportunities for this type of training in the UK, the Defence Infrastructure Organisation (DIO) has entered into a ground-breaking partnership with the Woodland Trust – the UK's leading charity championing native woodland and trees. ➤



The alliance secures wins for both partners. DIO gets to create valuable woodland cover across its training estate, whilst the charity moves closer to hitting its target of doubling native woodland cover across the UK by 2050, for the benefit of people, wildlife and the environment.

Prince William of Gloucester Barracks, Grantham (PWOGB), is the latest project for the partnership, which was established in March last year. Staff from the charity's head office joined forces with troops based at the Barracks to plant the first 2,000 of 84,000 native saplings, which will ultimately grow into a 70 hectare woodland.

As well as providing valuable forest cover for military training exercises, the trees will form a Diamond Wood, part of the Jubilee Woods project marking The Queen's Diamond Jubilee in 2012. Local residents will also have the opportunity to plant trees later in the year, as the Trust plants some six million trees to mark the occasion.

Speaking about the project, DIO Chief Operating Officer David Olney says: "We're delighted to continue our partnership with the Woodland Trust and respond to military training needs in providing woodland cover to benefit soldiers preparing for operations.

"The excellent initiative at Grantham allows us to continue to improve training facilities, whilst securing significant conservation and environmental benefits at no extra cost to the MOD. It also provides a magnificent and enduring celebration of The Queen's Diamond Jubilee."

PWOGB commander Colonel David Kelly OBE adds: "Prince William of Gloucester Barracks welcomes this opportunity to embrace the economical and environmental sustainability benefits, allied to a fitting monument for the Queen's Diamond Jubilee celebrations.

"The site will also benefit by enhancing its training capability at no cost to the Defence budget. Opportunities for long and short term civil engagement will also present themselves and this project will mutually benefit all involved."

The partnership between DIO and the Woodland Trust began in spring last year with a massive tree-planting exercise at the Defence Training Estate (DTE) range at Warcop, in Cumbria, situated in the North Pennines Area of Outstanding Natural Beauty (AONB). This saw the first 160 hectares planted with some 176,000 trees of native species.

The range's location in the AONB meant that essential funding of over £100,000, plus logistical support, was provided by the North Pennines AONB Partnership's 'Living North Pennines' project, with extra money secured from carbon reduction funders, such as Waitrose and Eurocamp.

Of course, beyond the military training gains, woodland and trees deliver a host of benefits: enhancing the landscape and improving the environment for people and wildlife, absorbing and storing carbon, as well as sheltering crops and buildings.

Stuart Dainton, Head of Partnerships at the Woodland Trust highlights that the partnership has brought mutual

advantages: "Our partnership with DIO is playing a significant role in helping to increase woodland cover in the UK, currently one of the lowest in Europe. It is a great example of working together.

"Whilst each organisation has different motivations, everyone involved benefits from the planting of trees. Working with DIO and Prince William of Gloucester Barracks on this latest project will also ensure that we have a Diamond Wood a stone's throw from our head office in Grantham."

DIO is now working with the Woodland Trust to identify more sites suitable for planting, to further increase woodland areas on the military training estate across the UK. ■



On a re-basing note

The MOD's Basing Optimisation Programme (BOP) is a complex composition. And conducting the delivery ensemble is DIO programme manager Nigel Chew, who explains to DIologue how, with his BOP colleague Roger Talbot, he is keeping this dynamic tier 1 Defence programme in tune and on tempo.

The Basing Optimisation Programme will help deliver a Defence estate which meets the Services' needs in 2020 and beyond. DIO is providing the infrastructure needed to support the Army's return from Germany, along with associated basing changes for the RAF and Royal Navy.

Managing complex programmes is not new to Nigel though; his former roles include Programme Director of the MOD Science and Technology Programme. He likens his current high-profile role to that of a conductor charged with building and tuning an orchestra.

"There is a lot of work involved in re-basing," he explains. "It's a large and complex activity. My role has been to bring together people from different backgrounds, help form them into a strong team and ensure that we work quickly and effectively as we move forward."

Nigel's team has been working on a series of capacity studies, which will complete by early summer. This work will help establish how DIO can best configure the estate to support current and future military requirements. Detailed proposals will be submitted to Ministers towards the end of the year, linked to work being carried out by the Army on its future shape.

Nigel explains what has made his team so strong. "Its strength comes from the fact we have three contractors – Mott McDonald, URS Scott Wilson, and White Young Green – working together with DIO staff and secondees brought in from industry to conduct the capacity studies. We are working as a single team, which includes members of the DIO Strategic Asset-management Programme Team (SAPT)."

"Our core work at present is to understand what the infrastructure options are in different regions and we have received a fantastic level

of support and engagement," adds Nigel. "Part of our role is to develop relationships within and beyond DIO, as stakeholder relations will be critical in delivering results which meet the needs of our Armed Forces."

Nigel explains that he and other team members have been hard at work on building constructive and productive relationships – not just within Defence, but with interested parties ranging from councils in the south of England to the Scottish Government.



Nigel explains: "BOP, like other complex programmes, needs an open minded and broad approach but we will only get good outcomes if this approach is underpinned by solid data and numbers." He adds: "I've had to face the interesting challenge of building the team and getting everyone up to speed when many members are spread across the UK, from Plymouth to Edinburgh. I love building on the fresh-thinking and innovation that results from their different points of view and experience."



Nigel Chew



Did you know...

... that the rich culture and heritage of Afghanistan is being celebrated on our training areas?

DIO's archaeologists have been working with military colleagues to increase awareness of Afghanistan's past, as part of their training for overseas operations.

The Afghan village at STANTA has a permanent museum display in one of its buildings, while Salisbury Plain has a portable museum that can be set up in any of the Afghan settlements created for pre-deployment training. These museums may be used as briefing tools or as the backdrop to training scenarios.

Respect for cultural heritage has been an increasingly important factor in overseas operations and perceived lack of care for ancient sites has been used as propaganda by insurgents. In addition, looting of some sites has been an income stream for the enemy. The museums can be used to help understand these issues.

Although Afghanistan may appear arid and desolate, it has been the cross-roads of trade routes connecting The Orient and The West for thousands of years. Today's dusty hamlet may once have been the traditional halt of caravans on



A shura takes place at the Afghan village at STANTA

the Silk Road or the palace of a nobleman grown rich on control of trade.

The Afghan people care about their heritage, as the sign in front of the National Museum in Kabul says: "A nation stays alive when its culture stays alive". Meanwhile, some Afghans see heritage as an important economic asset for the future, anticipating tourism to archaeological sites like Jam, Herat, or Alexander the Great's city at Ai Khanum.

Martin Brown, archaeologist with DIO said: "We were pleased to respond to this unusual request for support to ops by creating the museums and are happy to know they are helping personnel better understand the operational environment.

"We got a very positive reception to the initiative from bodies, including the British Museum shop, who donated replica artefacts for our museums. As one of them said; "If this initiative helps save lives and heritage then we want to support it." ■