



Government Office for
Technology Transfer

International Perspectives on Knowledge Transfer

Alison Campbell
CEO GOTT
UPV – innovation
1st March 2023

International perspectives

**A personal reflection on themes
and trends**

Introducing GOTT



Government Office for Technology Transfer

GOTT supports the UK public sector to unlock the potential of its knowledge assets to deliver value to the UK economy and society.

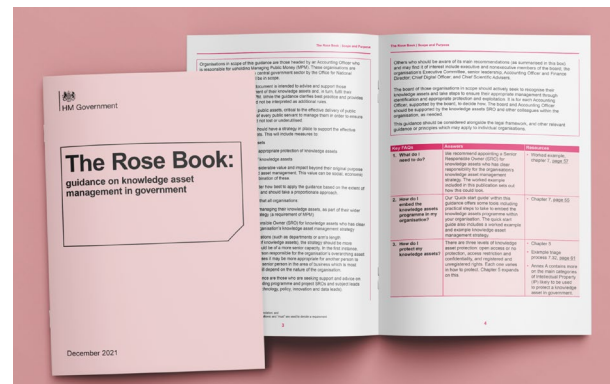
We contribute to building an environment where innovation can thrive and where improved management and exploitation of knowledge assets can transform processes, products and services in the public and private sectors.

Knowledge Assets (KAs) exploitation

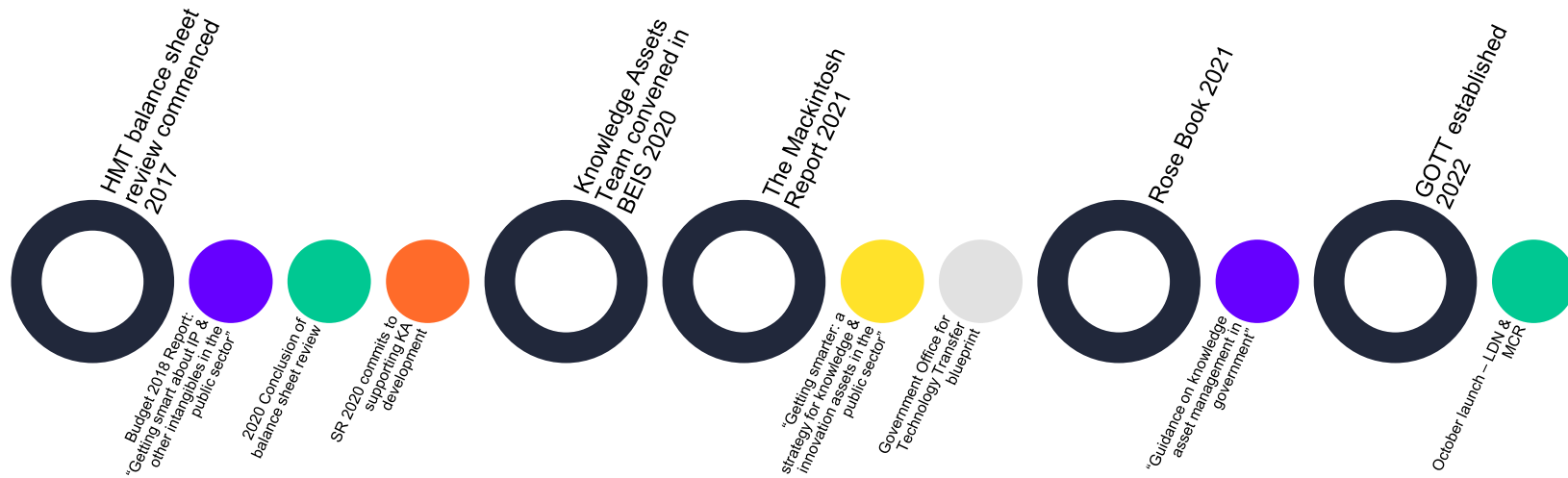
- Intangibles including:
 - Intellectual property
 - Datasets
 - Processes or method
 - R&D outputs
 - Know-how

- KA exploitation includes:
 - Sharing within government
 - Commercialisation
 - e.g. out-licensing or spin-outs
 - Open-source
 - Collaboration
 - Consultancy

The Office of National Statistics estimates c.50% investment in the economy is into intangibles



We are in start-up mode



HM Treasury



Department for
Business, Energy
& Industrial Strategy



Department for
Business, Energy
& Industrial Strategy



Government Office for
Technology Transfer



Department for
Business, Energy
& Industrial Strategy

Strategy

Purpose: Creating value for the UK through unlocking the potential of government-owned knowledge assets (KAs)

Objective: To increase engagement in, and outcomes from, KA exploitation

Priorities:

- Raise the profile of KA exploitation across government
 - Gov-tech and wider disciplines
- Create connected KA communities across government
 - Share and develop best practice
- Deliver targeted interventions
 - Advice, support, funding, policy
 - Help to access the right services and expertise



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Technology Transfer

Knowledge
assets are
intangible assets
e.g. intellectual
property, R&D
outputs, data &
know how

Multi-disciplinary
team: policy,
analysis,
marketing &
communications,
technology
transfer



Headquartered in
Salford, with staff
also located in
Cardiff and
London

Supporting UK
public sector
organisations to
unlock the
potential of their
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GOTT is a cross-
government
delivery team
based in DSIT

KA exploitation
delivers value to
the UK - social,
economic and
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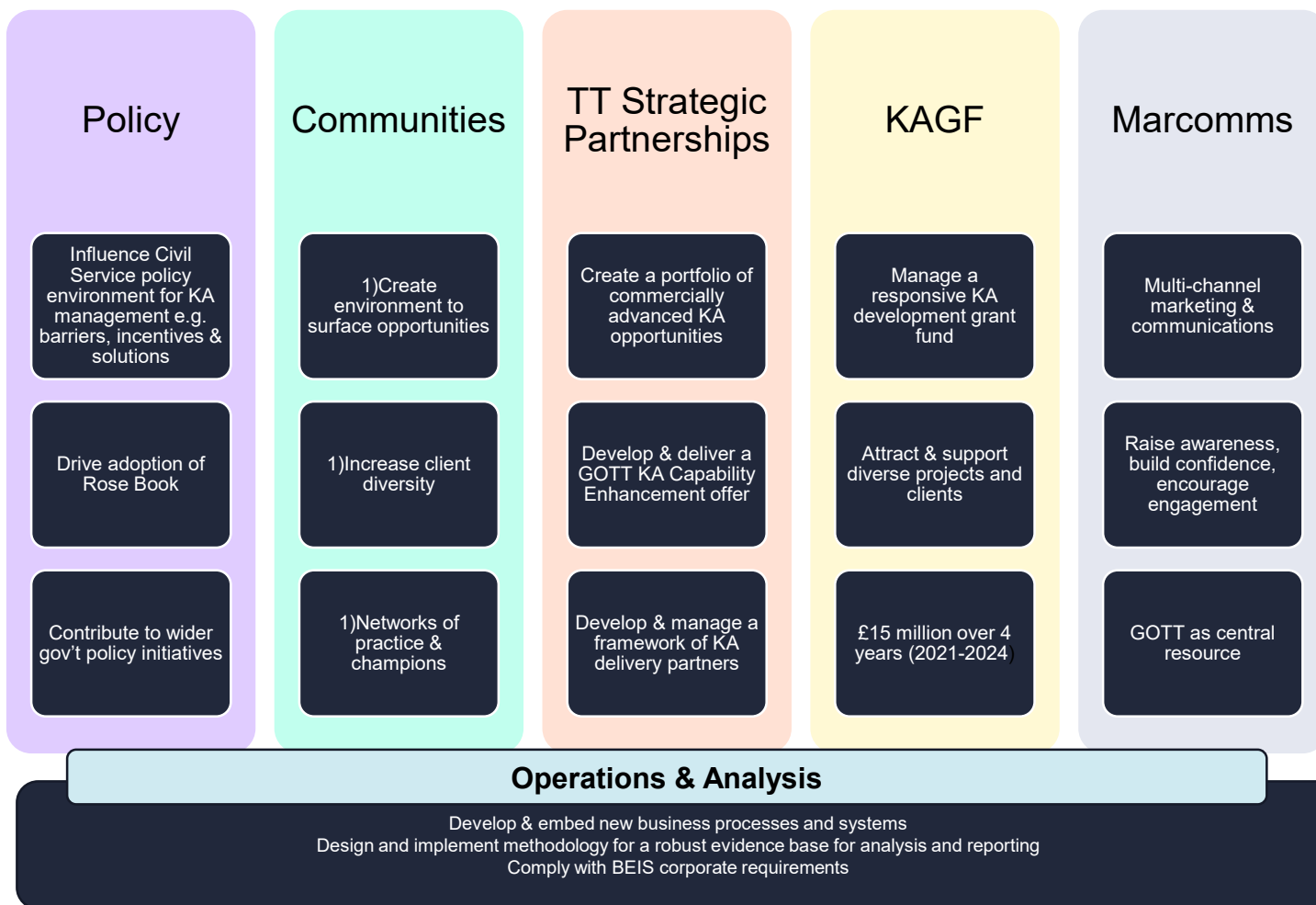


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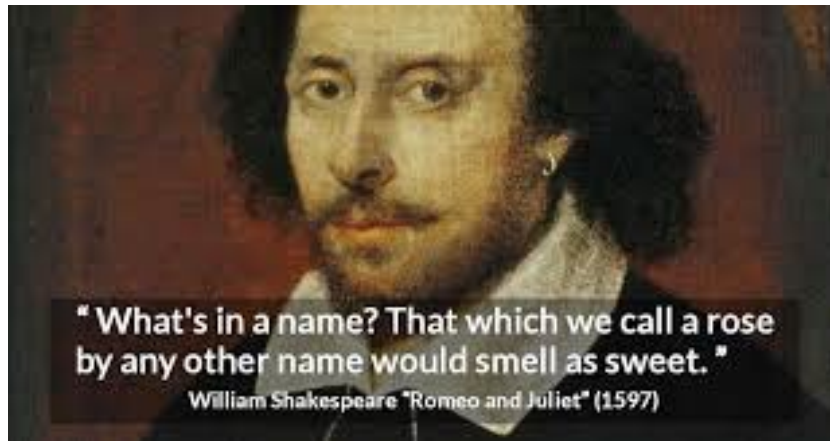
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Themes and trends



**"What's in a name? That which we call a rose
by any other name would smell as sweet."**

William Shakespeare "Romeo and Juliet" (1597)



Technology Transfer

Knowledge Transfer

Knowledge Exchange

Exploitation

Commercialisation

Valorisation

Knowledge Asset Management

Technology Transfer

Knowledge Transfer

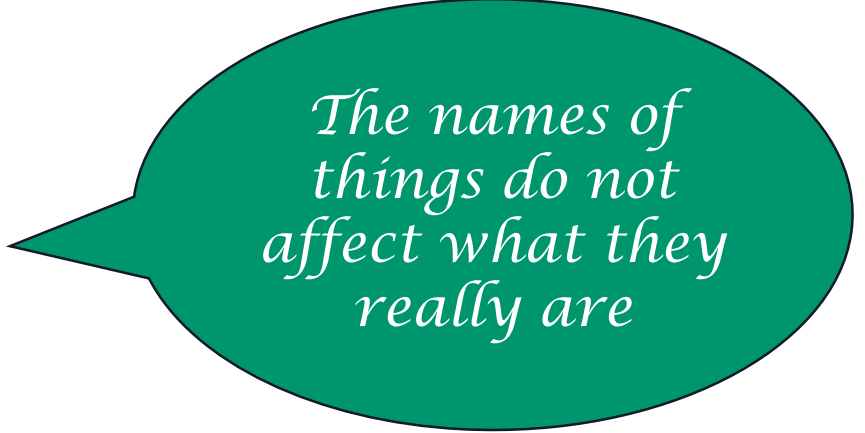
Knowledge Exchange

Exploitation

Commercialisation

Valorisation

Knowledge Asset Management



*The names of
things do not
affect what they
really are*

**Provided we know what we are doing and why
And others do too**

Government Office for Knowledge Asset Transfer (GOKAT)....

Government Office for Knowledge Asset Transfer (GOKAT)



Tech transfer is changing (“*but they’ll never call it KT*”)



“If I could sum up 2022 in two words, they would be “increasing complexity”. Multiple new high-profile research alliances, new accelerator programs, and new types of partnering deals at Stanford have created a more complicated landscape, but they make our work more intellectually stimulating and exciting.”

Karin Immergluck, associate vice-provost, Office of Technology Licensing, at Stanford University

“ By having a corporate alliances unit that can quickly connect companies with existing faculty research programs, IP portfolios and startups, we are able to lay the groundwork for a multi-faceted collaboration.”

Kelly Sexton, associate vice-president for research and Innovation Partnerships at University of Michigan

Spin-out environment

BUSTING MYTHS AND MOVING FORWARD

The reality of UK university approaches to
taking equity in spinouts

TOMAS COATES ULRICHSEN
ZOI ROUPAKIA
LEONARD KELLEHER

NOVEMBER 2022

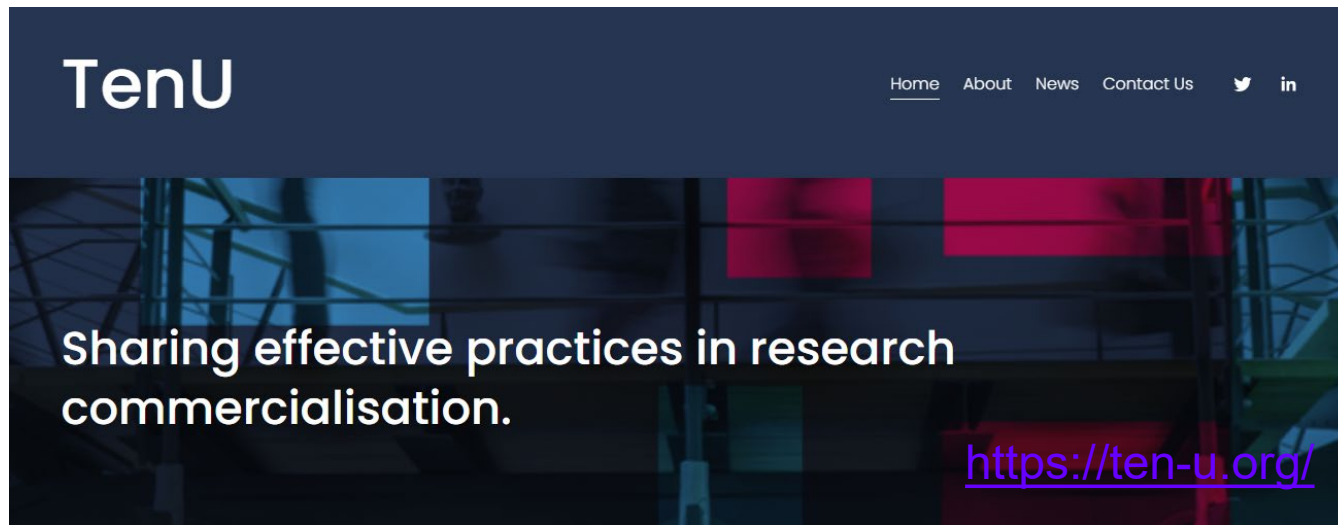
TECHNICAL REPORT



UNIVERSITY OF
CAMBRIDGE

University
Commercialisation and
Innovation Policy
Evidence Unit

TenU is an international collaboration formed to capture effective practices in research commercialisation and share these with governments and higher education communities.



USIT Guide due May

Columbia Technology Ventures

BIOCENTURY

Analysis BCIQ Data Events My Workspace About BioCentury Contact

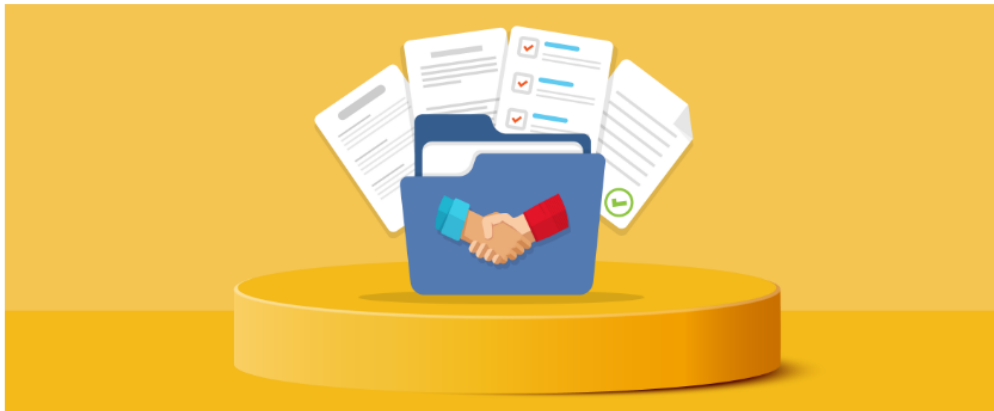
ARTICLE | FINANCE

Getting start-ups started faster

Start-up license template could reduce university-VC negotiation time 80%

BY STEPHEN HANSEN, ASSOCIATE EDITOR

21 November 2022 9:36 PM GMT



A consortium of academic institutions, VCs and law firms are aiming to slash the time and cost of licensing IP for life sciences start-ups by 80%, through the publication of a model term sheet.

The consortium came together nearly three years ago based on shared frustration at the time it takes to reach agreement on a license term sheet between a technology transfer office and investors building a company around the academic IP...

Orin Herskowitz: “2022 was a big year for us, as we wrapped up a two-plus years-long effort to create [a common ‘reasonable’ template for early-stage university life science startups funded by venture capital](#). It was a great cross-university and cross-VC initiative..”

“Next up: hoping to do the same thing for climate startups..”.

Venture Partners at CU Boulder

Brynmor Rees, associate vice chancellor for research & innovation and managing director of Venture Partners:

‘Licensing with EASE®’ model.

Licensing with EASE® express agreement for start-up entrepreneurs launched in 2018

CU Boulder has seen its number of startups “increase dramatically,”



CATALOGUE OF MODEL AGREEMENTS

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Featured Model Agreement

KTI Model Part Funded Collaborative Research Agreement

The agreement is for use for collaborative
research between an research performi...

docx 88.8KB

[Download](#)

Featured Model Agreement

COVID-19 Non Exclusive Royalty- Free (NERF) Licence Agreement

This simple two page agreement makes
COVID-19 related intellectual property easi...

docx 42.9KB

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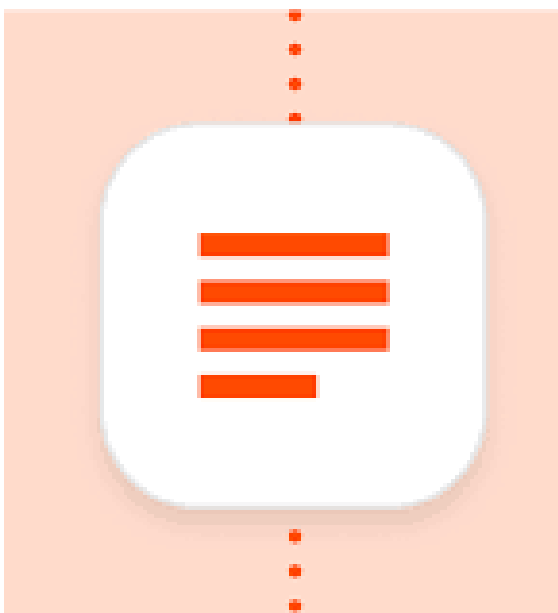
Featured Model Agreement

KTI Model Option to Licence Agreement to a Spin-out Company

An option to take a licence to IP to certain
milestones, such as successful fund...

docx 50KB

[Download](#)





Keith Marmer, chief innovation and economic engagement officer at University of Utah:

“With tight public capital markets putting downward pressure on venture capital investors, I anticipate universities will face decisions on whether **to increasingly invest their own resources** into promising opportunities and keep these assets in-house longer than we’ve seen in the past....

I believe we will see universities also increase investments in risk mitigation structures, including **larger seed stage venture funds, increased entrepreneur engagement programs and pre-company technology accelerators.**”



<https://northern-gritstone.com/>

- Supports the commercialisation of science and IP-rich businesses based in the North of England
- Profit with Purpose
 - Financial returns for shareholders & wider positive, societal and economic impact, including high-skilled job creation in the North of England.
- Partners: Universities of Leeds, Manchester and Sheffield
- First close £215m
- Catalysed by government programme – Connected Capabilities (HEIF)

- A national seed investment fund that nurtures innovative businesses from the UK's publicly funded science and knowledge base
- From seed to Series A and beyond
- Objective to leverage private investment and grow jobs, recycling profits from the realisation of our investments into the next generation of impactful UK companies.
- Backed by UK Research and Innovation (UKRI), Ministry of Defence (MOD), the Department of Science Innovation and Technology (DSIT), the UK Atomic Energy Authority (UKAEA) and other public bodies.
- Includes £13.9m investment by DSIT to support KAs-based spin-outs
- Managed by Future Planet Capital Group.





We are moving our technology transfer and entrepreneurship activities closer together to capitalise on the increasing interest in innovation and entrepreneurship in the research community

Alastair Hick, chief commercialisation officer at Monash University

Diversity in spin-outs: UK university spin-outs 2022





Science & commercialisation given new focus



2021 New German coalition (SPD, Greens and Free Democrats).

- A focus on science includes creation of a **federal technology transfer agency**, the German Agency for Transfer and Innovation (DATI).
- €14.6 million funding in 2023 of a proposed annual budget of €50 million (for the agency plus its innovation activities)



2022 New Australian government (Labour)

- Commercialisation of science at the core of the evolution of the Australian economy.

CSIRO Corporate Plan 2022/3:

- Advance Australia's **commercialisation of science**
- Share our world-class national labs and facilities with industry....



2023 new UK Prime Minister created a new Department of Science Innovation and Technology.

- **S&I&T is key to** the Government's plan to grow the economy > generating better, well paid jobs and driving improvements in health, education and transportation.

Enduring investment in commercialisation & KT pays off



KiwiNet:

- Enduring alliance of 19 research organisations (11 years)
- Funding – government, institutions, corporate partners
- Objective - transforming scientific discoveries into new businesses
- In 2022 they scaled the pipeline to more than 830 projects, launched 35 startups & NZ\$255m in financials returns for New Zealand.



Higher Education Innovation Funding (HEIF).

- Supports knowledge exchange (KE) in universities
 - Can include funding for commercialisation staff
- Funding – government
 - £260m programme (over five years)
- Objective - create and sustain a range of knowledge exchange activities in response to demand across the economy and society
- Return on investment - £8.30 generated for every £1 of funding.



Hot topic in Knowledge Valorisation

December 2022 - European Council adopts [Recommendation on the guiding principles for knowledge valorisation](#)

- knowledge valorisation in research and innovation policy;
- skills and capacities;
- system of incentives;
- intellectual asset management;
- relevance in public funding schemes;
- peer learning;
- metrics, monitoring and evaluation.

To be implemented through

- [Code of practice on the management of intellectual assets](#) & [Code of practice on standardisation in the new ERA for Research and Innovation](#),
- Developed with Community of Practice
- Publication and adoption due early 2023?

Horizon Europe EIC-funded Transition and Pathfinder projects IP Provisions

Granting of royalty-free access rights to EIC inventors

- **December 2022** ASTP, AURORA, CESAER, Coimbra Group, EARTO, EULIFE, Idea League, LERU [Joint Statement](#):
 - Possible conflicts with institutional, regional or national rules on IP & revenue share
 - Obstacles to the knowledge valorisation services provided by KTOs
 - And potential researcher tensions
 - Negative side effects for universities to maximise research exploitation
- **Amendment** to EIC IP rules in the [EIC Work Programme 2023](#)
 - EIC beneficiaries [universities] may suspend the access rights to EIC inventors if they consider that the exploitation activity by inventors could negatively affect their own exploitation activities.
- **Current situation**
 - Not suitable. EIC should implement the same IP provisions as rest of Horizon Europe.

IP hot topic - AI

- AI and ML patent applications are increasing with a compound annual growth rate of around 20%, worldwide
- Big data is doubling in size every two years
- Estimated \$16.6bn of VC investment in AI start-ups in 2019 in USA

Patenting & transacting

Patent

- There is no specific patent guidance but...
 - EPO 2020 - AI inventions are subject to the same type of scrutiny as other “computer-implemented inventions”
 - USPTO 2020 - “AI is viewed best as a subset of computer-implemented inventions”
- > describe the technical effect

Sharing and trading data (WIPO 2022)

- Challenge
 - How data is defined, categorized and regulated?
- Further issues
 - Security, ethics, privacy, ownership



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Thank you

www.gov.uk/government/organisations/government-office-for-technology-transfer

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