

# “Information Governance: making it work?”

NERC Digital Gathering, DG23

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*525 years*  
of pushing boundaries

# Overview

- Interactive
- Laws and regulation, funder, industry and scientific norms
- Your challenges and successes
- What would help and what help is out there
- Science focus: legal perspective led CDE22 Masterclass, webinar (see site)
- Cross cutting
  - Next-generation sensing
  - Data science tools and techniques
  - Environmental data – collection and governance
  - Building Confidence and trust, people and skills

# How we will do it

- Abbe and others online on Zoom (hopefully)
- In room support
  - Burcu, John, IT support....
- Questions via SLIDO
- Recording?

## Key themes

- Strong focus on open research, open data, open access
  - Metadata, datasets, outputs
- Funders, governments (not just UK) eg Geospatial Commission (Geo6)
- Information sharing regimes
- “Instinctive science”
  - FAIR
  - DORA evaluation
  - Fort Lauderdale
    - immediately available
    - enable recognizes and respects important contributions
- Business models – sharing or reward (and different mixes)

## And within that....1

- What does open mean (eg Ordnance Survey Mastermap free, rest - Premium)
- Geospatial Strategy
  - Mission 1 “Mission one safeguard “The UK needs to create the right market conditions and **incentives for innovation, while safeguarding national security, intellectual property rights and individual** privacy.”
  - ‘Open’ can refer to different qualities of the data such as whether it: is findable, accessible, interoperable and reusable (FAIR) ; is free at the point of use; or has clear licensing conditions
  - “To unlock the power of location, we need to take a balanced approach that considers the costs, value [golden thread and combination] and sensitivity [individual and business] of different types of data”
- Race: publication pressure, exceptions in information regimes - s22 and 22 A FOI Act
- Someone has to pay
- REF28 indications
- **NEED** to check (policy, licence, SOP, contract, standards, and support infrastructure -
  - bottom of pages....

## And within that....2

- National differences
- Who “own” the data you are working with
  - IP rights, funder, government
    - [The James Hutton Institute Open Data Licence \(download\).pdf](#)
    - Cranfield Soils “depending on the status of the user, the cost can vary from a fully commercial charge for data lease to being royalty free with a small charge for extraction and preparation of the data to meet the user’s needs”
- Check licences for what you can do now and for your results
  - data and publication
  - non commercial/commercial
  - raw and value-added
  - reputation/taken as is
- Expectations of making licence clear for publication, minting DOI for datasets
  - have others done as they would be done by?
  - Data management and dissemination plan

# Some starting checklists - 1

- NERC DataTree training - <https://datatree.org.uk/> - funded by NERC launched 2018 topics 1, 3, 6
- <https://www.ukri.org/manage-your-award/publishing-your-research-findings/making-your-research-data-open/> [doesn't refer to IP previous one did]
  - 3 “You should record and make metadata available and discoverable to other researchers in a way that helps them to understand the research and reuse potential of the data. Published results should always include information about how to access the supporting data”
  - 5 “To make sure you get appropriate recognition, you may be entitled to a limited period of privileged use of the data you have collected and analysed to publish the results of your research. The length of time depends on the research discipline and the research council running the funding opportunity”
- <https://www.ukri.org/about-us/policies-standards-and-data/good-research-resource-hub/open-research/>

## Some starting checklists - 2

- NERC data policy <https://www.ukri.org/about-us/nerc/our-policies-and-standards/nerc-data-policy/>
  - “Central to the policy is that NERC-funded scientists must make their data openly available within two years of collection, and deposit it in a NERC data centre for long-term preservation. The aim is that all NERC-funded data are managed and made available for anybody to use without any restrictions.” <https://www.ukri.org/wp-content/uploads/2022/03/NERC-080322-policy-data-021219.pdf>
- <https://www.ukri.org/wp-content/uploads/2016/02/NERC-220322-Policy-LicensingAndChargingForInformation.pdf>
- [UK Government Licensing Framework - Re-using PSI \(nationalarchives.gov.uk\)](http://nationalarchives.gov.uk)
- [Geospatial Commission making geospatial data more accessible - GOV.UK \(www.gov.uk\)](http://www.gov.uk)
  - Data Exploration Licence allows anyone to freely access data held by the British Geological Survey, Coal Authority, HM Land Registry, Ordnance Survey and the UK Hydrographic Office, Valuation Agency for research, development and innovation purposes
- [Open Government Licence - Re-using PSI \(nationalarchives.gov.uk\)](http://nationalarchives.gov.uk)



## Some starting checklists - 3

- [British Geological Survey Welcome to BGS - British Geological Survey](#)
- <https://www.bgs.ac.uk/geological-data/national-geoscience-data-centre/>
- <https://www.bgs.ac.uk/geological-data/opengeoscience/>
- <https://www.bgs.ac.uk/information-hub/licensing/>
- <https://www.bgs.ac.uk/bgs-intellectual-property-rights/>
- British Oceanographic Data Centre <https://www.bodc.ac.uk/>
- [https://www.bodc.ac.uk/submit\\_data/submission\\_guidelines/](https://www.bodc.ac.uk/submit_data/submission_guidelines/)
- [https://www.bodc.ac.uk/resources/help\\_and\\_hints/using\\_this\\_web\\_site/copyright/](https://www.bodc.ac.uk/resources/help_and_hints/using_this_web_site/copyright/)

## Some starting checklists - 4

- Centre for Environmental Data Analysis <https://www.ceda.ac.uk/>
- JASMIN policies <https://accounts.jasmin.ac.uk/account/conditions/>
- <https://eidc.ac.uk/deposit>
- <https://eidc.ac.uk/policies/acquisition>
- British Antarctic Survey UK Polar Data Centre <https://www.bas.ac.uk/data/uk-pdc/>
- <https://www.bas.ac.uk/data/uk-pdc/metadata-guidance/>
- <https://www.bas.ac.uk/data/uk-pdc/data-citation-and-publishing>
- <https://www.ordnancesurvey.co.uk/customers/public-sector/public-sector-geospatial-agreement>

## Some starting checklists - 5

- [Updating the Open Definition to meet the challenges of today – Open Knowledge Foundation blog \(okfn.org\)](#)
- Public sector (Scotland) end user licence  
[https://www.hutton.ac.uk/sites/default/files/files/Ordnance%20Survey%20Public%20Sector%20\(Scotland\)%20End%20User%20License\(2\).pdf](https://www.hutton.ac.uk/sites/default/files/files/Ordnance%20Survey%20Public%20Sector%20(Scotland)%20End%20User%20License(2).pdf)
- <https://hub.jncc.gov.uk/assets/d6381e39-baa4-4f12-93d7-fa16dd3600b8.pdf>
- [When we share, everyone wins - Creative Commons](#)
- <https://public.wmo.int/en/our-mandate/what-we-do/observations/Unified-WMO-Data-Policy-Resolution>  
[https://library.wmo.int/doc\\_num.php?explnum\\_id=11256](https://library.wmo.int/doc_num.php?explnum_id=11256)  
[https://library.wmo.int/doc\\_num.php?explnum\\_id=11001#page=139](https://library.wmo.int/doc_num.php?explnum_id=11001#page=139)

## A story

- Researcher wishes to explore experiences in flooding of river Cam
- Use 4 databases: one a research council resource; one developed by public body; one developed by a large multinational corporation; one organically developed and then bought by large multinational corporation
- No personal information
- Want to share the data to support their publication
- Wants to combine data from the 4 datasets and add new data for next generation approach, look more widely than own project
- Make publication immediately open access
- Pass new dataset on to partners, some for money and some not, to enable
  - new spin out
  - address imminent climate related emergency

# SO....

- What would you do?
  - What do you need?
- Similar experiences?
- How much of this is likely to happen now or in future
  - 5 mins for reflection then contribution via SLIDO

# Similar questions, other areas -1

- Information Management Framework Digital Twins - CReDO, Connected Places Catapult
- NERC information management framework
- Industry obligations to share: oil and gas disclosure obligations, some variations on when shared publicly (UK - NDR, Australia)
- AI: can it down IP, can it infringe, how regulated – evolving, national variety
- EU data strategy– private use of public data and vice versa?
  - Building a jigsaw: standards, interoperability, funding, trust
  - But no data access right

## Similar questions, other areas - 2

- Term of the moment “unlocking value” (EU, Scotland, UK) - Moving away from culture of caution? Scotland and health?
- NERC Digital Solutions Programme “**Simply put**, the design of DSH aims to pull information from different sources and in different formats into a unified system. To the end-user, the system would allow for a seamless experience of finding and working with the data, as well as managing which data and tools are available to whom. On the backend, there are complex relations and architectures in place to make this happen”
- NERC strategy delivery plan 22-25: Improving connectivity
- NERC Digital Strategy: make best use of digital assets, maximising value, accessibility, interoperability

# Futures? 1

- Call for evidence Geospatial Commission regarding opportunities across economy – interesting quotes
- “Key data providers, such as Ordnance Survey, may be hindering innovative applications of location data because of the need to demonstrate commercial returns. Other countries, such as the Netherlands, have successfully made their core location data open (free-to-use) for both public and private companies. The UK Public Sector and Geospatial Commission should investigate funding options to provide key location data in a genuinely open (free-to-use) way for organizations in the private sector in a similar fashion to the Public Sector Geospatial Agreement. This might take the form of separate agreements for organisations that are managing critical national infrastructure, for groups of organisations that are examining ways to achieve net-zero internally and through their supply chain and for charities provide critical services such as the RNLI”
- Access to Geospatial Data will be one of the key drivers of change in the next five years. This is especially true when integrating multiple data sources, that can offer more consistent, accurate, and useful information when compared with an individual data source. However, research commissioned by the UK Government shows there are several barriers which stops data from being shared effectively across the economy. This includes, though not limited to, organisations lacking the resources or knowledge to share data, lack of existing incentives to share data and high cost associated with implementing data sharing practices. Furthermore, as more geospatial data is increasingly collected by multiple private sector organisations rather than a single public authority, this coordination issue becomes increasingly complex

“



## Futures? 2

- “The value chain does not differentiate between public/private sector value chain delivery and greater connectivity and interplay between the two could be utilised to help stimulate growth in the UK economy. As the growing shift from location data towards data science and visualisation tools continues to gain momentum, the silos between ecosystems will become increasingly harder to define. The need for trusted, authoritative, and maintained data through a clear set of agreed data standards will therefore become ever more important. This will support data interoperability and in turn develop clearer outcomes for each part of the ecosystem. We would therefore recommend that data governance, licensing, security, accountability should all be highlighted as examples under the "Data transformation, processing, systems" section”.
- “Data democratisation: ensuring the right people have the right geospatial data at the right time, with the right licencing, with the right cadence - lowering the bar to link, analyse and share geospatial datasets for more people.
  - o platform -browser, tablet, mobile as well as traditional hardware
  - o Licencing – simpler human readable licenced such as OGL
  - o Cost – new models to enable ad-hoc customers to make more use of spatial data
  - o Availability – easier to find, standardised metadata and attribution”

# Reflections

- Guidance for our community
- Future influence
- What are priorities, who asked, who is in the room
- Private public, sharing or not
- Need to build more “Geo6??”