

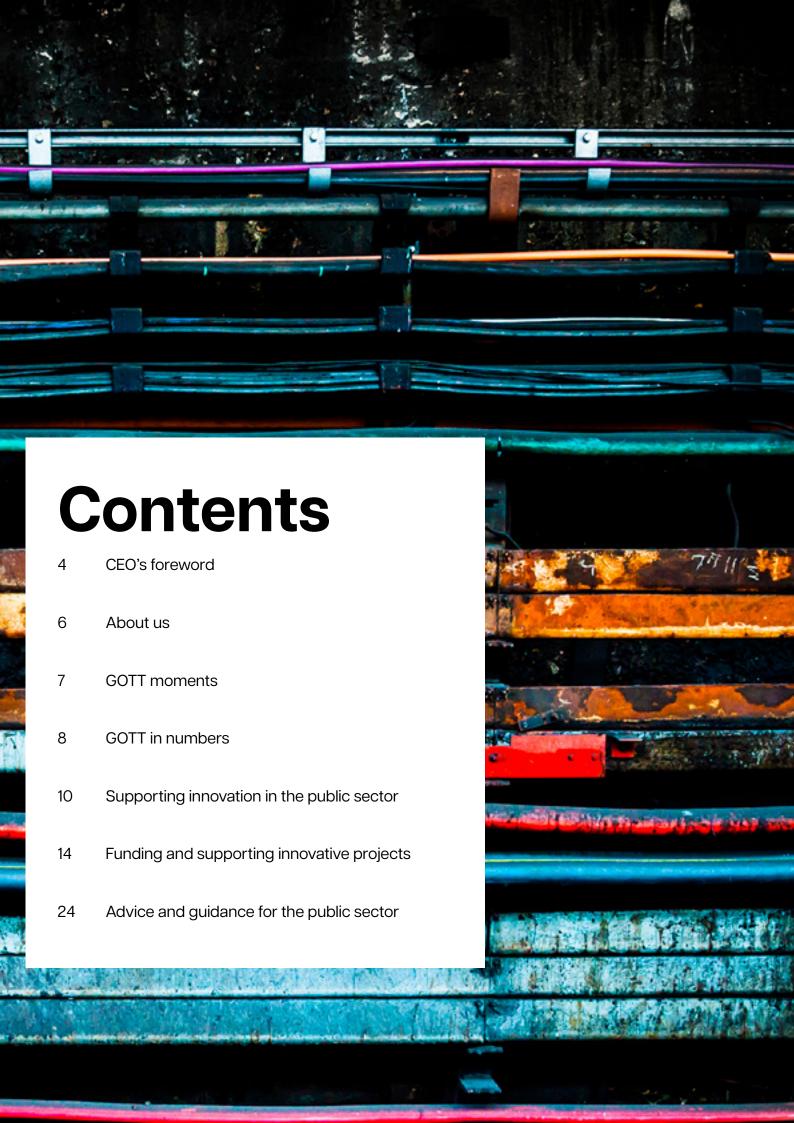


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By Dr Alison Campbell OBE

Welcome to the GOTT annual Snapshot Report. This is now the second year we've published an update on our progress and I am very proud of what our team has achieved, though there is of course still a lot of hard work ahead of us. It is important to hold ourselves to account by tracking our progress to help ensure we meet our commitments.

It's been a year of lots of "firsts". We've launched our first accelerator programme known as PRIMA (The Public Research Innovation and Market Accelerator) which aims to help innovators to test whether there is a market for their idea, product or service. We're delighted to have welcomed the first cohort in the Spring. We've also hosted our first-ever conference which was a big success in bringing together innovators across government. And we've published the first independent review into public sector spin-outs. There are many more

examples of new initiatives contained in this report so I won't give away too many more.

GOTT has provided education, funding, advice and expertise as well as encouraging government and the wider public sector to introduce new mechanisms to support innovators to devote more time to the exploitation of Knowledge Assets.

We've built a diverse pipeline of over 160

Knowledge Asset opportunities from right across the public sector that have the potential for commercial or wider exploitation. Some of these projects are gaining international recognition and securing places on exciting start-up incubator programmes, for example ChipStartUK.

We've started the groundwork and planted seeds to help set the public sector up to tackle a myriad of challenges with a pro-innovation mindset. We've started to build the model for Knowledge Asset exploitation in the public sector that will deliver benefits to the UK economy, society and the public sector itself. Part of this work involves cultivating the right environment across government for valuing the importance of Knowledge Assets so they reach their full potential.

As GOTT's leadership team, Maggie, Joanna, Rachel and I look forward to continuing to play our part in accelerating innovation in the public sector in the coming year.

We'd like to thank our team, stakeholders, Advisory Board and the leadership team in DSIT for their brilliant support this year. None of this would be possible without you.



Joanna Rodin, Deputy Director jobshare, Strategy and Implementation



Rachel Egan, Deputy Director jobshare, Strategy and Implementation



Dr Maggie McGowan, Deputy Director, Capability and Partnerships



GOTT is a unit within the government's Department for Science, Innovation and Technology, with a cross-government remit. We support central government departments and their public bodies. We also work with a range of stakeholders such as private sector investors, tech transfer organisations, universities and the wider knowledge exchange sector to share our collective knowledge.

It's our job to harness the power of innovations created by the public sector by supporting the identification, development and translation into use of these intangible Knowledge Assets (KAs) to deliver social and economic value for the UK.

Our team of experienced policy professionals and commercialisation specialists provide advice and practical support to build knowledge and expertise within the public sector. Our support offer has grown over the past year and includes:

 guidance on KA policy and practice, tailored for each public sector organisation's needs.

- grant funding to test out the potential of a KA for a different purpose or application either inside or outside of government.
- advice on the different pathways and strategies to commercialise a high potential KA and practical support to develop the KA towards the market, for example through licensing or setting up a spin-out.
- advice on KA development for potential use across government.
- training and development to upskill innovators who may be new to KA exploitation or more experienced.
- membership of a cross-government network that offers peer support from other innovators who share a desire to learn more about KA exploitation.

GOTT moments

May 2023

Knowledge Assets Grant Fund Spring Panel meeting

July 2023

Knowledge Assets Grant Fund Summer Panel meeting

July 2023

Hosted a grant application workshop

August 2023

Published new guides to help the public sector develop KA Management Strategies and appoint Senior Responsible Owners



October 2023

Knowledge Assets Grant Fund Autumn Panel meeting

November 2023

Held our first Conference



January 2023

Completed an independent review into the spinout landscape in the public sector

January 2023

Knowledge Assets Grant Fund Winter Panel meeting

February 2024

Reached a landmark of 100 grant-funded projects

Launched our first-ever Accelerator programme



March 2024

Refreshed the Rose Book guidance to incorporate HR/ Talent Mobility and Procurement advice



GOTT in numbers

By 31st March 2024 GOTT had:

Built a pipeline of over

160

Knowledge Assets

Awarded grants totalling

organisations

to 110 Knowledge Asset projects in 40 public sector

Seen the appointment of





Senior Responsible Officers

for Knowledge Asset
Management appointed across
government

154

members of our crossgovernment Knowledge Assets Network

Funded

5 new roles

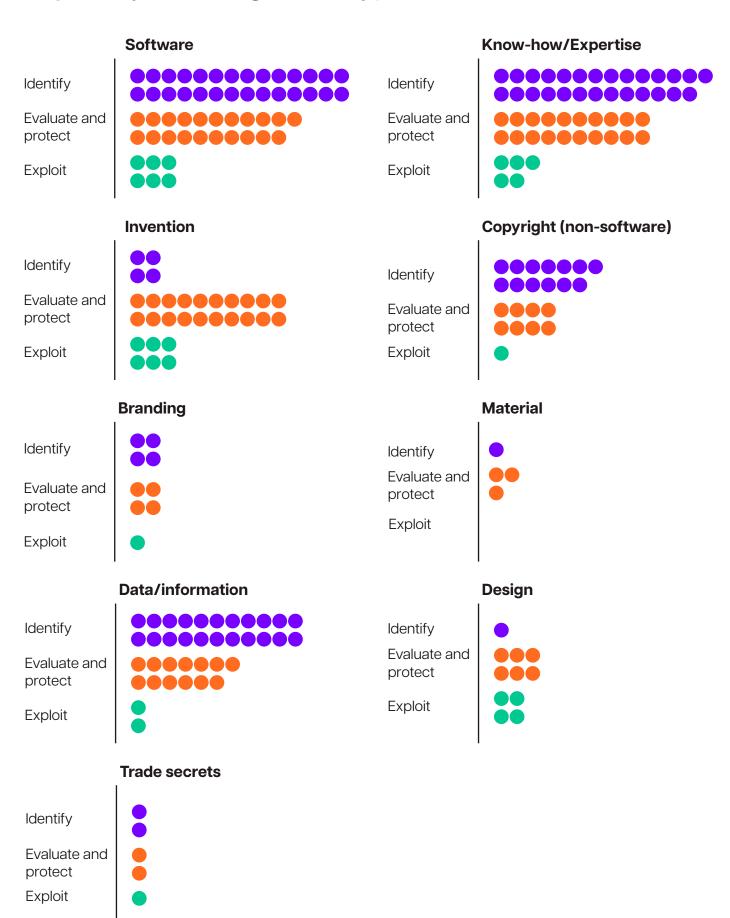


to embed Knowledge Asset Management in individual public organisations

1,845
LinkedIn followers



Projects by Knowledge Asset type



Supporting innovation in the public sector

Capacity-building for a sustainable model

GOTT is committed to enhancing the KA capability of innovators and leaders from right across the public sector. Whilst there are excellent examples of organisations that have been exploiting KAs for many years in pockets of government, we want to make sure support is consistent and everyone can take advantage of these opportunities. There has been a clear demonstration of demand for more knowledge and upskilling in KA exploitation (in particular, commercialisation) from different areas in government too with many asking GOTT directly for further support.

We've responded to this by rolling out a suite of capability-building programmes that will help to enhance the careers of innovators through engagement opportunities, skills development and training.

In March 2024, we also launched <u>a new accelerator programme</u> known as PRIMA (The Public Research Innovation and Market Accelerator) in partnership with Innovate UK. Innovators from 7 organisations were selected to join the first cohort in Spring 2024 and will take part in an 8-week part-time customer discovery programme to test whether there is a market for their idea, product or service.

We developed a package of accessible skills training during the year, and launched the Beginner Bootcamp, designed to cover the fundamentals of KA exploitation. The Bootcamp covers how to identify KAs in a public sector organisation and how to manage them and will take place in-person in June 2024.

The PRIMA accelerator programme is the result of a pivotal partnership between Innovate UK and the Government Office for Tech Transfer to empower public sector innovators to create, develop and deliver tangible benefit for society. We are excited at the launch of this unique platform, which will provide the first cohort with collaborative access to diverse sector leaders and organisations building on the experience of the Innovate **UK ICURe programme and** our excellent ICURe delivery partners.

Dave Wilkes.

Director for Innovation Ecosystem, Innovate UK

A commercialisation webinar series will also run throughout 2024/25.

We've initiated a pilot programme to fund a dedicated KA Manager post in five public sector organisations. The objective is to stimulate sustainable change from within individual organisations, driving a culture of KA exploitation and delivering new KAs with wider market potential. Running for two years, the KA Managers will seek out new and underutilised KAs as well as developing their host organisation's KA strategy and underpinning policies. GOTT's team of Tech Transfer Strategic Partners will act as dedicated mentors to each postholder.

We look forward to reporting back on the uptake and impact of all of these initiatives in next year's Snapshot Report.

Networking and knowledge exchange

We've helped to develop networks that nurture and facilitate greater engagement between innovators across wider government. Our Knowledge Asset Network is now an established cross-government network with over 150 members. We've held three meetings with our network over the past year where members have discussed Knowledge Asset Management Strategies, Tech Transfer Fellowships, appointing a Senior Responsible Owner and other KA-related topics. Members such as NHS England, The National Archives and the Science and Technology Facilities Council have also shared their approaches to KA exploitation during the sessions.

The success of our KA network has led to our development of a new digital community space where members can connect with each

It's been great working closely with GOTT from the start. GOTT is running a number of schemes that we've been able to leverage to support the exploitation of knowledge Assets. The KA Network has been a great platform to connect, share our experience in KA management and gain learnings from our colleagues in other public organisations.

Abeer Abdalla Innovation Lead UK Atomic Energy Authority

other and a growing events calendar that now includes in-person events.

We held our first-ever national conference in November 2023. Almost 100 innovators from across government plus the wider tech transfer eco-system gathered in London to hear from inspiring keynote speakers. Feedback from delegates has been overwhelmingly positive and many new relationships were formed at the event that continue to be maintained.

A lively panel discussion looked at how to resource KA management with Dr Heather Lewtas, Head of Innovation at UK Atomic Energy Authority, Dr Robert Singh, Director of Research and Enterprise, Essex University and Dr Anji Miller, Programme Director, LifeArc /Skills Lead, Innovation Hubs for Gene Therapies.

The morning sessions were very inspirational. The overall content was good to inspire those on the fence about commercialising public sector assets.

- delegate feedback

Organisations that are practicing KA commercialisation are at different stages of that process, some just starting the journey and some more experienced, and a forum like this conference, where shared practice can be openly discussed is incredibly helpful.

- delegate feedback

What counts as a Knowledge Asset. I had a very narrow view about this before.

- delegate feedback





Plenary sessions included 'Accelerating Knowledge Asset exploitation in the public sector: opportunities and challenges' with panellists from Ploughshare, the Natural History Museum and Quantum Detectors (pictured above).

The conference closed with a speech from DSIT's Permanent Secretary Sarah Munby who highlighted the importance of collaboration in driving innovation (pictured below).

Our CEO Alison Campbell spoke to European Knowledge Transfer leaders in Luxembourg in November 2023 and also shared her innovation and spinout expertise in a keynote speech at a spin-out conference in Copenhagen in October 2023.

Our team also took part in the Association of European Science and Technology Transfer Professionals Annual Conference Joint Action for Global Impact in Tallinn. This event brought



together over 300 knowledge transfer and Tech Transfer professionals, creating a platform for in-depth discussions on the latest challenges, projects, and opportunities facing the community.

Funding and supporting innovative projects

Our Knowledge Assets Grant Fund, now in its third year of operation, supports projects with the potential to deliver social, economic and environmental benefits to the UK. It supports early stage KAs, with funding available for activities such as market research, building prototypes, testing asset development, gathering supporting data, scoping end-users' requirements, exploring IP protection and sourcing expert advice. Routes to exploitation are typically long-term and where the grant funding adds particular value is in early stage de-risking and decision making. Projects are independently assessed by a panel of external experts.

This year we reached a major milestone of 100 funded projects in sectors as diverse as museums to healthcare. GOTT funds a wide variety of KA types, from Al tools for analysing documents to 'Deep Tech' solutions in quantum computing, fusion control software, sensors and advanced manufacturing.

In addition to funding support through the Knowledge Assets Grant Fund, GOTT supports innovative projects directly through its dedicated Technology Transfer Strategic Partnerships team. The team has had a busy year engaging with a range of organisations, from regulators and research establishments to central government departments to develop government-owned innovations towards the market. We're proud to have amassed a burgeoning portfolio of over 160 KAs.

We've established partnerships and created a cohort of specialists inside and outside government to work with the Technology Transfer Strategic Partnerships team in areas including evaluating nascent IP portfolios, developing commercialisation strategies, and help exploit promising KA opportunities. We have been pleased to access the skills of patent specialists at the Intellectual Property Office, working closely to dive deeper into publicly-owned patent families. We've seen the success of our Technology Transfer and Commercialisation Dynamic Purchasing System, which has enabled agile procurement of commercialisation expertise for particular projects, supplementing GOTT's in-house capabilities.

We've been struck by the diversity and uniqueness of the KAs in GOTT's portfolio. We'll continue to support successful outcomes throughout the year, with exciting projects progressing through the pipeline, some of which are showcased in this report.

Many of the projects we support are ongoing so it's advisable to stay updated by keeping an eye on our <u>website</u> and <u>social media channels</u>. Below are a few examples of projects we've funded and supported over the past year.



HSE's Smarter Regulation Sandbox: improving health and safety compliance

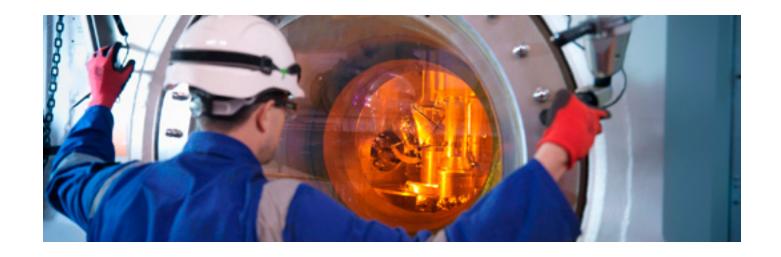
Discovering Safety, a programme of work led by the Health and Safety Executive, has made significant strides in using data and analytics to reduce workplace injuries and fatalities. The programme developed the world's first regulatory sandbox in 2023 which achieved a safe space for government, industry, and technology providers to innovate in robotics, Al, safetyzones and safetytech such as hearing protectors.

With new support from GOTT, Discovering Safety, alongside project partner, Safetytech Accelerator can now expand the successful Health and Safety Sandbox System into a replicable blueprint. The 'Smarter Regulation Sandbox' will accelerate regulatory compliance and support innovators in bringing new, exciting regulatory technology products to market that have the potential to improve health and safety consequences in millions of workplaces.

With this support from the Government Office for **Technology Transfer the Smarter Regulation Sandbox** will demonstrate how digital technology can be used to make health and safety regulatory information more accessible to organisations in order to accelerate compliance, improve efficiency and productivity and reduce regulatory burdens on industry, whilst supporting innovators to bring emerging digital products to market.

Helen Balmforth,

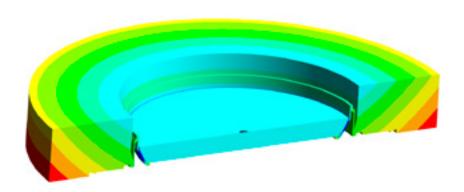
Head of Data and Analytics and Lead on Discovering Safety, Health and Safety Executive



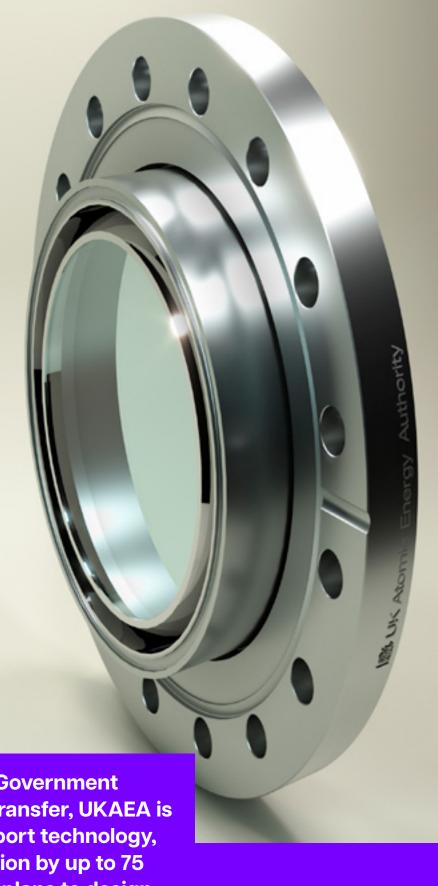
UKAEA's fusion technology: finding new applications

The UK's national fusion lab UK Atomic Energy Authority (UKAEA) has used KA grant funding from GOTT to expand the application of its unique fusion technology and deliver value to its customers. As a vital part of its research into fusion energy, UKAEA, has built expertise in producing high-performance optical viewports used on fusion machines. Project Solace, which

received the grant funding, further enhances viewport performance for other sectors such as quantum physics. These designs will be available for different sectors and global markets, including aerospace, beam-line science and high-power laser applications, to provide solutions to manufacturing challenges.



Pictured above: a model of UKAEA's diffusion-bonded viewports. Diffusion bonding joins parent materials to improve precision and quality for applications such as optical viewports. This image shows thermal expansion of the various metallic and ceramic elements during bonding which cause optical distortion.



With support from the Government Office for Technology Transfer, UKAEA is improving optical viewport technology, reducing optical distortion by up to 75 percent. The team now plans to design and produce ultra-low distortion designs for the next generation of quantum computers and sensors.

Tim Bestwick, Deputy CEO, UKAEA



Presymptom Health spin-out company

Each year, 245,000 people are affected by potentially fatal sepsis in the UK and late-stage diagnosis increases the likelihood of death by 10% for every hour left untreated.

Originally focussed in battlefield applications, scientists at the Defence Science and Technology Laboratory (Dstl) developed a diagnostic tool using machine learning to enable much earlier and more effective diagnosis and treatment, before symptoms appear or clinical diagnosis is possible.

Ploughshare, on behalf of Dstl, established Presymptom Health Ltd as a spinout to attract investment and realise the full commercial and social potential including the civilian market.

In 2021, Dstl was awarded grant funding from GOTT to undertake further technology development and related clinical trials. Following completion of the project, the resulting IP was licensed to the company.

In March 2024, Presymptom Health Ltd raised a further £1.5m in an external funding round to accelerate product development and time-to-market. The product is currently undergoing clinical trials at nine NHS hospitals in the UK. A first commercial product launch based on

this work, to support antibiotic stewardship by ruling out infection in symptomatic patients, is expected to secure accreditation by mid-2025.



This ground-breaking innovation will mean that patients with sepsis stand a much better chance of survival as diagnosis and treatment can take place before symptoms even appear.

Dr Roman Lukaszewski, *Chief Diagnostics, Dstl*



NPL's HIDRA Vision semiconductor chip

GOTT's sustained support has been pivotal in helping the new semiconductor wafer imaging technique developed by HIDRA Vision to reach its present stage of development, which includes much more in-depth understanding of the market, requirements for productisation, and to deliver new heights with the technology. In addition, GOTT's funding allowed the HIDRA Vision team to get the exposure it needed from investors and advisors specialised in the semiconductor industry. Developed at the National Physical Laboratory (NPL), HIDRA Vision's imaging technology will help ensure the UK remains at the forefront of the compound semiconductor industry on the global stage.

NPL was awarded a second round of KA grant funding to build and test a full-scale prototype across various applications where high-level imaging is required, for example, semiconductor inspection and computational pathology. The project has now received backing from DSIT's incubator programme, ChipStartUK, where HIDRA Vision is one of 12 startups selected for Cohort 1 and was recently invited as one of only two companies to engage with Silicon Catalyst US.

With the help of the Knowledge Asset Grant Fund, we are moving technology that was developed for research activities into an application to directly benefit the UK industry in compound semiconductors.

Dr Yameng Cao, CPhysNPL Senior Scientist, CTO
and Acting CEO of HIDRA
Vision, an NPL spinout



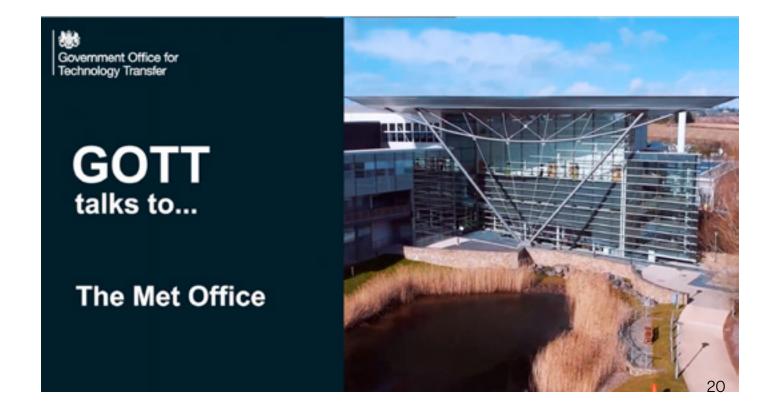
Met Office Knowledge Asset Management approach

The Met Office has a rich reservoir of data, expertise in climate science and world-renowned meteorology. It understandably wants to protect and make the most of their KAs The Met Office has developed a joined-up corporate approach which forms the basis of their Knowledge Asset Management Strategy.

This strategy now has endorsement from their senior leadership team and organisation-wide

buy-in as a result of gaining support from their CEO. The team leading KAs at the Met Office worked with colleagues across their organisation to help change behaviours and create procedures that support the strategy.

Click the image below to watch a short film and hear from the team in their own words.





We have made good progress on work to protect and exploit Met Office Knowledge Assets in the past year, working across a wide range of Met Office teams to understand what assets are important to us and / or have untapped potential value. The Rose Book and support from GOTT has been essential in establishing why we need to do this work and ways we can take it forward to best effect.

Patrick Sachon,

Head of Product Portfolio and Knowledge Assets, Met Office



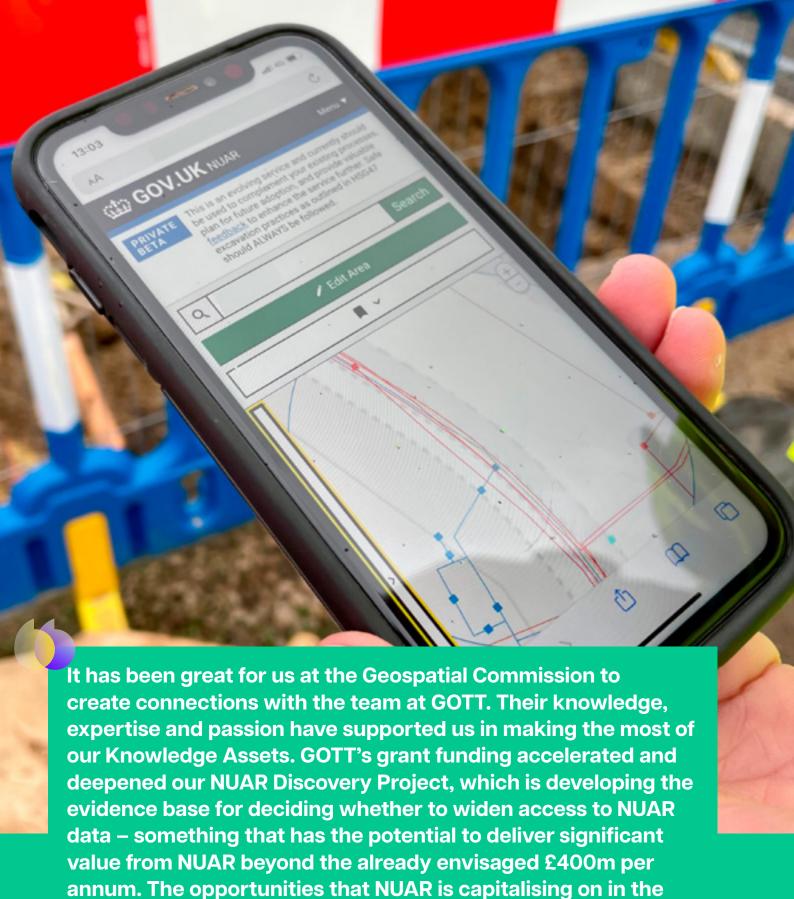
Geospatial Commission's National Underground Asset Register

The Geospatial Commission, part of the Department of Science, Innovation and Technology, has successfully licensed a data-based KA in the form of the National Underground Asset Register (NUAR). NUAR is an emerging digital map of underground pipes and cables that is revolutionising the way buried infrastructure is installed, maintained, operated and repaired. NUAR is envisaged to deliver at least £400m per annum of economic growth through increased efficiency, reduced asset strikes (when underground pipes and cables are accidentally damaged)

and reduced disruptions for the public and businesses. The Geospatial Commission was awarded grant funding to explore potential market opportunities and increase benefits from widened secure and controlled access. In parallel, GOTT's Tech Transfer team advised the project team on licensing of the KA to other government organisations around the world. The UK and Ontario (Canada) have since signed a collaboration agreement to share the knowledge and technology behind NUAR.

Click the image below to watch a short film and hear from the team in their own words.





UK are replicated across the world, and the advice on licensing

NUAR internationally was valuable as we explore opportunities

Chris Chambers,

Deputy Director Geospatial

from collaboration with others.

Deputy Director, Geospatial Commission

Advice and guidance for the public sector

GOTT has an essential role in guiding and providing best practice in KA management to the public sector. We've published a number of new guides that provide a framework for thinking and that are applicable across an array of contexts and so should be the first place public sector organisations turn to when considering KAs.

Tailored organisation-specific advice can be sought from GOTT where required in addition to the general good practice guides.

Knowledge Asset Management Strategies: What to include and where to start

Who's it for?

Public sector organisations that want to ensure effective KA management in support of their organisational priorities, alignment to central government guidance and value for money.

What's in it?

A checklist with recommended practical actions covering:

- Strategic context and getting started.
- Putting KA management into practice.
- · Continuous evaluation.



Knowledge Asset Senior Responsible Owner (SRO): guide to appointing and the role.

Who's it for?

Public sector organisations appointing a Knowledge Asset SRO.

What's in it?

- The 4 responsibilities of an SRO.
- · Recommended actions and examples.



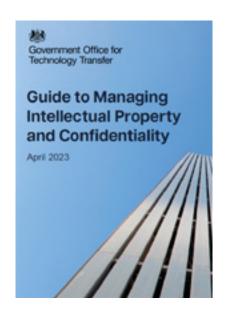
Managing intellectual property and confidentiality

Who's it for?

People interested in Knowledge Assets and involved in the creation or management of IP in the public sector.

What's in it?

- The basics of IP and IP rights.
- How to manage them.
- · Why and how to approach confidentiality.



Refreshed Rose Book guidance on Knowledge Asset management in government

Who's it for?

Public sector organisations headed by an Accounting Officer who is responsible for upholding Managing Public Money.

The recommendations are relevant to a range of roles such as Executive and Non-Executive teams and government professions such as HR, Commercial, Procurement and Innovation.

What's in it?

Additional supplementary guidance added to the existing Rose Book guidance covering:

- HR/Talent policies.
- Public sector procurement.



Acknowledgements

We would like to thank our stakeholders, partners and KA Grant Fund panellists.

We are grateful to the GOTT Advisory Board whose members have been instrumental in sharing their insights so generously and putting GOTT in a strong position to deliver on its ambition:

Ben Alexander,

Adviser, Cabinet Office.

Sue Connaughton,

Deputy Director, HM Treasury.

Dr Anne Lane,

CEO, UCL Business Ltd.

Dr Andrew Mackintosh,

Chair of UKI2S.

Professor Paul Monks,

Chief Scientific Adviser for the Department for Energy Security and Net Zero.

Maxine Purdie,

Independent expert and former CEO of PraxisAuril.

Dr Tony Raven,

Independent expert and former CEO of Cambridge Enterprise.

Tony Soteriou,

Director, UKRI.

Dr Stuart Wainwright OBE,

CEO, UK Centre for Ecology & Hydrology.

Adam Williams,

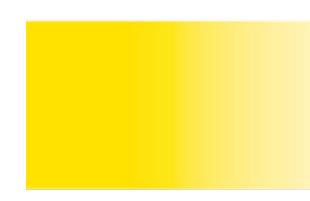
CEO, Intellectual Property Office.

Tom Taylor,

Director of Finance, Planning & Performance and Chief Financial Officer, Office for National Statistics.

Ted Hayden,

Director, Government Office for Science.









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