Dstl wargames the power of influence

The event provided an opportunity for civil servants and military officers to experience wargames based on influencing behaviours using physical and non-physical force, share specialist knowledge and identify potential user requirements for further investigation.

Held on Monday 19 July at QinetiQ's Training Innovation Facility, and attended by UK Ministry of Defence (MOD) and government representatives seeking to integrate influence activities into their areas of work, the event was organised by a multi-disciplinary team comprising members from across academia, industry and defence.

The conference showcased wargames developed as part of the Defence Science and Technology Laboratory's Representation of Behavioural Effects (RBE) project. The RBE project conducts science and technology (S&T) activities to improve the representation, integration and synchronisation of non-kinetic / behavioural effects in decision-support tools such as wargaming, modelling and simulation.

Wargames provide structured and safe-to-fail environments to help explore what works (winning / succeeding) and what doesn't (losing / failing). At the core of wargames are: the players; the decisions they take; the narrative they create; their shared experiences; and the lessons they take away.

The work from this conference will help determine how better to wargame influence and how to include influence within wargames that have not considered it before. Incorporating influence within wargames will better represent the current and future character of warfare, as set out in the Integrated Review and thus better informing decision-making within UK government.

Crown Copyright. Photographer: SAC Charlotte Hopkins, JIAG

The event was supported by the Joint Information Activities Group (JIAG), which trains around 600 people a year in influence activities. Commanding Officer Lt Col Pat Owen said:

At JIAG we use wargaming to support our training in several areas, and it has always proved popular with both students and staff. We're delighted to have been part of the workshop, and look forward to supporting the research project in the future.

Jess Lowe, the lead for Dstl's Influence Programme, stressed the importance of the work, which will serve to promote best practice through the creation of a Development, Concepts and Doctrine Centre (DCDC) Wargaming Influence Handbook. Jess said:

Information advantage is at the heart of how UK defence must operate to achieve influence in this more complex and competitive world.

This Wargaming Influence Conference was an opportunity to share, test and improve the novel concepts and approaches that Dstl is developing to help decision-makers in UK defence and government better plan and achieve influence overseas.

Commenting on the success of the conference, DCDC's Chief of Staff, Group Captain Martin Ogden, added:

We are grateful to all those who contributed — their valued input will enable us to assess and, where appropriate, develop game methods and mechanisms that can be used by the MOD community to represent and adjudicate influence activity for concept, capability and warfare development purposes.

The generation of the handbook from this research is a great demonstration of how we can work together with Dstl to close capability gaps and provide useful guidance for practitioners across defence.

IP at the heart of new innovation strategy

Innovation is critical in tackling the UK's biggest challenges, including achieving Net Zero, levelling up growth across the country, achieving our ambitions as a global trading nation and economic recovery from the Covid pandemic.

IP will play a central role in creating the right environment to meet these challenges. An effective IP system gives confidence to businesses, creators and investors that ideas will be protected and they can get a return for their work.

The Strategy outlines how IP will address its four pillars of unleashing business, supporting people and skills, serving the needs of institutions and places and stimulating missions and technologies. Specifically, the IPO will:

• launch a new 'IP Access' fund that will help businesses to grow and to build back better from the Covid pandemic. Building on the already successful IP audit plus programme, this new scheme will support

businesses to manage and commercialise their IP so that they can use the value within their IP assets to grow their business

- launch a new, free, fit for purpose support offer for businesses and organisations to make the most of their IP in overseas markets. The service will consist of easy to access, 'self-serve', online materials and clearer routes to access the UK's network of IP experts based in key export markets around the world
- extend its education programme to reach more higher education-based researchers during the next academic year. This will help them better understand and manage the IP they create and generate the maximum benefit from their research

In addition, the IPO will consult a number of issues to strengthen the UK's IP system, and in the Autumn it will consult on the protection of inventions and creations made by artificial intelligence (AI) with minimal human input. Following its 2020 call for views the IPO will look at options to address whether patents should be granted to inventions, and copyright should apply to creative works, created by AI.

The IPO will also lead a call for views to better understand how the current framework for Standard Essential Patents (SEPs) is functioning to support innovation, and to establish whether change is needed.

The IPO set out in its Corporate Plan a programme of work that will support the government's focus on innovation including developing an IP & Innovation Passport and an IP in Finance strategy alongside a framework linking IP to stages in the business lifecycle. It will also publish a Places Strategy and along with existing regional posts that will support the levelling up agenda.

The IPO's Chief Executive Tim Moss said:

Innovation is critical in tackling the UK's biggest challenges both now and in the future.

The UK's new Innovation Strategy is the starting point for the government's long-term vision of how we will cement our role as global leaders in innovation and deliver the target of R&D investment at 2.4% of GDP — and it has IP running through the heart of it. The strategy recognises that a strong IP system, that protects and allows for a return on investment on ideas, creates the confidence on which this success is built.

We know that innovation is the engine of the modern economy and we're proud of the contribution we're making to drive that forward.

Notes for editors

The <u>government's Innovation Strategy</u> was published by the Secretary of State for Business on 22 July. More information on the IP elements can be found in the 'Safeguarding Intellectual Property' section of the strategy.

The <u>IPO's Corporate Plan</u> was published in May and sets out its priorities over the coming business year (2021-22).

The <u>IPO</u> is the official UK government body responsible for intellectual property (IP) rights including patents, designs, trade marks and copyright. It operates and maintain a clear and accessible intellectual property system in the UK, which encourages innovation and helps the economy and society to benefit from knowledge and ideas. It helps people get the right type of protection for their creation or invention.

South East flood protection receives record government investment

£176.5 million is to be invested in more than 200 schemes in 2021/22.

The investment is part of plans outlining £5.2 billion of investment over the next 6 years. More than £860 million will be spent in 2021-22, boosting design and construction of more than 1,000 new schemes across England as part of the Environment Agency's annual capital programme.

It is all part of the government's <u>Flood and Coastal Erosion Investment Plan</u> which outlines how new flood and coastal schemes will better protect 336,000 properties by 2027, helping to avoid £32 billion in wider economic damages and reducing national flood risk by 11%.

Examples of flood defence schemes include:

Lydd Ranges sea defence scheme, Romney Marsh

The Lydd Ranges sea defence scheme will better protect 1,761 homes from flooding and help keep the nationally critical Ministry of Defence (MoD) firing training ranges operational.

It is part of the shoreline defences for the low lying Romney Marshes with over 14,500 properties, many hectares of prime agricultural land and roads and infrastructure at risk from coastal flooding.

Construction on the 3.2 kilometres of defences is now underway. It will consist of 34 new timber groynes, 320,000 cubic metres of shingle beach recharge, a new rock revetment, improvements to the 'Green wall' and

relocation of an existing outfall at Denge.

For further information can be found on GOV.UK.

Thames Valley flood scheme

This scheme is in its early stages and is looking at approaches to reducing flood risk across the Thames Valley. This includes the whole of the River Thames upstream of London from its source in Gloucestershire, and the rivers that flow into it. It complements existing and planned local flood alleviation schemes.

The scheme aims to provide an increased level of climate resilience across the Thames catchment area. Currently in the consultation phase, the vision is to develop a scheme that will:

- reduce flood risk throughout the Thames Valley
- enhance the environment
- help grow the economy
- support sustainable growth
- improve health and wellbeing for rural and urban communities

For further information and to take part in the public consultation that runs until 20 August 2021, see <u>consultation page</u>.

River Roding project, Essex

The River Roding flood alleviation scheme will reduce flooding to 600 residential properties, commercial properties and infrastructure in area around Woodford and Ilford. It will also improve the River Roding for wildlife and for people to enjoy.

The project includes building a flood storage area on the River Roding at Shonks Mill Bridge. This will involve building a long earth embankment and control structure on the river. The river will flow naturally for most of the time but during high flows and increased flood risk, flood water will be stored behind the earth embankment in a temporary reservoir. This will reduce the river flow and risk of flooding downstream. As the flood risk recedes it will drain back naturally into the River Roding.

The project includes refurbishing two stretches of existing flood embankments in Woodford to improve the defences against the impact of projected climate change.

Further information can be found at the Environment Agency consultation page.

Eastbourne to Pevensey Bay flood defence scheme

The Eastbourne to Pevensey Bay flood defence scheme will better protect 10,000 homes and businesses from flooding, as well as key infrastructure, including the A27 and railway line.

Carbon efficiencies will play a key part in the design and construction of

the scheme. It will embrace new technology and ways of working with the aim of achieving 50% carbon savings.

The scheme, which has only recently started, is currently going into the design options phase. As the project progresses the Environment Agency and partner, Eastbourne Borough Council, will engage and consult with local residents and stakeholders throughout the key stages of the scheme.

Environment Secretary George Eustice said:

The tragic recent events in Germany and Belgium serve as a sobering reminder of how devastating flooding can be.

We are standing by communities and will bolster defences against flooding across England with many thousands more properties better protected by 2027.

It's important we take action right across the system. Our comprehensive plan will achieve this by tightening planning procedures, helping more people access insurance and making homes more resilient to the effects of flooding.

Emma Howard Boyd, Chair of the Environment Agency, said:

We have seen some devastating flooding around the world so far this summer. No one can prevent all flooding and climate change means the risk is increasing, but we can reduce the risks. Having completed the government's previous 6 year capital programme on time and on budget, better protecting more than 314,000 homes from flooding and coastal erosion, this year we began the government's new £5.2 billion flood programme.

These schemes should provide reassurance to communities and businesses, but no one should have a false sense of security. I strongly urge people to sign up for flood warnings and regularly check flood risk on gov.uk.

Summary of the EA capital programme 2021/2022 in the South East

Environment Agency area	£m 21/22	Number of schemes being invested in 21/22
Hertfordshire and North London		Over 50
Kent, South London and East Sussex	70.5	Over 50
Solent and South Downs	56.4	Over 50
Grand total	176.5	Over 200

- More details on the programme of flood and coastal erosion risk management (FCERM) schemes can be found on <u>GOV.UK</u>.
- An interactive map of Environment Agency asset management information and data — including the 2021-27 FCERM investment programme — is available via <u>Asset Management</u>.

<u>Presidential visit strengthens</u> <u>healthcare partnership with Kenya</u>

- Health and Social Care Secretary signs Memorandum of Understanding with Kenya
- Qualified healthcare staff to join NHS in coming years to increase workforce numbers
- Builds on pandemic support to Kenya, including test genome sequencing and vaccine sharing, and 30-year research partnership

The MoU, signed at the Royal College of Physicians by the Health and Social Care Secretary and Kenya's Cabinet Secretary for Labour Cooperation, Simon Chelugi, and attended by President Uhuru Kenyatta today [Thursday 29 July], builds on UK healthcare support provided to Kenya during the pandemic through the genomic sequencing of positive COVID-19 tests and 817,000 COVID-19 vaccine doses donated this week.

The MoU commits to a process for qualified but unemployed Kenyan nurses to be actively recruited to work in the NHS in the coming years, helping to deliver the government's manifesto commitment for 50,000 more nurses by 2024 and support the training of Kenya's healthcare professionals.

The UK has been working with Kenya for over 30 years to improve healthcare outcomes in both countries, with the Kenya Medical Research Institute (KEMRI) and Wellcome Trust partnering together to establish a health research programme. This partnership has strengthened over the years and has proven to be pivotal throughout the COVID-19 pandemic, with KEMRI and Oxford University working together in trialling the AstraZeneca vaccine, with support from the UK government.

The President's visit to the UK delivers on the Strategic Partnership between the two countries, agreed by President Kenyatta and Prime Minister Boris Johnson in January 2020.

Health and Social Care Secretary, Sajid Javid said:

We have a historic and mutually respectful relationship with Kenya. This has been strengthened by working closely with Kenya during the pandemic and sharing UK vaccine doses to support Kenya's fight

against COVID-19.

Our healthcare agreement will make the most of UK and Kenyan health expertise which will be beneficial to both countries, with the exchange of knowledge and training which will provide first class healthcare.

The UK is sharing expertise with Kenya to work together in identifying, tracking and responding to new COVID-19 variants, saving lives at home and around the world. KEMRI is working with Public Health England as part of the UK's New Variant Assessment Platform (NVAP). The support includes reagents and equipment to increase in-country genome sequencing, technical advice, support with understanding biological data and training.

As the Prime Minister announced yesterday, the UK will offer 817,000 vaccine doses to Kenya to support efforts to combat the pandemic, with the first doses going this week. This is part of a delivery of 9 million Oxford-AstraZeneca vaccines to COVAX.

Jane Marriott, the British High Commissioner to Kenya, said:

Our health partnership with Kenya is over 30 years old and growing stronger by the month. This new agreement on health workers allows us to share skills and expertise even further, and is a fantastic opportunity for Kenyans to work in the UK.

From COVID-19 vaccines and genomic sequencing, to exchanges on cancer research and treatment to help Kenya treatment more cancer patients at home, the UK has a long and proud history of support for Kenya's health sector. The signing of the Kenya-UK Health Alliance is the latest chapter in our flourishing partnership.

Backed by over £500m in UK government funding, COVAX, a global scheme to get COVID-19 vaccines to developing countries, has delivered 138 million doses to over 136 countries and territories. COVAX aims to deliver a staggering 1.8 billion COVID-19 vaccines around the world by early 2022.

Following the MoU, an Implementing Committee will develop an Action Plan to identify eligible nurses who may want to apply to work in Health and Care roles in the UK.

With around only 900 Kenyan staff currently in the NHS, the country has an ambition to be the 'Philippines of Africa' — with Filipino staff one of the highest represented overseas countries in the health service — due to the positive economic impact that well-managed migration can have on low to middle income countries.

The MoU also commits the two governments to explore working together to build capacity in Kenya's health workforce through managed exchange and training, depending on funding availability following the Spending Review.

Additionally, the prevention and management of cancer in Kenya will be improved through a partnership between Kenyatta University Teaching Research and Referral Hospital and the University of Manchester/Christie NHS Foundation Trust. In part, this will see the promotion of Kenya as an East African regional hub for cancer treatment.

- Kenya took part in vaccine trials of the AstraZeneca vaccine through KEMRI Kilifi, on Kenya's coast, to test the vaccine in different environments.
- In the NHS in England there are 894 Kenyans working across all roles. This makes Kenyans the 30th largest nationality group in the NHS.

'The Frying Scotsman' British-made green cars exported by train which runs on used vegetable oil

- DB Cargo to deliver transport first by hauling British-made cars to continental Europe on trains fuelled by used vegetable oil
- Rail Minister Chris Heaton-Harris will unveil the locomotive at the DB Cargo depot in Toton, Nottinghamshire
- 'I'm a climate hero' train set to transport hundreds of Toyota cars a week from the Midlands to France and Czech Republic

In a pioneering and environmentally friendly first for the UK, hybrid cars built in the Midlands will soon be carried to continental Europe via an ecolocomotive that runs on greener fuel made from used vegetable oil.

Rail freight operator DB Cargo's sustainable hydro-treated vegetable oil fuelled (HVO) locomotive can cut carbon emissions by up to 90% compared to diesel.

The train, named 'I'm a climate hero', to reflect its new role, is an important step in the transition towards the <u>government's goal of net zero by 2050</u>. It highlights the important role that rail freight can play as part of the Department for Transport's aims to make transport greener, as outlined in the government's recent <u>transport decarbonisation plan</u>.

Rail Minister Chris Heaton-Harris said:

We are boosting British business while cutting carbon. This is what building back greener is all about.

Trains are one of the most eco-friendly ways to transport goods and, through ingenuity and innovation, DB Cargo are leading the way

in making it even greener.

DB Cargo is the largest rail freight operating company in the country and has been trialling and expanding its use of HVO as a way to reduce carbon emissions in the short term.

This new service using HVO will transport Toyotas built in Derby to continental Europe through the Channel Tunnel and import Toyotas on its return leg.

DB Cargo CEO Andrea Rossi said:

We are very excited at the prospect of working with Toyota to trial the use of HVO on its services to and from Europe. HVO is one of the world's purest and greenest fuels and has an important role to play in helping DB Cargo UK and its rail customers decarbonise their operations.

This will be the first time we have used HVO on an automotive service and one bound for the continent. It's a first on many levels for us.

Leon van der Merwe, Vice President Supply Chain, Toyota Motor Europe, said:

As a company, we are dedicated to making continuous progress towards carbon neutrality and this includes seeking ways to reduce emissions from manufacturing, vehicle use and logistics.

By utilising this new rail freight multi-modal opportunity, we are helping to ensure our low emission hybrid electric vehicles built at our British Burnaston plant can be transported to our customers in an increasingly sustainable way.