



CONSULTATION DRAFT

TESTBED Dorset

A One Health Responsible Research and Innovation Testbed

Towards the UK's Living Science Park

PROSPECTUS 2026

A place-based One Health innovation platform





Forward

We are pleased to present this Prospectus for TESTBED Dorset, developed by the One Health Enterprise Network (OHEN) CIC, as the first full articulation of a Living Science Park approach rooted in Dorset's landscapes, communities and regional research strengths.

We have written this document to explain why TESTBED Dorset exists, how it operates, and what it is intended to enable. Over recent years, it has become clear to us that many of the challenges facing the UK and the wider world cannot be addressed through isolated projects or single disciplines. They require research and innovation to take place in real-world settings, with collaboration across sectors, and with responsibility built in from the outset. This Prospectus sets out how TESTBED Dorset responds to that need.

One Health: Central to this approach is One Health, which, in the context of TESTBED Dorset, reflects our recognition that the health of the environment, plants, animals and people are fundamentally connected. Issues such as environmental change, food security, disease risk and public health concerns, emerge from interactions across living systems and places. For us, One Health is not a theoretical concept, but a practical framework for designing and testing research and innovation in real landscapes and communities, where these connections can be observed, understood and addressed together.

We would like to thank the members of the One Health Enterprise Network Steering Group, along with our wider network of partners, landowners, researchers, public bodies and community organisations, who have helped shape this Prospectus through discussion, challenge and practical experience. Their contributions have ensured that TESTBED Dorset is grounded in reality rather than aspiration.

This Prospectus represents the full version of the TESTBED Dorset offer. We recognise that different audiences will require different levels of detail, and shorter summary versions and briefings are also available for government, funders, partners and communities.

TESTBED Dorset will continue to evolve. This document is therefore intended to be a living Prospectus, reviewed and updated on an annual basis to reflect learning, growth and changing priorities.

We look forward to working with those who wish to engage with TESTBED Dorset and help shape its next phase.

OHEN Steering Group, February 2026



A Word About Our Supporters - 2026

TESTBED Dorset is supported by a broad and diverse group of organisations spanning government, research, innovation, enterprise, land management, and higher education. This support reflects a shared interest in developing a coordinated, place-based approach to responsible research and innovation that can operate across real landscapes and living systems, while remaining aligned with national priorities and public value.

Strategic oversight and direction are provided through the One Health Enterprise Network Steering Group, which brings together officers and representatives from key national and sector-leading organisations. Central government engagement includes the **Department for Environment, Food and Rural Affairs** and the **Department for Business and Trade**, ensuring that TESTBED Dorset is informed by, and aligned with, national priorities relating to environmental protection, biosecurity, innovation, productivity and sustainable economic growth.

Innovation system expertise is contributed through **Innovate UK**, supporting alignment with national innovation funding pathways and translational research priorities. Sector-specific capability is further strengthened through engagement with the **UK Agri-Tech Centre**, reflecting the central role of agriculture, food systems and land use within Dorset's landscapes and within the One Health context.

Several nationally significant research and innovation centres also support TESTBED Dorset's development and activity. These include the **Centre for Environment, Fisheries and Aquaculture Science (CEFAS)**, which brings expertise in environmental science, biosecurity and evidence-based policy; the **National Biofilms Innovation Centre (NBIC)**, contributing specialist knowledge in biofilm science and engineering across biological, environmental, industrial and health-related systems; the **PLASTIC Research Centre at Arts University Bournemouth**, which provides capability in materials innovation, sustainability and design-led research; and the **Bournemouth University Disaster Management Centre**, offering insight into risk, resilience and systems thinking relevant to environmental change and public health preparedness.

Academic leadership and research capability are further reinforced through engagement with four universities: **Bournemouth University, University of Bristol, University of Southampton, and Arts University Bournemouth**. Together, these institutions bring complementary strengths across current and frontier sciences - environmental science, public health, behavioural sciences, AI/AGI (Artificial Intelligence / Artificial General Intelligence), applied quantum, engineering, data science, sustainable product design, and applied research - ensuring that activity within TESTBED Dorset is interdisciplinary, scientifically robust and internationally relevant.

OHEN - STEERING GROUP



A Word About Our Supporters - 2026

TESTBED Dorset also sits within a **wider regional life sciences economy valued at approximately £3.2 billion**, encompassing research-intensive universities, innovation-led businesses, established research infrastructure and routes to national and international markets. Within this broader context, the Living Science Park provides a distinct and complementary capability, enabling research and innovation to move beyond traditional laboratory and clinical environments into real-world landscapes and communities. This connection strengthens the regional life sciences offer, supporting innovation that can progress effectively from discovery through real-world testing to scalable application.

Business and enterprise expertise within the Steering Group is strengthened through the involvement of **Efeca** and **Synergy Farm Health: Farm Vets**. Efeca contributes applied expertise in sustainable agriculture, environmental economics and value-chain transformation, with experience operating at the interface between evidence, policy and commercial practice in the UK and internationally. Synergy Farm Health brings practical insight into livestock health, biosecurity and on-farm delivery, ensuring that research and innovation remain grounded in the realities of agricultural systems and animal health. Their participation provides an essential bridge between research, policy intent and practical implementation.

As this document is published in early 2026, TESTBED Dorset is supported in principle by a wider network of landowners and land-based organisations that provide access to the real-world settings central to the Living Science Park approach. This includes **Bournemouth, Christchurch and Poole (BCP) Council** and **Dorset Council**, through their stewardship of council-owned farms and green spaces; the **National Landscapes and Purbeck Estate**, including land managed by the **National Trust**, **Dorset Wildlife Trust** (through the **Dorset Local Nature Partnership (DLNP)**) and key Dorset contacts at **Natural England**; and the **St Giles Estate** and **Smedmore Estate**, which manage large and diverse landholdings well suited to applied and frontier research. Participation also includes **Kingston Maurward Estate**, forming part of **Coastland College**, which offers access to scientifically important landscapes, a working farm, and a strong interface with education and learning that supports the development of future workforce. **DLNP** is a key partner in TESTBED Dorset, providing strategic insight and place-based expertise to help align responsible research and innovation with landscape-scale environmental priorities across the county.

The involvement of this wider network reflects a shared commitment to enabling responsible research and innovation that respects land use, environmental protection, security, and community interests, with access agreed on a proportionate, project-by-project basis.

Collectively, this full OHEN network of organisations positions TESTBED Dorset to become a credible and trusted platform, linking local landscapes and communities with national capability and international research agendas, while remaining firmly grounded in place, purpose and public value.

Thank you all for your support.



THE HEADLINE OUTCOMES BY 2035:

- 1. TESTBED Dorset established in true partnership as a nationally and globally significant Living Science Park***
- 2. Real-world One Health research delivering measurable impact and public value***
- 3. Dorset landscapes embedded as active test environments for innovation in living systems – supporting new and frontier science.***
- 4. Evidence-to-practice accelerated through trusted governance and proven delivery models***
- 5. Responsible Research & Innovation and public participation embedded by default***
- 6. A continuous innovation pipeline powering SMEs, universities, and public sector adoption***
- 7. A nationally influential and internationally transferable model driving economic growth and policy impact.***

OHEN - TESTBED Dorset Vision 2035

By 2035, the One Health Enterprise Network has established **TESTBED Dorset as a nationally and internationally significant Living Science Park**, delivering measurable impact through true local and regional partnership delivering place-based research and innovation across animal, plant and environmental health, with clear insight into public health outcomes.

TESTBED Dorset is recognised as a **working model for innovation in living systems**, not simply as a location. It provides a proven environment in which new and frontier research and innovation are developed, tested and refined within real landscapes, supported by trusted governance and an embedded culture of responsible research. This has enabled faster translation from evidence to practice and reduced the gap between innovation and real-world use.

By 2035, Dorset's landscapes actively contribute to national and international One Health capability. Working farms, SSSI's, coastlines, landowner's estates and community spaces are routinely partnered with to generate evidence on environmental change, biosecurity, food systems and emerging disease, and much more. The knowledge produced informs UK policy and delivery, while also contributing to international research programmes, standards and shared learning.

OHEN has matured into a **globally recognised steward and convenor**, valued for its ability to connect disciplines, sectors and places. Through TESTBED Dorset, it enables collaboration between UK and international partners seeking real-world settings in which to test approaches that can be adapted and applied elsewhere, ensuring that local activity contributes to global solutions.

Responsible Research and Innovation is fully embedded by default. Public engagement, learning and participation are integral to how innovation is designed and delivered, strengthening trust, legitimacy and long-term stewardship. This approach has proven essential to sustaining collaboration and ensuring that innovation delivers public value.

TESTBED Dorset supports a continuous, connected pipeline of innovation. Small and medium-sized enterprises validate products and services for UK and global markets. Universities strengthen translational research and international partnerships. Public bodies test and refine approaches before wider adoption. Communities contribute data, insight and stewardship through structured participation and citizen science.

Learning from the platform has informed funding approaches, governance models and place-based research policy in the UK and internationally. Elements of the Living Science Park model have been adopted elsewhere, with Dorset recognised as an early, credible demonstrator. This model is a major economic engine – a significant contributor to the UK economy.

By 2035, the impact of TESTBED Dorset extends beyond individual projects and programmes, delivering impact that endures and travels well beyond the landscapes in which it was created.



TESTBED Dorset
LIVING SCIENCE PARK

1. Introduction and Purpose



TESTBED Dorset is a place-based One Health Responsible Research and Innovation testbed, designed to enable a new and frontier real-world science, innovation and evaluation across Dorset's landscapes, communities and enterprises (i.e., Landscapes-Based R&D [1]). Its purpose is to provide a structured, trusted and enabling environment in which complex challenges that sit at the intersection of public health, animal health, plant health and environmental health and resilience can be addressed in practice rather than theory.

The testbed recognises that many of the most pressing challenges facing society do not arise within single sectors or disciplines. Instead, they emerge from interactions between people, animals, plants, land use, climate, behaviour, infrastructure and policy. These interactions are inherently place specific. As a result, solutions that are developed without reference to real settings often struggle to translate into effective action, adoption or scale.

TESTBED Dorset exists to bridge this gap. It enables research and innovation to take place within real landscapes and communities, generating evidence that reflects lived conditions and operational realities. Over time, this approach establishes Dorset not simply as a location for individual projects, but as a coherent, accessible environment in which science can be carried out continuously in the real-world, functioning in effect as a *Living Science Park*.

The purpose of TESTBED Dorset is therefore threefold. First, it supports the development and testing of solutions that address One Health challenges in an integrated way. Second, it ensures that this activity is undertaken responsibly, with ethical, social, environmental and regulatory considerations embedded from the outset. Third, it creates a platform for learning and translation, so that insights generated locally can inform wider policy, practice and investment.

TESTBED Dorset does not seek to duplicate effort of existing strategic or research infrastructure or innovation support mechanisms. Instead, it acts as a connective layer that brings together assets that already exist but are often fragmented. By coordinating land access, partnerships, governance and engagement, it enables Dorset to operate as a living environment for science rather than a collection of disconnected sites.

1. Definition: **Landscape-based Research and Development** is a life sciences approach that uses real, functioning green spaces to design, test, and apply innovation within the ecological systems in which it will ultimately operate across human, animal, environmental, and plant health. By working in situ, it captures real world complexity and generates robust evidence to support translation, development and deployment at scale.

TESTBED Dorset has emerged from a **five-year programme funded by Dorset Local Enterprise Partnership**, established to bring together the One Health approach and enterprise in support of solutions to global challenges. The programme launched shortly before the COVID-19 pandemic and ran until 2024, serving as a regional and national showcase for innovation at the intersection of health, environment and economic development.

During this period, the programme delivered a series of conferences and a structured innovation sandpit, attracting engagement from government, industry and academia. This activity demonstrated both the opportunity and the practical challenges associated with translating interdisciplinary research into solutions that can operate effectively in real-world settings.

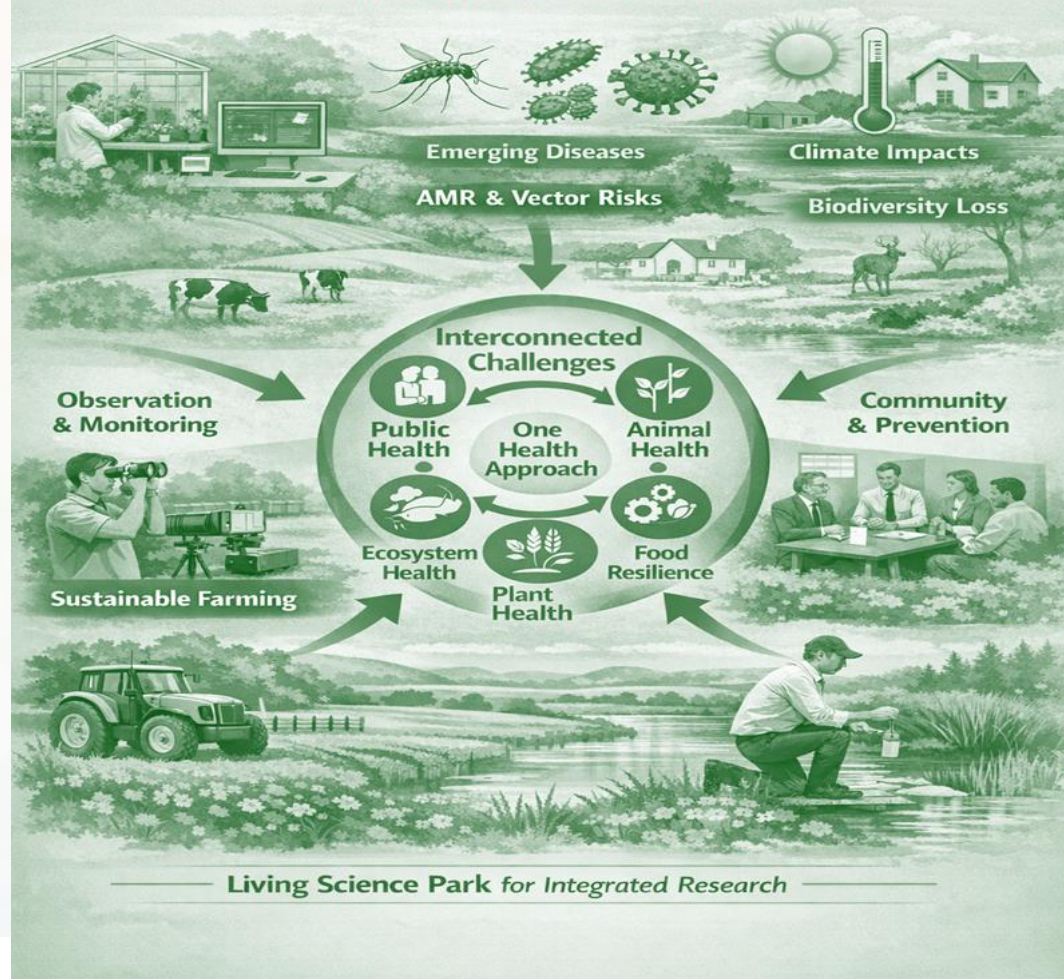
From this work, a **multi-sector One Health Enterprise Network (OHEN) Steering Group** was established to provide strategic oversight. The Steering Group includes representation from central government, innovation and business bodies, universities with active research interests in Dorset, enterprise and growth organisations, and organisations working across agriculture, environment and sustainability. Its role is to provide stewardship and strategic direction, rather than to manage delivery.

In early 2025, Dorset Local Enterprise Partnership was formally disbanded as part of national changes to local growth governance. As part of its final activity, it worked with Dorset Council and Bournemouth, Christchurch and Poole Council to develop a **pan-Dorset growth strategy**, within which One Health was positioned within the Nature theme. This provided a clear local policy context for continuing the work in a new form.

In late 2025, OHEN transitioned into a Community Interest Company, OHEN CIC, creating a formal structure through which TESTBED Dorset could be developed and delivered from 2026 onwards.

TESTBED Dorset: One Health, Place-Based Testbed

Human • Animal • Environment



2. The Case for a One Health, Place Based Testbed

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The rationale for TESTBED Dorset is rooted in the nature of the challenges it seeks to address. Issues such as emerging infectious disease, antimicrobial resistance, vector borne disease, climate related health impacts, food system resilience and biodiversity loss are not isolated problems. They are symptoms of interconnected systems under pressure.

Traditional research and innovation models have delivered extraordinary advances, but they are often poorly suited to addressing system level challenges. Controlled environments and narrowly defined pilots can obscure interactions between variables that only become apparent in real world settings. Innovations may perform well technically but fail socially, economically or environmentally when deployed at scale.

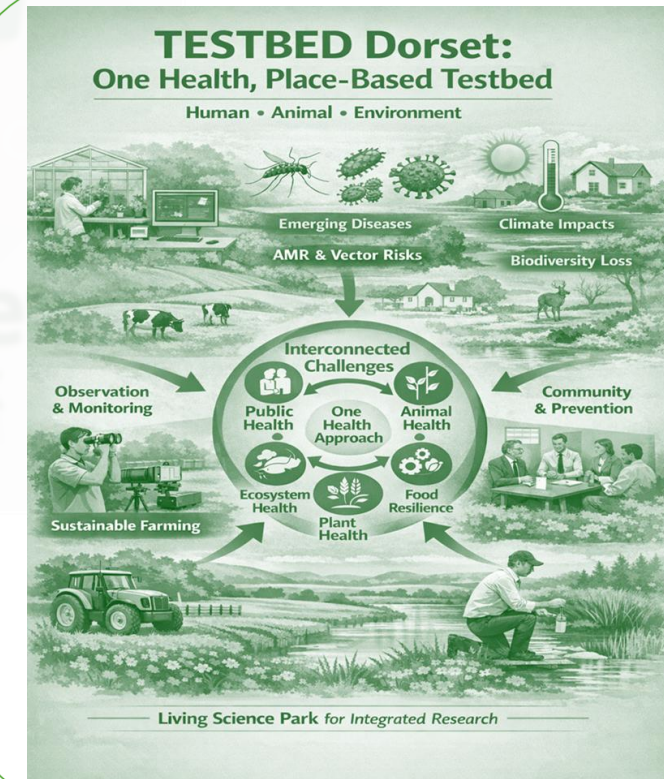
A One Health approach recognises that human, animal, plant and environmental health are interdependent. A place-based approach recognises that these interdependencies play out differently in different contexts. Together, they point towards the need for environments where science can be undertaken continuously within lived systems, with learning accumulated over time.

One Health is critical because threats to biosecurity, public health, animal, plant health, and the environment are interconnected. An integrated systems approach that spans prevention, detection and response across sectors is essential to protect people, animals, plants, ecosystems and the economy. (summarised from written evidence by the Department for Environment, Food and Rural Affairs describing their integrated approach to biosecurity and health risks).

To continue its progress, humanity has – for the first time in its history - to pro-actively manage its place at global and regional as well as local scales. We can no longer just take - “extract, consume, waste”. Sir John Beddington’s 2009 speech of a Perfect Storm in the 2030s is still considered very relevant today (UK Government’s Chief Scientist – 2008-2013).

TESTBED Dorset provides this capability. Rather than operating as a series of time limited trials, it creates the conditions for Dorset to function as a Living Science Park, where research, observation, experimentation and evaluation are embedded within everyday landscapes and communities. This allows evidence to build cumulatively and comparatively, rather than being reset with each new project.

Importantly, this approach supports prevention. Many health and environmental challenges can be mitigated or avoided through early intervention, innovation in land management, improved surveillance and behavioural change. These interventions are inherently contextual and benefit from being studied within a stable, long term science environment.





TESTBED Dorset
LIVING SCIENCE PARK

3. Dorset as an Enabling, High Innovation R&D Platform

3.1. Background: Dorset offers a distinctive and credible environment for a One Health testbed. Within a compact geography, it encompasses a remarkable diversity of landscapes, land uses and communities. These include protected natural environments, productive farmland, coastal systems, market towns, peri urban areas and densely populated urban spaces.

This diversity enables comparative and system level research that would be difficult to achieve within a single site or institutional campus. It allows innovation to be tested across different contexts, revealing how solutions perform under varying environmental, social and operational conditions. Over time, this breadth allows Dorset to operate as a living, distributed science environment rather than a single destination.

Dorset also benefits from a strong tradition of environmental stewardship. Major landowners, conservation bodies and local authorities play active roles in managing land for long term public benefit. This creates the stability and continuity required for long term observation and learning, which are essential characteristics of a Living Science Park.

The county is also home to universities and colleges with relevant strengths in health, environmental science, data, engineering and social science. Alongside this academic base, Dorset has a growing cluster of innovative SMEs working at the interface of health, environment, agriculture and digital technology.

Crucially, Dorset operates at a scale that enables coordination. Relationships between stakeholders can be built and maintained. Governance can be proportionate rather than bureaucratic. Learning can be shared effectively across projects and over time, reinforcing the notion of Dorset as a place where science accumulates rather than disperses.

3.2. International and National Designations Associated with Dorset's SSSIs: Dorset's 139 Sites of Special Scientific Interest (SSSI) form the backbone of a much wider network of nationally and internationally designated sites. Many SSSIs overlap with, or underpin, higher level conservation designations, reflecting Dorset's exceptional importance for biodiversity, geodiversity and ecosystem function.

These layered designations are highly relevant to TESTBED Dorset. They demonstrate that the county already operates within strong regulatory and stewardship frameworks, providing both opportunity and responsibility for place-based research and innovation.

Key International and European Designations

Many Dorset SSSIs are also designated as:

Special Areas of Conservation (SACs): Designated under the Habitats Regulations to protect habitats and species of European importance. In Dorset these include extensive heathlands, coastal habitats, wetlands and river systems.

Examples include:

- Dorset Heathlands SAC
- Poole Harbour SAC
- River Avon SAC
- Studland to Portland SAC.

These SACs support internationally important habitats such as lowland heath, coastal lagoons, estuaries, chalk rivers and dune systems.

Special Protection Areas (SPAs): Designated for the protection of rare and migratory birds. Dorset's SPAs are particularly significant for overwintering and breeding bird populations.

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Key examples include:

- Poole Harbour SPA
- Dorset Heathlands SPA.

These sites support species such as avocet, black tailed godwit, nightjar, Dartford warbler and hen harrier.

Ramsar Sites: Wetlands of international importance designated under the Ramsar Convention.

- Dorset Ramsar sites include:
- Poole Harbour Ramsar
- Dorset Heathlands Ramsar.

These recognise the global importance of Dorset's wetland systems for biodiversity, hydrology and ecosystem services.

National Designations: In addition to SSSI status, many sites are also designated as –

- **National Nature Reserves (NNRs):** Such as Purbeck Heaths (Super)NNR and Durlston, Holt Heath, Hog Cliff, Valley of Stones, Morden Bog and Holton & Sandford Heaths. These are often used as reference sites for research and long-term ecological monitoring.
- **Areas of Outstanding Natural Beauty (AONBs):** Large numbers of SSSIs fall within the Dorset National Landscape and Cranborne Chase National Landscape, adding further landscape scale protection and management context.

3.3. Key Habitats and Species Themes Across Dorset's SSSIs:

Dorset's SSSIs protect an unusually wide range of habitats and species within a compact geography, reflecting the very varied underlying geology. This diversity underpins Dorset's value as a place for One Health research, environmental science and landscape scale innovation.

Rather than being dominated by a single habitat type, Dorset's SSSIs collectively represent interacting systems, making them particularly valuable for studying complexity, thresholds and change.

❖ Core Habitat Types

Lowland Heathland: Dorset contains one of the largest and most significant expanses of lowland heathland in Europe. Heathland SSSIs such as Canford Heath, Arne, Studland, Hartland Moor and Tadnoll and Winfrith Heath support globally rare habitats.

These systems are highly relevant to research on:

- Biodiversity resilience
- Fire risk and land management
- Climate change impacts
- Human interaction with sensitive environments.

Chalk Grassland and Downland: Sites such as Cerne Abbas, Lambert's Castle, Hog Cliff and Chalbury Hill support species rich chalk grassland.

These habitats are valuable for:

- Pollinator research
- Soil and plant interactions
- Restoration ecology
- Sustainable grazing systems.

Wetlands, Bogs and Rivers: River systems such as the Frome, Avon, Allen, and Axe, alongside bogs like Ebblake and Oakers Bog, are critical for hydrology, water quality and biodiversity.

Potential research relevance includes:

- Nutrient cycling and pollution pathways
- Antimicrobial resistance in the environment
- Vector-borne disease research and surveillance
- Flood management and nature-based solutions
- Wider links between water systems and public health.

Coastal and Marine Influenced Systems: Jurassic Coast, Chesil Beach, Poole Harbour, Highcliffe to Milford Cliffs and the Isle of Portland represent internationally significant coastal and geological systems.

These sites support research into:

- Coastal resilience and climate adaptation
- Marine and terrestrial interface health
- Geological processes and earth system science
- Recreation, wellbeing and environmental pressure.

Woodland and Ancient Woodland: Smaller but important woodland SSSIs such as Girdlers Coppice and Bouldsbury Wood provide insight into long term ecological continuity and biodiversity refugia.

Species Importance: Across Dorset's SSSIs, key species groups of importance include:

- Breeding and overwintering birds of international importance
- Rare reptiles such as sand lizard and smooth snake
- Pollinators and invertebrates linked to heathland and chalk systems
- Specialist plants adapted to nutrient poor or saline conditions
- Aquatic species sensitive to water quality and flow.

Relevance to TESTBED Dorset

The density and overlap of these designations mean that Dorset already functions as a highly regulated, internationally significant environmental system. For TESTBED Dorset, this provides:

- Exceptional ecological value and research relevance
- Strong existing governance and management frameworks
- Opportunities for internationally relevant evidence generation
- A credible setting for responsible, policy relevant science.

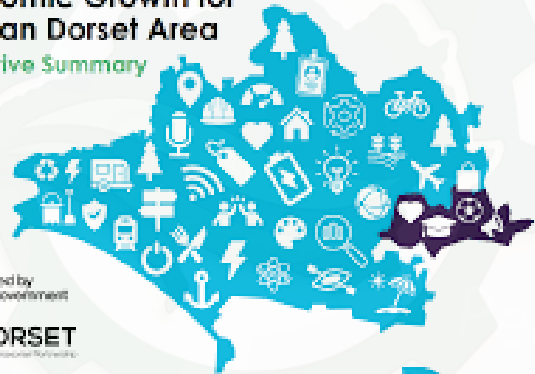
This designation landscape reinforces Dorset's suitability to operate as the UK's Living Science Park, where science is conducted within real regulatory, environmental and societal conditions.



4. Strategic Alignment and Policy Relevance

A Framework for Economic Growth for the Pan Dorset Area

Executive Summary



Funded by
UK Government



Produced by DorsetLEP on behalf
of Dorset Council and Bournemouth,
Christchurch and Poole Council



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TESTBED Dorset has been deliberately designed to align with both **national policy priorities** and the **most recent strategic direction for Dorset**, acting as a practical delivery platform rather than a parallel strategy. Its emphasis on place, prevention, responsible research and real-world translation reflects the direction of travel across government, funders and local partners.

At a local level, TESTBED Dorset aligns strongly with the **pan-Dorset growth agenda** developed jointly by Dorset Council and Bournemouth, Christchurch and Poole Council following the disbandment of Dorset Local Enterprise Partnership. That work positioned One Health within the Nature theme of the emerging growth strategy, recognising that environmental assets, land use and innovation capability are central to Dorset's long-term economic and social resilience. TESTBED Dorset provides a mechanism to turn this strategic intent into action by enabling research, innovation and enterprise to operate directly within Dorset's landscapes and communities.

The platform also complements Dorset Council's **Economic Growth Strategy 2025–2040**, particularly its focus on improving productivity, supporting high-value innovation, and strengthening sectors linked to agri-tech, environmental science and the wider life sciences economy. By enabling real-world testing and collaboration, TESTBED Dorset helps translate research capability into investable propositions and practical outcomes, supporting sustainable growth without duplicating existing business support. BCP Council's **Corporate Strategy 2024–2028: thriving economy** in a healthy natural environment frames a place “where people, nature, coast and towns come together in sustainable, safe and healthy communities” and sets a priority around **vibrant places where people and nature flourish with a thriving economy in a healthy, natural environment**. TESTBED Dorset is a strong fit because it explicitly links environmental and land-based innovation to place outcomes and community benefit, while creating routes for business and research collaboration.



TESTBED Dorset will align closely with the **Dorset Local Nature Recovery Strategy**, providing a way to support applied research, monitoring, piloting and learning that contribute to nature recovery objectives while engaging landowners, communities and researchers in delivery. TESTBED Dorset also aligns with the Dorset Local Nature Partnership's Vision and Strategy and it's six strategic priorities: natural capital; natural economy; naturally healthy; natural resilience; natural understanding and natural influence – all of which support the One Health approach.

Nationally, TESTBED Dorset aligns clearly with the priorities of the **Department for Environment, Food and Rural Affairs**. By enabling responsible research directly within working landscapes, it supports environmental protection and recovery, plant and animal health, biosecurity, food system resilience and evidence-based policy informed by high-quality real-world data.

The platform also aligns with the **UK Health Security Agency's** focus on prevention, preparedness and early insight. TESTBED Dorset enables research into environmental and ecological determinants of health, emerging disease risks influenced by climate change and land use, and the integration of environmental evidence into public health decision-making.

For **UK Research and Innovation**, TESTBED Dorset provides a real-world environment for interdisciplinary and translational research, strengthening pathways from discovery to adoption while embedding responsible research and public engagement throughout delivery.

Finally, TESTBED Dorset supports the **Department for Business and Trade's** priorities, including in the Modern Industrial Strategy, by enabling innovation-led, place-based growth, supporting small and medium-sized enterprises, reducing innovation risk through real-world testing, and creating conditions that are attractive to private investment.

In combination, this alignment positions TESTBED Dorset as a delivery-enabling platform that connects national ambition with local capability, translating strategy into credible, place-based action.



5. Operating Model & Phased Programme for TESTBED Dorset

5.1. Background: TESTBED Dorset operates as a place-based Living Science Park, providing the coordination, stewardship and facilitation required to enable responsible research and innovation to take place within Dorset's landscapes and communities.

It does not function as a single site or delivery body.

Instead, it operates as a distributed platform, connecting partners, enabling access, embedding responsible research practices and accelerating learning from real-world activity.

At the centre of the model is a small Hub team, whose role is to convene, facilitate and steward activity rather than to commission or deliver projects directly.

The operating model is designed to be lightweight, scalable and adaptive, evolving over time as activity, partnerships and funding mature.

Therefore, this operating model is intentionally **evolutionary rather than fixed**. It prioritises trust, learning and practical delivery in early years, before scaling activity and influence over time.

By phasing development in this way, TESTBED Dorset balances ambition with credibility, ensuring that growth is grounded in real-world experience and demonstrable value – relevant and useful.

5.2. Core Functions (Across All Phases): Across all phases, TESTBED Dorset undertakes four core functions:

- Convening and partnership building, bringing together academia, enterprise, public bodies, landowners and communities around shared challenges – this to include an annual summit and network engagement events
- Facilitating access to landscapes, assets, data and partners through clear, proportionate processes
- Embedding Responsible Research and Innovation, including public engagement, ethical consideration and environmental responsibility
- Capturing learning and insight from real-world activity to inform future projects, funding and policy relevance.

These functions remain constant, but their scale and form evolve across phases:

Phase 1: Partnership Growth and Project Facilitation (Years 1–3) - The initial phase focuses on establishing TESTBED Dorset as a credible, trusted platform.

Key priorities include:

- Growing and formalising the TESTBED Dorset network, including landowners, public bodies, research organisations, enterprises, and citizen engagement
- Facilitating an early pipeline of pilot, demonstrator and exploratory projects to test the operating model – aiming to support ~10 R&D projects per year by Yr3.
- Refining governance, permissions and assurance processes based on practical experience

- Developing and testing a sustainable funding model for the Hub team, drawing on a mix of grant income, project contributions and partner support.

During this phase, the Hub team operates in a highly facilitative role, focusing on connection, readiness and risk reduction rather than scale. Success is measured through quality of engagement, delivery of early projects and evidence that the model adds value.

Phase 2: Platform Consolidation and Scaling (Years 4–6) – Focuses on consolidating TESTBED Dorset as a recognised platform and increasing the scale and ambition of activity.

Key priorities include:

- Expanding the volume and complexity of projects supported, including multi-partner and multi-year activity
- Strengthening relationships with national research centres, funders and policy bodies
- Embedding TESTBED Dorset more deeply within funding pathways and strategic programmes
- Moving the Hub team towards a more stable, blended funding model, combining core support, service-based contributions and project-linked income.

At this stage, TESTBED Dorset operates as a trusted intermediary, reducing friction between funders, innovators and place-based partners. Learning from earlier activity informs refinement of challenge areas, engagement mechanisms and assurance processes.

Phase 3: Maturity, Influence and Replication (Years 6–10) – This phase represents the mature operating state of TESTBED Dorset.

Key priorities include:

- Sustaining a continuous pipeline of high-quality, place-based research and innovation
- Demonstrating long-term environmental, public health, economic and societal value
- Using accumulated evidence to inform national policy, funding design and best practice
- Exploring replication or adaptation of the Living Science Park model in other places.

By this phase, the Hub team operates with long-term financial sustainability, clear governance, and a strong national profile. TESTBED Dorset functions not only as a delivery platform, but as a reference model for responsible, place-based innovation.

❖ **Landowners and Public Green Space as Core Infrastructure**

A defining feature of TESTBED Dorset is that it treats land not simply as a backdrop for research, but as core infrastructure for responsible innovation. The active participation of major private estates alongside publicly managed green spaces enables the testbed to operate across a wide range of real-world environments, each with distinct ecological, social and operational characteristics.

Private landowners and local authorities are not passive hosts within TESTBED Dorset. They are strategic partners whose stewardship responsibilities, operational constraints and long-term objectives shape the nature of research and innovation activity. This partnership model ensures that activity reflects real decision-making contexts and produces evidence that is meaningful beyond the testbed itself. Landowners are the ultimate arbiters of what happens on their land.

The St Giles Estate provides large scale mixed farmland, woodland and rural settlements, enabling landscape level research into sustainable agriculture, soil health, plant health, biodiversity restoration and environmental drivers of disease. Its scale and continuity potentially allow for longitudinal studies that are particularly valuable for understanding change over time and informing policy and regulatory approaches.

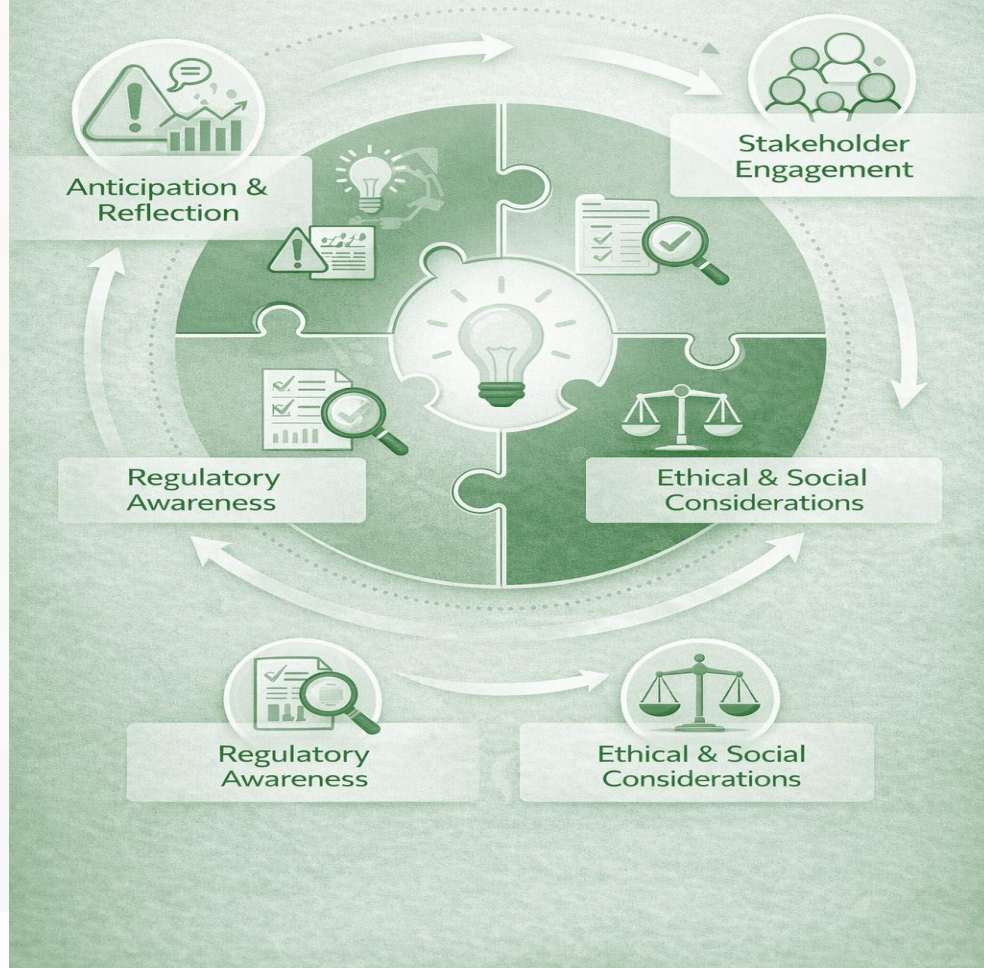
Smedmore Estate offers a distinctive land sea interface, combining agricultural land, semi natural habitats and Jurassic Coast proximity. This potentially supports research into coastal ecosystem health including learning about climate change through the fossil record; plant and soil resilience, antimicrobial resistance pathways and wildlife health in transitional environments. It also provides opportunities to explore nature-based solutions that address flood risk, biodiversity and community wellbeing together.

Kingston Maurward Estate adds a critical translational dimension, as part of Coastland College. As a working estate with an educational mission, it enables applied research, demonstration and skills development to occur side by side. Innovations tested here can be rapidly incorporated into training and practice, supporting workforce development aligned with One Health principles.

Alongside private estates, the green spaces managed by Bournemouth, Christchurch and Poole Council and Dorset Council provide essential urban, peri urban and community facing environments. Parks, heathland, country parks, commons and coastal access land enable research into urban health and wellbeing, environmental exposure, biodiversity in public spaces, plant and tree health, and inclusive citizen science.

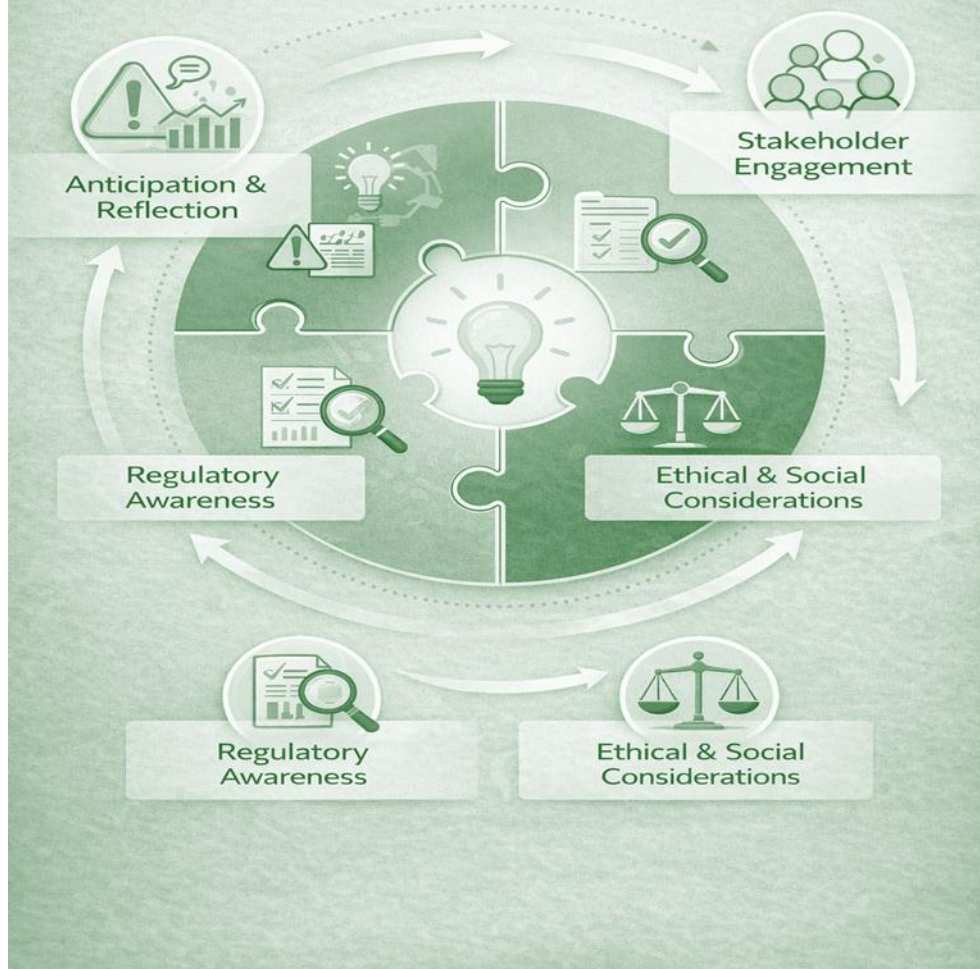
Together, these land assets allow TESTBED Dorset to operate across different ownership models, management regimes and access conditions. This enables comparative research, strengthens public engagement and ensures that innovation is grounded in the realities of both private stewardship and public responsibility.

RESPONSIBLE RESEARCH & INNOVATION



6. Responsible Research and Innovation in Practice

RESPONSIBLE RESEARCH & INNOVATION



Responsible Research and Innovation is not a theoretical commitment within TESTBED Dorset. It is a practical framework that shapes how projects are designed, governed and delivered.

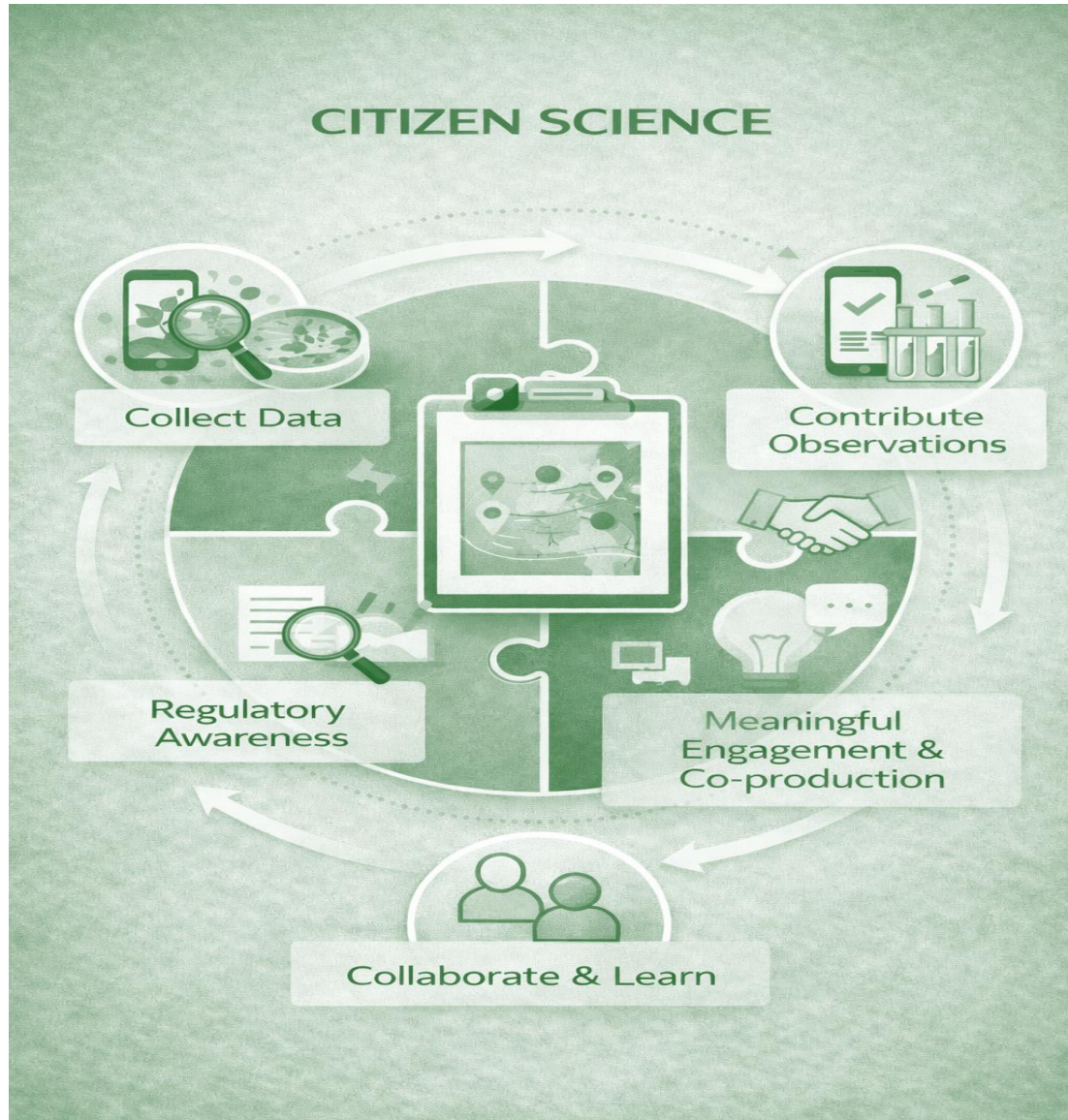
This includes anticipating potential impacts and unintended consequences, engaging stakeholders early, reflecting on values and assumptions, and responding to emerging insight. These principles are applied proportionately, recognising the diversity of activities supported by the testbed.

Projects are expected to consider ethical, social, environmental and regulatory implications from the outset. This reduces downstream risk, supports public trust and improves the likelihood of adoption and scale.

Public engagement is integral to this approach. Communities are not treated as passive recipients of innovation, but as partners whose perspectives improve quality and relevance. Transparency and feedback are prioritised, ensuring that participants understand how their involvement contributes to outcomes.

Regulatory awareness is also embedded within Responsible Research and Innovation practice. TESTBED Dorset supports innovators in aligning evidence generation with regulatory and policy needs, helping to bridge the gap between innovation and implementation.

By embedding responsibility throughout the innovation lifecycle, TESTBED Dorset demonstrates that rigour and agility are not opposing forces, but complementary strengths.



7. Learning, Participation and Citizen Science

CITIZEN SCIENCE



Learning and participation are foundational to TESTBED Dorset. The testbed recognises that responsible research and innovation depend not only on technical excellence, but on understanding, trust and shared ownership between science and society. Therefore, the TESTBED Hub will help facilitate this engagement and involvement through its wider network.

Learning within TESTBED Dorset supported project and programmes is experiential and place based. By embedding learning alongside live research and innovation activity enables people to engage with real challenges rather than abstract concepts. This applies to a wide range of audiences, including school pupils, students, early career researchers, SMEs, land managers, public sector staff and lifelong learners.

We see citizen science as a core capability rather than an optional add on. It enables data collection at scale, supports longitudinal observation and strengthens the relationship between people and the places they inhabit.

Citizen science activity may include environmental monitoring of air, water and soil, biodiversity observation, plant and wildlife health reporting, disease surveillance and evaluation of nature-based interventions, etc. Through these activities, citizens meaningfully contribute directly to the evidence base underpinning One Health innovation.

Publicly accessible green spaces play a critical role in enabling inclusive participation. They provide familiar, accessible settings where engagement can occur as part of everyday life, rather than through specialist or exclusionary mechanisms.

Through learning and citizen science, TESTBED Dorset's network builds capability, understanding and trust, ensuring that innovation is not only effective, but socially legitimate and sustainable.



TESTBED Dorset
LIVING SCIENCE PARK

8. Governance, Assurance and Trust

Governance, Assurance and Trust

Credible governance is essential to the success of TESTBED Dorset.



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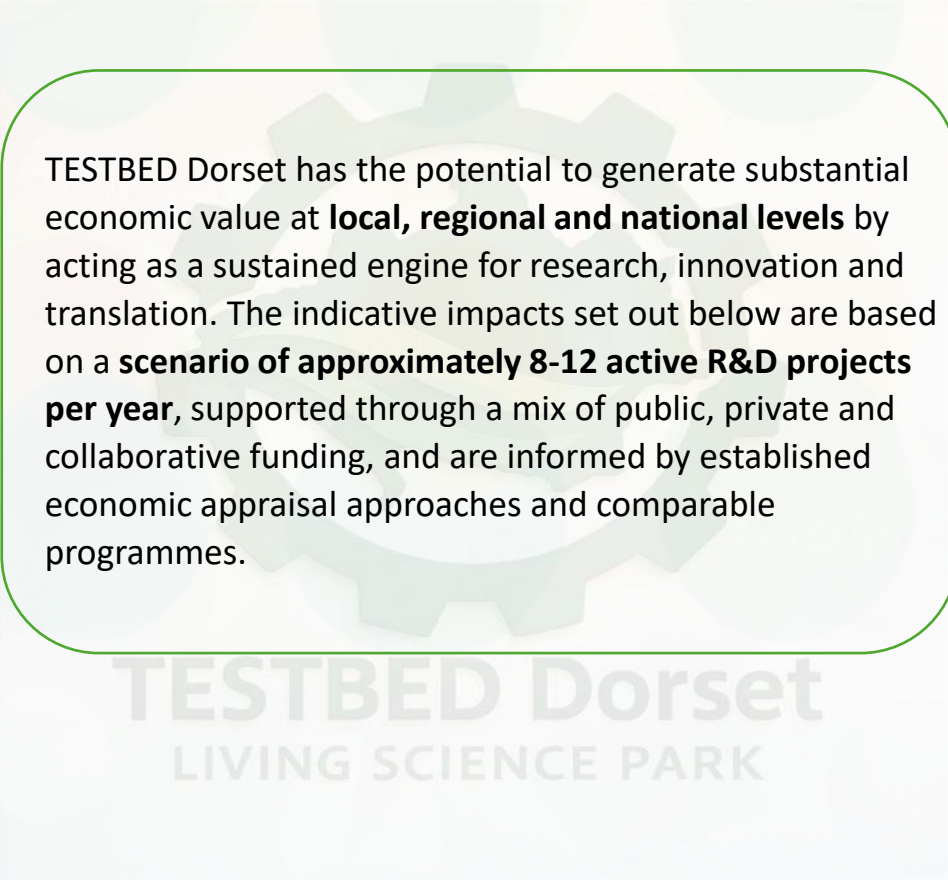
TESTBED operates with clear structures for oversight, accountability and decision making, designed to be enabling rather than burdensome.

Strategic oversight is provided through the One Health Enterprise Network Steering Group - a multisector group with representation from government, academia, enterprise, land management and public interest perspectives. This ensures alignment with policy priorities and maintains strategic coherence.

Project engagement is guided by transparent criteria, including alignment with One Health principles, Responsible Research and Innovation and public value. Ethical and regulatory considerations are addressed early through proportionate review mechanisms.

Clear roles and responsibilities are established for all partners, reducing ambiguity and managing risk. Data governance, consent and safeguarding are treated seriously, particularly where citizen science and community engagement are involved.

Trust is built through consistency, transparency and delivery. By operating openly and sharing learning, TESTBED Dorset builds confidence among partners, funders and communities.



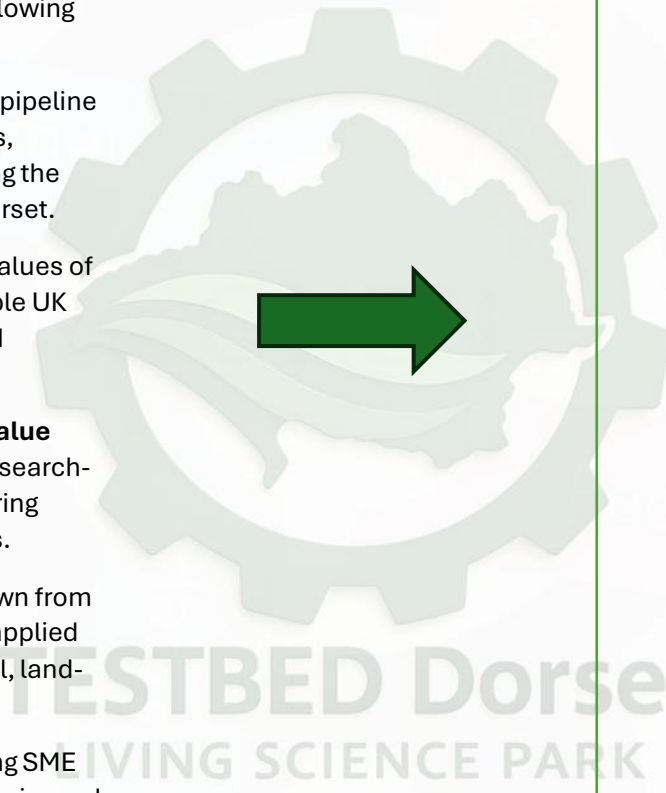
TESTBED Dorset has the potential to generate substantial economic value at **local, regional and national levels** by acting as a sustained engine for research, innovation and translation. The indicative impacts set out below are based on a **scenario of approximately 8-12 active R&D projects per year**, supported through a mix of public, private and collaborative funding, and are informed by established economic appraisal approaches and comparable programmes.

9. Potential Economic Impact

9.1 Methodology and Assumptions: The indicative economic impacts set out below are based on a transparent, conservative methodology intended to demonstrate **order of magnitude**, rather than provide precise forecasts. The analysis draws on the following core assumptions:

- **Project pipeline modelling:** A sustained pipeline of **8–12 projects per year**, spanning pilots, demonstrators and applied R&D, reflecting the expected operating model of TESTBED Dorset.
- **Average project values:** Typical project values of **£0.8–£2.0 million**, informed by comparable UK research and innovation programmes and combining public and private investment.
- **Economic multipliers:** Standard **gross value added (GVA) multipliers of 1.6–2.2** for research-intensive and life sciences activity, capturing indirect and induced supply-chain effects.
- **Employment intensity:** Benchmarks drawn from agri-tech, environmental innovation and applied life sciences, covering research, technical, land-based and SME roles.
- **Spillover and follow-on effects:** Including SME sales growth, licensing and IP exploitation, inward investment, productivity gains and follow-on funding.

These assumptions are aligned with **HM Treasury Green Book principles** and with evaluation approaches used in comparable place-based innovation programmes.



Local Economic Impact (Dorset): At a local level, TESTBED Dorset anchors high-value research and innovation activity directly within Dorset. The emphasis on a **sustained flow of projects**, rather than one-off investments, enables cumulative economic benefits to build over time.

Over a ten-year period, TESTBED Dorset could:

- Support **80–120 R&D projects** across health, environmental and land-based innovation
- Attract **£80–£150 million** in direct R&D expenditure into Dorset
- Support or create **600–1,000 skilled jobs**, including research, technical, land-based and SME roles
- Generate **£150–£300 million in direct GVA**, driven by SME growth, contract activity, IP exploitation and follow-on investment

Local multipliers are further strengthened through demand for professional services, equipment and monitoring, data and digital services, green construction, and land-based operations.

Regional Economic Impact (Wessex and South West): At a regional scale, TESTBED Dorset enhances the existing research and innovation ecosystem by providing a **real-world testing and validation capability**, improving both funding success rates and investor confidence.

Taking direct, indirect and induced effects into account, indicative regional impacts over ten years include:

- **£300–£600 million in total economic activity**, combining direct spend, SME growth, supply-chain effects and productivity gains
- A material contribution to strengthening the **£3.2 billion regional life sciences economy**, particularly in agri-tech, animal and plant health, environmental innovation and prevention-focused solutions

Comparable impacts have been observed in regional innovation assets such as agri-tech centres, catapult-linked demonstrators and place-based research programmes.

National Economic Impact (UK): Nationally, TESTBED Dorset operates as a **de-risking and acceleration platform**, improving translation from research to adoption and reducing late-stage R&D failure.

Drawing on evidence from national innovation and demonstrator-led programmes, potential UK-wide benefits over ten years include:

- **£500 million to over £1 billion in economic benefit**, arising from productivity gains, avoided costs, faster adoption of innovation and SME scale-up
- A **replicable model for place-based innovation**, capable of being adapted and deployed in other regions

Relevant exemplars include Innovate UK demonstrator programmes, UK Catapult Centres and large-scale place-based research initiatives, where real-world testing has significantly improved adoption and value realisation.

9.2. TESTBED Dorset as a Model for the Future: TESTBED Dorset has been deliberately designed not only as a place-based initiative for Dorset, but as a model for how research and innovation can be organised and delivered in the future. Its value lies as much in the approach it demonstrates as in the outcomes it generates locally.

At its core, TESTBED Dorset responds to a challenge shared across the UK and internationally: many of the most pressing issues facing society, from environmental change and food security to biosecurity and public health, require innovation that works across real systems rather than within controlled or artificial settings. Traditional models of research and innovation often struggle to address this complexity. TESTBED Dorset offers an alternative by enabling responsible, real-world testing within living landscapes and communities, supported by proportionate governance and trusted partnerships.

As a model, TESTBED Dorset is intentionally **modular and transferable**. It does not depend on a single institution, asset or funding source. Instead, it combines a small coordinating hub, a clear operating framework, and a network of partners who retain control over their own assets and decisions. This makes the model adaptable to different geographies, policy contexts and sectors, while maintaining consistency in principles and standards.

Within the UK, this approach has clear potential to be adapted in other places with distinctive landscapes, research strengths and community assets. TESTBED Dorset demonstrates how national policy ambitions around place-based growth, prevention, environmental recovery and innovation can be translated into practical delivery mechanisms. Lessons from its governance, funding, engagement and assurance arrangements are already informing discussions about how similar Living Science Park approaches could be developed elsewhere, tailored to local context rather than replicated wholesale.

Internationally, TESTBED Dorset provides a credible **exportable model** for countries facing similar challenges. Many nations are seeking ways to align research, innovation, economic development and environmental stewardship more effectively. The Living Science Park approach offers a framework that can be adapted to different regulatory environments, cultures and landscapes, while retaining its focus on responsible research, public value and real-world impact.

Crucially, TESTBED Dorset demonstrates that innovation does not need to be detached from place to be globally relevant. By grounding activity in real landscapes and communities, and by embedding learning and responsibility throughout delivery, the model generates insights and solutions that travel well beyond their point of origin.

If adopted and adapted elsewhere, the TESTBED Dorset model has the potential to generate significant additional economic impact beyond Dorset itself. On a conservative basis, replication of a Living Science Park model in five to ten UK locations over the next decade, each supporting a similar pipeline of around ten R&D projects per year, could enable £1.5 - £3.0 billion in cumulative economic value, combining direct research spend, SME growth, supply-chain effects and productivity gains. Internationally, the model also presents an opportunity for exportable innovation capability, including advisory support, programme design, governance frameworks and partnership development. Even limited overseas adoption, for example through collaborations with three to five countries seeking place-based approaches to One Health, environmental innovation or biosecurity, could generate tens of millions of pounds in service exports, research collaboration income and inward investment, while strengthening the UK's position as a leader in responsible, place-based innovation.

In this way, TESTBED Dorset functions not only as a local and regional asset, but as a scalable economic and intellectual platform with the potential to deliver substantial national and international returns over time .

TESTBED Dorset also positions the county not only as a beneficiary of innovation, but as a **contributor to future innovation practice** in the UK and internationally, offering a practical, tested model for how complex challenges can be addressed through place-based action. Feeding into national learning about how innovation systems can better serve public value.

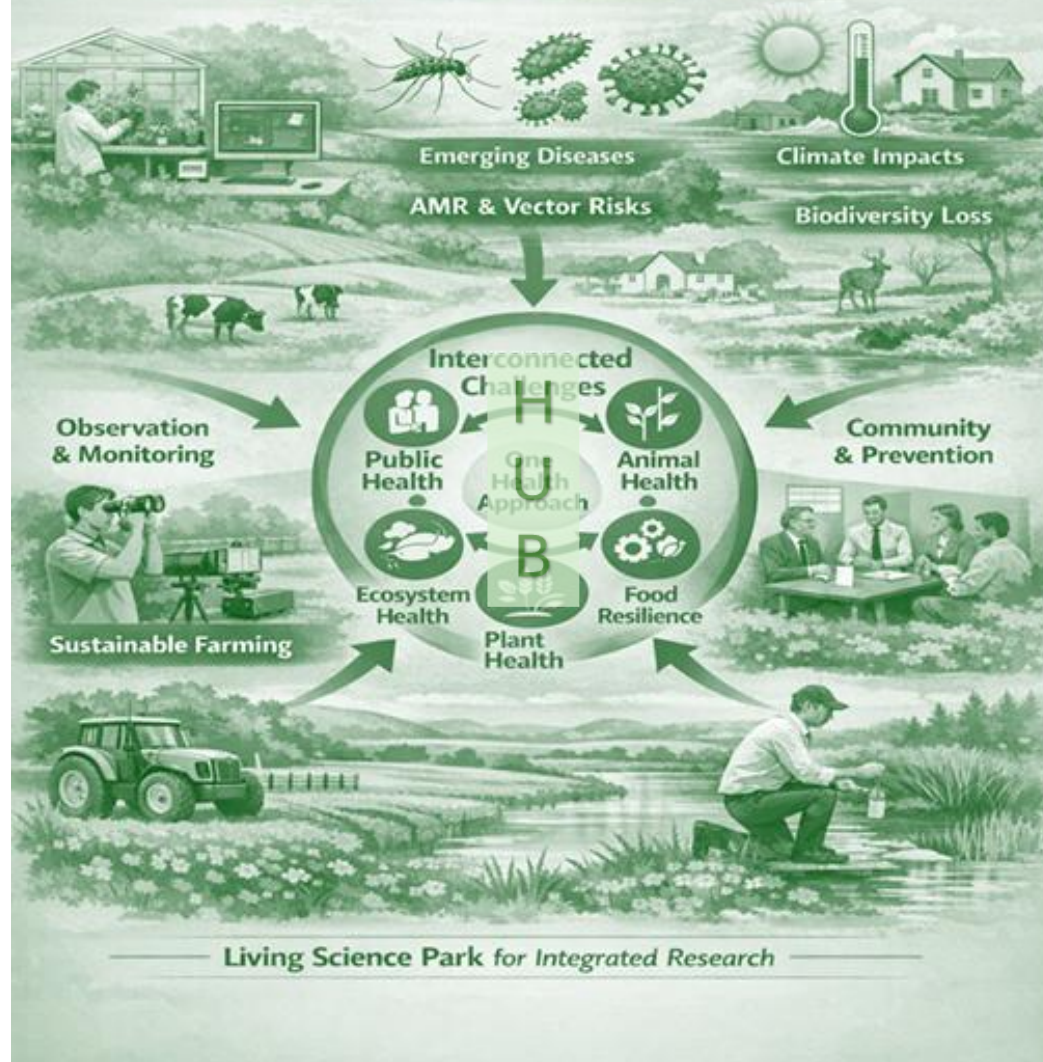


TESTBED Dorset
LIVING SCIENCE PARK

10. Contacting the TESTBED Dorset Hub

TESTBED Dorset: One Health, Place-Based Testbed

Human • Animal • Environment



TESTBED Dorset operates through a central Hub that provides a single point of contact for organisations and individuals interested in developing projects, exploring collaboration, or inviting expertise to events. The Hub exists to make engagement straightforward, proportionate and well governed, while ensuring that activity aligns with One Health principles and Responsible Research and Innovation.

The Hub does not replace existing relationships or institutional routes. Instead, it acts as a coordinating function, helping partners navigate the landscape of land access, expertise, governance and engagement in an efficient and transparent way.

Developing a Project within TESTBED Dorset

Organisations seeking to develop a research or innovation project within TESTBED Dorset are encouraged to contact the Hub at an early stage. Early engagement allows ideas to be shaped in ways that are realistic, responsible and aligned with both local context and national priorities.

The Hub can support project development by:

- Discussing the suitability of an idea for a place based One Health approach
- Identifying relevant landowners, public green spaces or community settings
- Connecting proposers with academic, enterprise or public sector partners
- Advising on Responsible Research and Innovation considerations
- Helping navigate governance, permissions and engagement requirements
- Supporting alignment with policy, regulatory and funding contexts.

Engagement with the Hub does not commit proposers to a specific pathway. It provides an informed starting point that can save time, reduce risk and improve the quality and credibility of proposals.



Requests for Speakers and Contributions to Events

The TESTBED Dorset Hub also coordinates requests for speakers and contributions to conferences, workshops, training sessions and policy discussions. Hub members collectively bring expertise across One Health, land-based science, responsible innovation, enterprise, public engagement and place-based research.

Requests may include:

- Keynote or panel contributions on One Health and place based innovation
- Case studies on TESTBED Dorset projects or approaches
- Contributions to policy, academic or industry events
- Participation in workshops, sandpits or learning programmes.

The Hub will identify appropriate contributors based on the nature of the request, ensuring that contributions are relevant, authoritative and aligned with the values of TESTBED Dorset.

How to Make Contact

Initial contact with the TESTBED Dorset Hub should be made via the central coordination point – **kevin.brooks@OHEN.UK**. Enquiries are triaged to ensure that responses are timely and appropriate, and that requests are directed to the most relevant Hub member or partner.

When making contact, it is helpful to include:

- A brief outline of the proposed project or event
- The intended audience or setting
- Timescales and any known constraints
- Any specific expertise or perspective being sought.

This enables the Hub to respond efficiently and constructively.