



MOD'IFYING THE ESTATE

The portfolio and opportunities for acquisition and (re) development



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INTRODUCTION

The Ministry of Defence (MOD) is a government department led by the Secretary of State for Defence. It includes both¹:

- A Department of State – responsible for supporting ministers, developing policy, evolving and delivering plans, and generating military capability
- A Military Strategic Headquarters – a specialised role, unique to the MOD, that directs and carries out military operations on behalf of the government

The MOD’s organisational structure encompasses the UK’s three armed forces: the Royal Navy, the Army, and the Royal Air Force. It also includes Strategic Command, the Defence Nuclear Organisation, the Head Office, and a range of Enabling Organisations that provide supporting services to the whole of Defence.

The ethos for the MOD is:



We work for a secure and prosperous United Kingdom with global reach and influence. We will protect our people, territories, values, and interests at home and overseas, through strong armed forces and in partnership with allies, to ensure our security, support our national interests and safeguard our prosperity.



Responsibilities and priorities of the MOD²:

- Protect the UK, its Crown Dependencies, and its Overseas Territories
- Pursue a campaigning approach to counter the threats from state and non-state actors
- Promote our national interests globally
- Secure strategic advantage, achieve greater economic and industrial resilience, and contribute to national prosperity

THE DEFENCE ESTATE

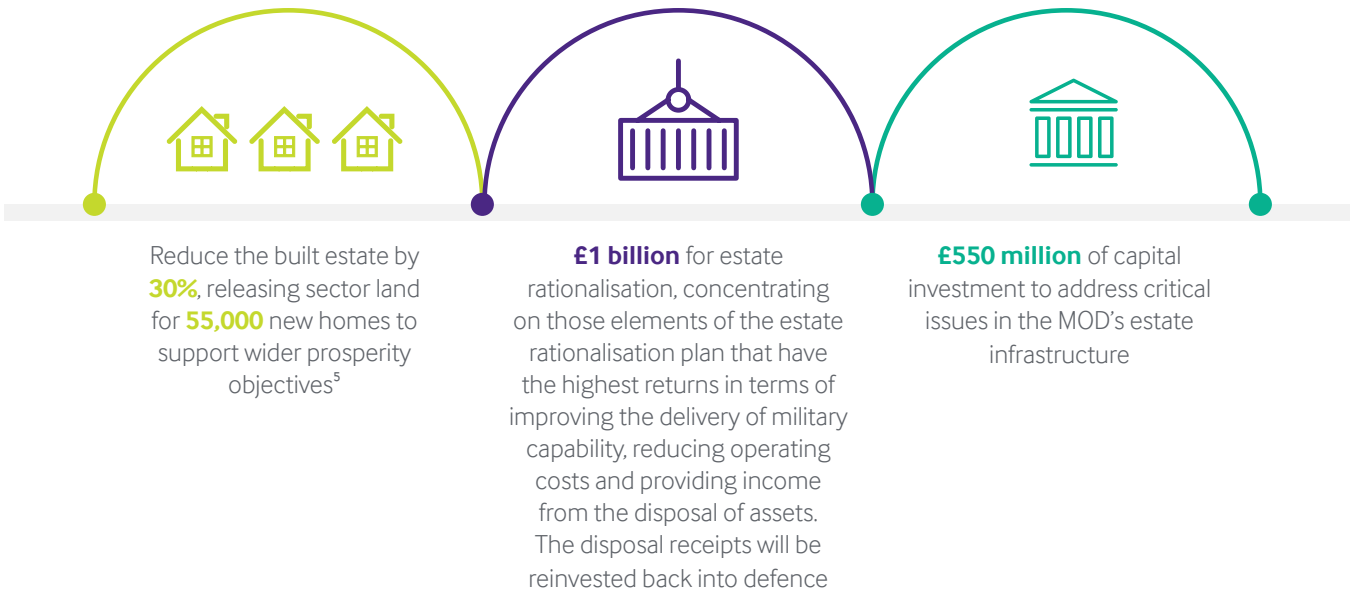
The MOD presented in 2021³ that they have access to circa. **344,200** hectares of land in the UK, which equates to **1.5%** of the country’s landmass. As of March 2020, the value of the MOD’s estate was **£35.6 billion**. This land consists of:

- Homes and workplaces for **135,000** military personnel, **59,000** civilians, and **33,000** volunteer reserves
- **900** sites across the UK, used as military bases, service accommodation, supporting rapid air response, and storage for military aid

WHAT NEEDS TO CHANGE?

In 2016, the MOD released the ‘MOD Estate Optimisation Strategy’⁴, an MOD initiative that aims to create a smaller and more efficient defence estate. The defence estate was built for a different time and with the armed forces becoming more agile, the defence estate needs to reflect this.

As part of the Strategic Defence and Security Review, the MOD set out that the current estate does not meet the needs of “the modern Armed Forces”. To achieve this, they set out to:





To assist with the goal, the One Public Estate programme began in 2013, working with 12 council areas and a handful of government departments. The purpose of this programme is to provide practical and technical support and funding to allow councils to deliver property-focused programmes in association with central government and other public sector partners⁶.

Along with the One Public Estate programme, the Government construction strategy sets out the focus and goals for UK construction⁷. These assist with the implementation of the goals regarding the MOD infrastructure estate, set out in the National Security Strategy and Security review.

As part of the 2015 Strategic Defence and Security Review, the MOD has worked with the Army, Royal Navy, and Royal Air Force to review the defence estate, concluding on three priorities: **military capability, efficiency, and value release**.

APPROVAL GRANTED FOR 1,300 HOMES IN RIPON⁹

As announced in 2016, Ripon Barracks are to be sold once they become surplus to military requirements.

Proposals for this land included **1,300** new homes, **40** hectares of publicly accessible open space, a primary school, two hectares of employment, and NHS facilities.

By March 2023, these proposals had been approved by Harrogate Borough Council meaning Homes England could progress with the development of this site.

Of the **1,300** homes at this development, **30%** are reported to be allocated for affordable housing¹⁰.



The Estate Optimisation Strategy focuses on reducing the size of the Estate by 2040 and releasing sites to be sold. For example, in 2016 a total of **35** sites were announced for release.

The Defence Estate Optimisation (DEO) Portfolio⁸ presents how the disposal of defence estate sites creates areas for regeneration, business growth and opportunity for enhancement of local economies. It states that from 2016 to March 2024 the DEO has released over 1,430 hectares of defence land at 25 sites for commercial and residential development. The portfolio also presents sites that are being disposed through 2024 and 2025.

OPPORTUNITIES FOR DEVELOPMENT

As sites continue to be disposed of through 2024 and 2025, there are further opportunities for development. The MOD is working with relevant authorities to release these sites and promote development on this land. As brownfield land, this also has environmental benefits.

Alongside the disposal of sites, additional funding is provided for improving the utilisation of buildings to increase efficiency and reduce reliance on constructing new facilities.

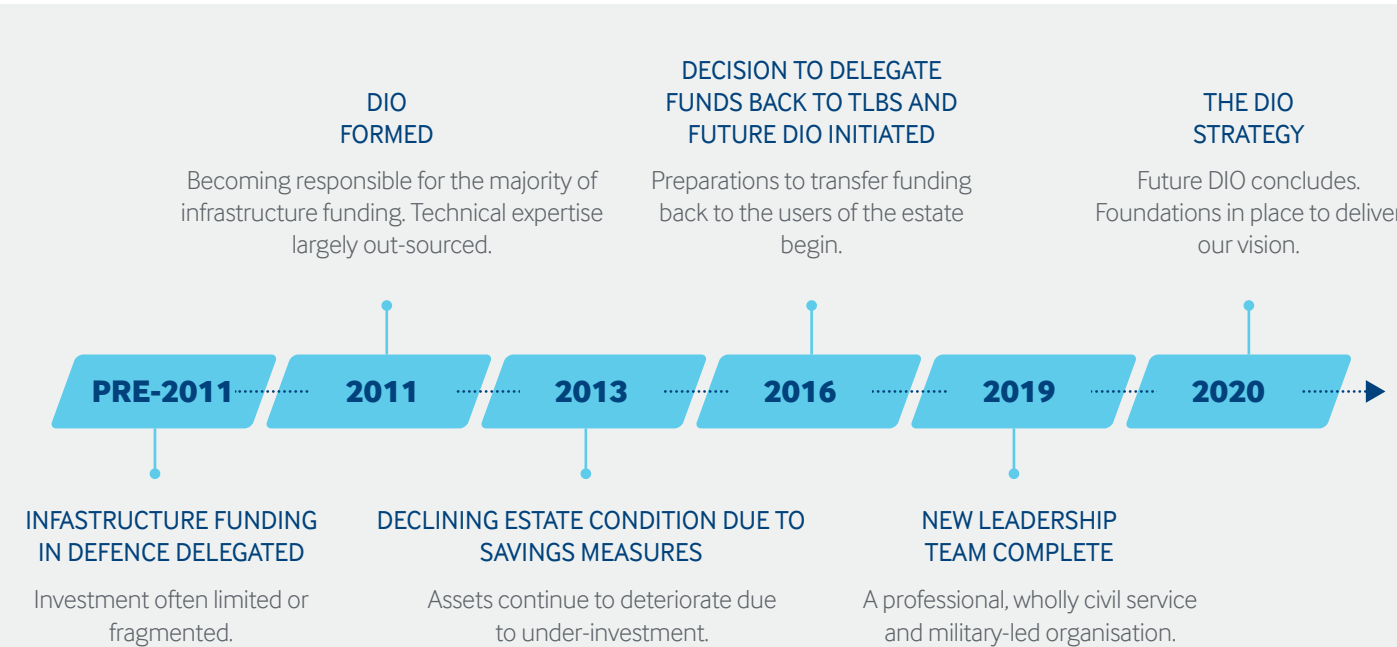
DEFENCE INFRASTRUCTURE ORGANISATION

The Defence Infrastructure Organisation (DIO), formed in 2011, is responsible for the defence estate, supporting the armed forces to enable military capability by planning, building, maintaining, and servicing infrastructure.

The purpose of the DIO is to provide estate for defence personnel to live, work, train and deploy at home and overseas. Some of the key responsibilities of the DIO are to¹¹:

- Plan and deliver major capital projects and lifecycle refurbishment
- Provide a safe place to train
- Allocate Service Families Accommodation
- Provide a central register of asset information to advise infrastructure planning
- Act as steward of the defence estate
- Provide the unarmed guarding service

The development of the DIO and the DIO Strategy (Source: DIO Strategy)



DEFENCE INFRASTRUCTURE ORGANISATION STRATEGY 2020 – 2030

The DIO Strategy 2020-2030 released in 2020¹² states that defence is modernising and transforming in response to a changing world, and therefore the DIO aims to become a more consistent provider of Defence Estate Infrastructure services. The DIO strategy sets out the path to achieve this.

The DIO strives to adapt their infrastructure, covering facilities and services to support the working and living needs of the users.

There are seven key factors that will impact the DIO from 2020 to 2030 which will need to be managed using the aspects set out above. These are presented below:

The seven key factors that will impact the DIO from 2020 – 2030

- 1
- THE DEFENCE CONTEXT IS CHANGING**
Requirements of the DIO change, driven by developing Defence needs. Defence capability is reliant on the estate for resilience.
- 2
- SUSTAINABILITY AND CLIMATE CHANGE**
Sustainability, including resilience in a changing climate, is increasingly important for the operation of the estate.
- 3
- THE WAY PEOPLE LIVE AND WORK**
People and their expectations change, and this will impact DIO's workforce and users of the estate.
- 4
- THE SUPPLY CHAIN IS EVOLVING**
The supply chain is becoming digitally driven. Industry providers are focusing their service offer.
- 5
- DATA EXPLOITATION CREATES OPPORTUNITIES**
Improved decision making requires the ability to identify, collect and analyse the right data.
- 6
- GOVERNMENT PRIORITIES, POLICY AND TARGETS**
Government policy, legislative change, and targets will continue to influence how DIO delivers for its customers.
- 7
- THE STATE OF THE ESTATE**
The estate is vast in nature and variable in condition and utilisation, with a finite supply of funds.



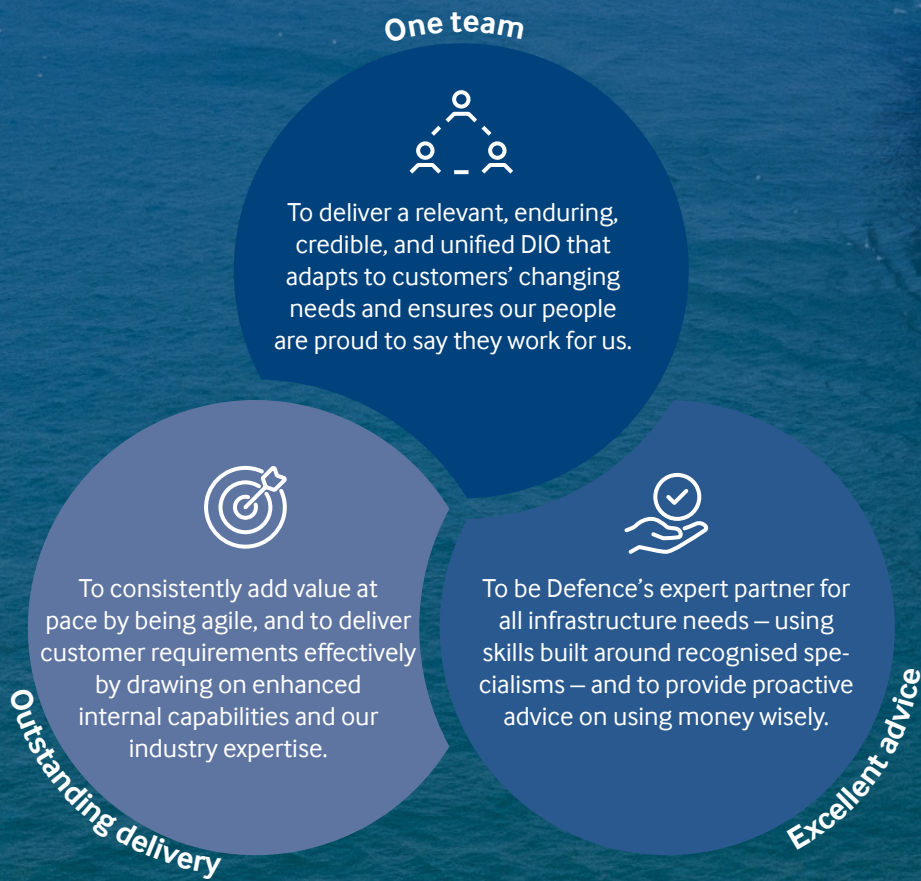
TECHNOLOGY
Wide-ranging implications for customers and our operations

The strategy presents five key aspects of managing defence infrastructure in response to the key factors that will impact the DIO as portrayed on the page opposite:

- Development/procurement and retention of expertise to manage infrastructure from cradle to grave
 - Utilisation of information and data to provide insight
 - Delivery of complex major programmes in support of defence capabilities
- Delivery of repeated and repeatable projects across the defence estate
 - Providing outcome-based solutions

STRATEGIC OBJECTIVES

The DIO strategy presents their streamlined DIO strategic objectives as:



(Source: DIO Strategy)



DIO STRATEGIC RESPONSES

The DIO has set out some strategic responses that will be the focus areas for achieving the strategic objectives.

Implement an asset management system

Asset management for the DIO involves aligning the strategic objectives with infrastructure planning and operations in the hope of increasing performance and reducing risk and cost.

The DIO will develop an asset management system by enhancing their expertise, providing a suitable platform, establishing an approach to release information, and creating a source for quality information.

To become experts in estate asset management, the DIO needs to understand their personnel and their families' requirements. This can be achieved by encouraging open dialogue and improving relationships to fully understand their needs.

Improve delivery for our customers

To reduce disruption to the military, the experiences of personnel and their families caused by infrastructure issues need to be reduced. The DIO takes full responsibility for the performance of the defence infrastructure and aims to work with suppliers and customers to reduce the impact on military outputs.

The DIO will create a good level of infrastructure and facilities expertise across all teams, driving delivery performance, improvement, innovation, and communication to build confidence and transparency.

The DIO aims to digitalise standardised core processes to provide a consistent approach to supplier performance and assurance.

Become an expert in sustainability, climate change and the environment

The DIO aims to become an expert at providing sustainable advice that leads to infrastructure decisions that are environmentally conscious, and is also aiming to contribute to Government priorities including reaching net zero-carbon emissions by 2050. They aim to do this by measuring carbon emissions and other sustainability data across the infrastructure assets.

The DIO will introduce a Sustainability Management System which will embed sustainability into the asset management processes. This will allow sustainable procurement, and will enable carbon-efficient design, construction, operation, and maintenance of infrastructure.

Streamline processes

The DIO will remove redundant processes and will standardise other necessary processes along with making them easily available, well-communicated and clear. They also aim to digitalise processes that are high-value and/or high cost. The overall goal of these changes is to provide a consistent service to customers.

The DIO will focus on aligning their teams to have common priorities, planning to scan future work so their teams can be prepared to meet future requirements and to enable an efficient response to opportunities.

Drive better experience, insight quality and consistency through a lean and digital approach

The DIO aims to streamline their processes to create a flawless user experience.

To benefit users, the DIO will use necessary relevant technology to deliver. By synergising information and data projects and by standardising governance and management of data, the DIO aims to understand their users to create a better experience.

All estate information and data will be held on a data repository and will allow the DIO to have an overview to enhance insight.

Upskill workforce and create a great place to work

The DIO aims to improve the customer experience and understand their needs by enhancing the skills of their workforce.

By connecting agile working methods, the right skills and the right customer problems with effective demand planning, the DIO workforce can predict customer demands and can be deployed rapidly. Central to this will be essential workforce training, engagement, and health and wellbeing.

The DIO will look ahead to predict the future skills their workforce will require. They will develop career pathways for their workforce and succession planning to ensure a smooth, consistent provision of infrastructure and services into the future.

HOW IS THE DIO MOD'IFYING THE ESTATE?

The MOD releases communication articles with information on their projects – the below are upcoming or completed projects which have been delivered with or by the DIO, aligned with the aims set out in the DIO strategy.

Groundbreaking for new Single Living Accommodation at Royal Military Academy Sandhurst¹³

- The DIO is delivering a single living accommodation at Royal Military Academy Sandhurst. This project includes a block for senior non-commissioned officers and a block for other ranks.
- These two blocks are constructed using modular methods, include photovoltaic panels, air source heat pumps for heating and hot water, and a SMART building management system.

The SMART system learns how the building is used and ensures the building is running efficiently.

- This aligns with the DIO strategy by responding to personnel needs and by making environmentally conscious decisions for design and construction methods.

Major accommodation upgrade completed at RAF Lossiemouth¹⁴

- The DIO has delivered a **£60 million** accommodation project for seven accommodation blocks, an office space and a 24-hour accommodation hub.
 - This project included demolition of existing buildings, and provision of pedestrian access routes and 300 new car parking spaces with provision for electric vehicles.
 - This aligns with the DIO strategy by focusing on the customer experience with the provision of a 24-hour social area,
- office space, pedestrian routes, and car parking spaces. This also aligns with the DIO’s aim to make environmentally conscious decisions.
 - This project was part of the Lossiemouth Development Programme for which Tetra Tech provided the Programme Management Office and project management services.



New carbon efficient accommodation marks start of nationwide improvements on the Defence Training Estate¹⁵

- Westdown Camp on Salisbury Plain and Nesscliff Training Area in Shropshire have received new accommodation blocks. These blocks can be subdivided so different groups can live in a block together and include SMART systems and washing facilities.
 - Learnings from the project at Westdown Camp were applied to Nesscliff. This meant that the Nesscliff blocks were built at net zero and allowed for 30% reduction of embodied carbon,
- construction time was reduced by two weeks, and the Nesscliff project received a – 5 EPC compared to 12 points from net zero at Westdown Camp.
 - The ability to subdivide these accommodation blocks allows for changes to be made when necessary. This project also shows how the DIO is being proactive to improve by shortening construction times, improving sustainability of their construction processes and their infrastructure.



CONCLUSION

To improve the efficiency of the defence estate, the MOD is disposing of redundant sites for redevelopment and through the DIO is upgrading their remaining sites to serve the needs of their personnel.

The Defence Estate Optimisation Portfolio details how **25 sites** have been released for commercial and residential development – an example of this is Ripon Barracks which has obtained planning consent for **1,300 new homes**.

With further sites to be released over the coming years, there will be further opportunities for redevelopment of land to benefit local economies, provide vital new homes, including affordable homes and jobs.

The case studies highlight how the DIO is providing upgrades to certain defence estate sites in line with their DIO strategy. As further improvements take place, this provides opportunities for sustainable and innovative development that focuses on personnel and their family needs.

TETRA TECH AND THE MINISTRY OF DEFENCE

Tetra Tech has been working with the MOD through DIO on the Defence Estate Optimisation Programme from its inception in the Basing Optimisation Programme that categorised sites for investment or disposal. We have delivered 10 of the Assessment Studies that have provided options for delivering the infrastructure on the receiver sites to enable the site disposals. In discussion with DIO and the MOD, these options have been down selected to a preferred option, designed to RIBA 2, and cost modelled to develop the business cases for the investment that will release the disposal sites. We are currently working with the DIO and their supply chain on the projects at the receiver sites as they move into construction, so have full visibility of the programme across the portfolio and the schedule for the disposals.

The disposals are being managed through DIO Acquisitions and Disposals and two Framework Contracts; the Strategic Property Advisor (SPA) will develop the disposal strategy for each site with DIO, and the Strategic Environmental Technical Advisor (SETA) will carry out the technical surveys and reports that are required to deliver the disposal strategy and planning requirements. Each of these Contracts has been split into 3 lots with sites across the MOD Estate and Tetra Tech has been appointed for one of the SETA Lots. We will be providing the Environmental, Ecology and sustainability input to the disposal of the sites in Lot 1.

We can also facilitate the transition from disposal to development by managing the design, stakeholder approval processes, and infrastructure construction to turn MOD disposal sites into serviced land parcels on which housebuilders build homes. At the 3,850 home Wellesley project in Aldershot, we managed the demolition of the former MOD facilities, remediation and installation of new strategic highway drainage, utility and community infrastructure to create serviced land parcels which were sold to housebuilders, (including Taylor Wimpey, Bellway, Barratts/David Wilson, Cala and Weston Homes). We also manage the Wellesley project financial model which records strategic infrastructure expenditure, income from land sales and distributes profit in accordance with the Development Management Agreement between the MoD as landowner and Grainger Plc as Master Developer.



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ABOUT RPS

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