MINERAL RIGHTS
England, Scotland, Wales

UNLOCKING GREAT BRITAIN'S POTENTIAL

Kirsty Benham

Critical Minerals Association
United Kingdom
(CMA UK)
Critical Minerals Association (CMA)

The Critical Minerals Association (CMA) is a key interlocutor between the UK Government and the critical minerals industry. Its mission is to support the development of socially and environmentally responsible critical mineral supply chains for the UK’s strategic security of supply for the Energy Transition, Energy Security, and Green Economy.

The CMA unites industry, academia, and other stakeholders to address challenges in critical mineral supply chains. We enable industry to generate a collective voice when outlining concerns and future recommendations, providing a direct line of communication between industry and government. We aim to improve societal perceptions of the sector by showcasing the economic and social benefits of critical minerals. The CMA also provides the secretariat to the UK's All-Party Parliamentary Group (APPG) on Critical Minerals.

Mineral Rights - England, Scotland, Wales
Unlocking Great Britain's Potential

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CMA MINERAL RIGHTS WORKSHOP DISCUSSION

This paper has been written by the Critical Minerals Association United Kingdom (CMA UK), following a round table with its members and other guests. This document has been prepared from the points raised at that meeting and the recommendations are reflective of discussions and not necessarily the views of all in attendance.

The workshop attendees were: Aberdeen Minerals, Camborne School of Mines – University of Exeter, Cornish Lithium, Cornwall Resources, Godolphin, Mineral Products Association, SRK Consulting, Tungsten West, Wardell Armstrong, UK Government: Land Registry, Crown Estate, BEIS, DIT, and DEFRA. BGS and the Country Landowners Association were invited to the meeting but were unable to attend.

Suggested stakeholders to engage in future conversations include: Country Landowners Association, Scottish Land and Business Association, National Farmers Union, large estates – Grosvenor, Duchy of Cornwall, Church Commissioners, Coal Authority, BGS, Planning Inspectorate (England / Scotland / Wales).

It is important to note that not everyone has the same views on mineral rights, different perspectives include:

- The practitioners (mineral rights agents etc) who are happy with the current situation.
- The explorers / developers who have spent time negotiating the system, some of whom feel that this time should not have been wasted but would not benefit from system changes.
- The explorers / developers who are trying to negotiate the system and are frustrated by this.

CONSULTEES

This paper has been written by Kirsty Benham, Co-Founder, Critical Minerals Association United Kingdom (CMA UK) in consultation and with the support of the following:

- CMA members
  - Aberdeen Minerals
  - British Lithium
  - Cornish Lithium Ltd
  - Cornish Metals
  - Cornwall Resources Limited
  - Godolphin Exploration
  - Tungsten West

- Universities
  - Professor Frances Wall, Professor of Applied Mineralogy at Camborne School of Mines, University of Exeter
  - Professor Aleksandra Cavoski, Professor of Environmental Law, University of Birmingham
  - Professor Robert Lee, Professor of Law, University of Birmingham
  - Dr Mark Ireland, Lecturer in Energy Geoscience, Newcastle University
  - Dr Alex Dickinson, Postdoctoral Research Associate, Energy Geosciences Group, Newcastle University

- Other stakeholders
  - Dr Mike Armitage, Former Managing Director, SRK Consulting (UK)
  - Oliver O'Donnell, Head of Research, VSA Capital
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Great Britain (GB) has the geological potential, mining history, universities, research bases, financial institutions, and mining services in place for critical minerals extraction. The nation is well placed to support a vibrant exploration and mining industry, but does it have one? If an exploration company had to choose between developing a critical minerals project in GB or investing in another jurisdiction familiar with mineral extraction, the current GB mineral rights processes (other than for gold and silver where the mineral rights are held by the Crown) could disincentivise investment.

The GB mineral rights system can be navigated, but it requires exploration and development companies (referred to as “operators”) to invest time, knowledge, patience, and capital into the process; all before such companies can even secure a site to explore for minerals. Some have described the GB system as “chaotic and archaic”, particularly prospective explorers, who view it as too complex to be worth investing time, capital, energy, and patience when many other jurisdictions are easier to operate in.

The GB mineral rights situation is highly complex as ownership of mineral rights can be severed from surface rights to any parcel of land, and it cannot, therefore, be assumed that the (surface) land owner will own the minerals beneath that land. Over centuries of conveyancing, many mineral rights have been separated from surface rights. Whilst the system works for some operators, the vast majority struggle to navigate a complex process of identifying mineral rights owners from ancient deeds, without any degree of legal certainty. A lack of support for operators and mineral rights owners from specialist civil servants (e.g. the lack of a mining agency or a coordinating body) reduces the likelihood of new entrants investing in GB when more navigable alternative jurisdictions are available.

Access to mineral rights, particularly in the South West of England, has been raised as a significant concern and barrier to new entrants. Even if such operators are willing to invest the considerable legal fees incurred in identifying ownership of the mineral rights, there is little guarantee that no other operator has obtained, or could obtain, the mineral rights during this extended and tortuous process.
Unfortunately, there is currently no exploration or mining licensing system in GB (the system is different in Northern Ireland, which changed in 1969). Mineral rights in respect to most critical minerals are privately owned and there is no easy way to establish ownership. Some mineral rights are registered with the Land Registry but many are not. The Land Registry holds information on mineral rights ownership if registered, but registration of these rights is voluntary, so there is currently no comprehensive, reliable register of mineral rights. Many deeds of ownership have been lost, particularly during WWII when major fires destroyed such records. A small area of land can also be divided amongst numerous mineral rights owners, some of whom may not still reside in the country. Some owners are unaware of their mineral rights and if a mineral rights owner cannot be found or contacted, it is challenging for an operator to access prospective land.

The Land Registry lacks a consistent registration process for owners wishing to register their rights. There is no guidance on typical exploration / mining agreements / royalties, and little support or independent advice for owners exists, outside of a few specialist law firms. Once mineral rights owners are identified, agreements are negotiated individually with each owner.

The GB system differs from many other nations, where mineral resources are owned by the state, and mineral rights royalties are negotiated with governments. Most nations have a public cadastre showing exploration and mining licence areas. In addition, many other nations have mining agencies, where exploration and mining companies can be supported throughout the development process. By contrast, in GB, there is no requirement for explorers to lodge the results of their exploration in a national repository when they complete any exploration, therefore collection of historical data on any asset is challenging.

The exceptions to the above are gold and silver. The Crown Estate and Crown Estate Scotland grant exclusive “options for leases” of gold and silver for specific parcels of land. Any agreements with the State / Crown do not override the need for companies to secure additional rights from surface owners (e.g. for access) and the owners of any other severed mineral rights.

This paper proposes manageable, practical changes to improve the mineral rights process, particularly for areas in GB that are highly prospective for critical minerals. These changes would increase exploration activity in GB, help develop security of supply of certain critical minerals, bestow mineral rights owners with royalties, increase GB tax intake, increase mineral exports and, create jobs for the local communities. The multiplier effect for mining of metal ores is 9.85 according to UK Government; for every new mining job, nine additional jobs are created.1 The improvements would enable entrepreneurship by exploration geologists who do not have the connections and networks that experienced operators have been able to develop. New exploration in GB should not be reserved to an exclusive group, but unless the process for obtaining mineral rights improves, many hopefuls will not have the resources or networks to start.

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1 ONS FTE multipliers and effects, 2021.
It is important to note that not everyone has the same views on mineral rights, different perspectives include:

- The practitioners (mineral rights agents etc) who are happy with the current situation.
- The explorers and developers who have spent time negotiating the system and, in some cases, feel that this time should not have been wasted but would not benefit from system changes.
- The explorers and developers who are trying to negotiate the system and are frustrated by this.

Members of the CMA have a wide range of views on the current mineral rights situation within the UK with different organisations having had different experiences operating in the GB system. The CMA recognises the importance of taking all of these views into account.

**KEY ISSUES**

There is no comprehensive register of mineral rights in England, Scotland, and Wales. The current complexity of the system disincetivises investment into GB exploration. To create an enabling environment and build a pipeline of critical mineral projects, the following issues must be addressed:

- Legal concerns and historic liabilities
  - There is no **legal certainty** for potential explorers who are in the process of identifying mineral rights and negotiating with owners. This presents a significant investment risk.
  - **Historic liabilities** can deter mineral rights owners from registering their mineral rights, as they do not wish to be responsible for historic remediation costs.

- Under resourcing of the Land Registry
  - The current process of registering mineral rights with the Land Registry is inconsistent and under-resourced. The additional time and costs required for owners to register their mineral rights, as well as historical liability, create a disincentive for registration.
  - When mineral rights owners are identified and mineral rights have been registered, the corresponding **surface deeds are not updated to reflect these mineral rights owners**, making it difficult for operators to prove to surface rights owners that they have already secured the mineral rights.
The UK’s minerals development system is under-resourced, and there are limited training opportunities and incentives for new entrants to minerals law, and planning and permitting, as raised by the Minerals Products Association.

- Complexity of navigating the system
  - Many mineral rights are unregistered, and some mineral rights owners may not know that they have them, equally surface owners may not know that such rights have been severed.
  - There is no comprehensive register of mineral rights in England, Scotland, and Wales.
  - There are many different mineral rights owners, from large landowners and institutions, to individuals, some of whom may not be in the country and may be difficult to track down.
  - There are no standardised licence agreements. Larger landowners will have their form of licence agreements in place. Negotiations with small owners take place individually.

- Lack of Government support
  - Unlike most other countries, there is no central Government support to operators, mineral rights owners, and stakeholders to provide assistance, expertise, and guidance on the process.
  - There is no central collection of the geological data obtained from operators. Many other countries have a central repository of exploration data and drill core, which encourages future exploration and research to learn from the previous investments. This is usually paid for through the granting of exploration licenses. Collection of data is typically undertaken by a nation’s geological survey or government-mandated geoscience organisation.
1. LEGAL CERTAINTY

a. When an exploration company or an individual seeks to explore an area of land where mineral rights ownership is unknown or uncertain, Government could provide a certificate to recognise that the company or individual is in the process of investing time and capital into developing the mineral rights package. The certificates would act as guarantees, which recognise an operator’s prior claim to explore an area of land (subject to them securing rights). These certificates could be reviewed yearly (on a use it or lose it basis) and the operator would have to apply for them from a suitably resourced Government body. The exploration company or individual would be required to demonstrate that they are developing the mineral rights package actively and in a timely manner. Other companies or individuals could apply for a ‘waiting list’ certificate, whereby if the first company is inactive in working to secure the rights and their certificate is not renewed, other operators can step in.

2. MINING AGENCY / COORDINATING BODY

a. The creation of a government mining agency or coordinating body (the Coal Authority could be re-tasked with this function) to support mineral extraction stakeholders and be responsible for identifying mineral rights owners and providing information. The body could equally be set up as a new entity in BEIS and would coordinate the BGS, Coal Authority, Land Registry, and Devolved Administrations.

3. REGISTRATION OF MINERAL RIGHTS

a. Create a central and accessible registry of mineral rights similar to that for land rights, facilitating searches for existing registrations of mineral rights, and encouraging wider and more comprehensive registration of rights in the Land Registry.

   i. Ensure that the Land Registry provides a clear and consistent mineral rights registration process to make registration straightforward.

   ii. Improve the searchability of the register on the Land Registry website.
b. Enable operators to explore for minerals in situations where considerable time/resource has been spent to identify mineral rights owners, but the mineral rights have not been registered.

c. **After a period of, for example, five years, any unregistered mineral rights from a mining project would go to a trust.** Mineral rights owners can still access royalties from trusts once they have come forward and registered their mineral rights. If no one comes forward to claim the rights, operators can still explore.

   i. **Make the process of registering mineral rights more attractive.** This was supported by larger landowners when the CMA discussed mineral rights with the Country Land and Business Association Minerals Group in 2022.

   ii. **After a period of, for example, five years, any unregistered mineral rights from a mining project would go to a trust.** Mineral rights owners can still access royalties from trust this once they have come forward and registered their mineral rights. If no one comes forward to claim the rights, operators can still explore.

d. Consider how **historic liabilities** placed on mineral rights owners can be managed and balanced to encourage the registration of mineral rights in a way that is fair to mineral rights owners, operators, and Government.

e. Once registered, **add comments detailing mineral rights owners to surface deeds** to provide a clear, indisputable record of ownership. Only completely established mineral rights would be added to the surface deeds.

### 4. NEGOTIATIONS

a. Government to have a draft **standardised licence agreement available** which can be optionally used by private entities and mineral rights owners as a template. Mineral rights agreements should continue to be a negotiated process between rights owners and project companies as there is no one size fits all approach to minerals.

### 5. GEOLOGICAL DATA

a. **Develop a central geological / technical database** to store and provide access to data that facilitates the creation and speed to operation of new mineral projects (this could be undertaken by the BGS but would require sufficient funding). Ensure
geological data is collated from explorers and operators in order to retain the information for future exploration.

b. **Legislate to** ensure that some geological data and a selection of drill core samples are collected from operators once such operators and explorers have completed their exploration and walked away to retain the information for future exploration. Require operators to record and preserve drill core for a period of time as part of permitted development rights and planning permission for exploration and mining.

c. **BGS to digitise critical minerals datasets that are** currently in paper or PDF format for accessible use (e.g. Reports of 267 mineral exploration projects carried out in the UK under the Mineral Exploration and Investigation Grants Act (MEIGA)).

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ISSUE 1: REGISTRATION OF MINERAL RIGHTS

Encouraging greater registration of mineral rights in geologically prospective areas would be helpful. This could be done by simplifying the Land Registry registration process and setting up a trust for unregistered rights and / or those who do not know that they own mineral rights, removing cost disincentives and providing incentives for registration.

There are many different types of mineral rights owners, from large land estates to individual owners. Many mineral rights are not registered and the owners might not know they have them. The registration process can be too costly and /or timely, or the owner might not want the liability for remediating historic sites.

Many of the larger mineral owners have registered their mineral rights – this is a costly and time-consuming process but often worth their while as they understand the value of minerals from previous mining activity across their estates. Smaller owners have less incentive to register mineral rights, they deal with particular plots as and when there is an expression of interest from mineral companies.

Large land estates recognised the benefit of registering their mineral rights and those engaged with during a presentation to the Country Land Owners Association’s minerals group in early 2022 supported compulsory registration of mineral rights. However, even if the registration process were free, the amount of time and research needed to pull together and demonstrate their mineral rights title to the satisfaction of the Land Registry runs up significant cost.

The registration of mineral rights in its existing form is not a free process and this is a disincentive, particularly for smaller owners. This liability is often transferred to the prospective exploration company, at significant cost and time.

As knowledge of ownership can become problematic when mineral rights are severed from surface rights, some parties are not aware of what they own until a chartered minerals surveyor starts investigating. Sometimes, even with lawyers and surveyors spending years researching mineral rights owners, there are unregistered mineral rights that cannot be found. This means that geologically prospective land may never be explored unless solutions are implemented, and mineral rights owners are incentivised.

In situations where the mineral rights owner is not known, the CMA recommends that the unregistered mineral rights are placed into a Government trust or escrow fund, whereby the mineral rights owner can access future royalties if they come forward with claims to the mineral rights. There are examples of where this has already been done, e.g. there are state-based escrow schemes in the USA.
PROBLEMATIC WORKAROUNDS

<table>
<thead>
<tr>
<th>The Mines (Working Facilities and Support) Act 1966</th>
<th>Qualified Title</th>
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<tbody>
<tr>
<td>If an agreement cannot be made with mineral rights owners, and a project is deemed to be of ‘national significance,’ operators can go through the Mines Working Facilities Act as a fallback. This process involves BEIS and resubmissions if the application does not meet the bar. It would be helpful to know how much time and resource this process takes from UK Government, and whether similar Government resources could be invested in preventing operators from needing to use the Mines Working Facilities Act. The 1966 Act grants third parties ‘prospecting and working rights’ and ‘ancillary rights’ to help mineral development. This is a convoluted procedure.</td>
<td>Qualified titles are an issue, as companies are averse to investing in a project where their investment is at risk because the title is not secure. There were examples of quarries where development had taken place without the full mineral rights secured, where insurance policies were used. However, it is far from ideal for operators to invest in a project without having secured the mineral rights needed.</td>
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RECOMMENDATION

1. Enable operators to explore for minerals in situations where considerable time/resource has been spent to identify mineral rights owners, but the mineral rights have not been registered.

   a. Make the process of registering mineral rights more attractive. This was supported by larger landowners when the CMA discussed mineral rights with the Country Land and Business Association Minerals Group in 2022.

   b. After a period of, for example, five years, any unregistered mineral rights from a mining project would go to a trust. Mineral rights owners can still access royalties from trust this once they have come forward and registered their mineral rights. If no one comes forward to claim the rights, operators can still explore.
**ISSUE 2: SURFACE DEEDS**

Operators also need access to surface rights, and these must be considered as well as mineral rights. One recommendation is for the Land Registry to make mineral rights registration consistent with surface right title deeds, as currently surface deeds do not mention mineral rights. This means operators have to prove to surface owners that they have the mineral rights on their land, which costs time and money and requires additional legal support. When someone registers mineral rights, the Land Registry should update spatially related surface deeds with the mineral rights details. Alternatively, there should be an expectation on mineral rights owners to place a notice on the surface titles upon registration of their rights. More funding to support HMLR and bolster the minerals section would be welcome.

**RECOMMENDATION**

1. Once registered, **add comments detailing mineral rights owners to surface deeds** to provide a clear, indisputable record of ownership.

**SOLUTION: LAND REGISTRY**

Mineral rights have not been a priority over the last five years and do not feature in the current Land Registry strategy or business plan, which is focused on the housing need. The Law Commission made a series of recommendations, compulsory registration of rights was not taken up, but Government did commit to looking at it further⁵. As a non-ministerial department, the Land Registry will work with BEIS to understand the drivers and priorities. The Land Registry has been looking at what can be done with their information and what data can be released to help society, the economy, and the environment.

If an operator would like to determine what mineral rights they have in a certain area, they can use ‘Map View’ on the Land Registry website, pay for and download summary documents, and go through these to find out whether there are mineral rights in the area. Geographic Information System (GIS) information from Land Registry is helpful as it shows what titles to chase down.

One recommendation from the group to the Land Registry was to improve the searchability of the register on the Land Registry website. If the Land Registry wanted to

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make additional revenue, to cover the provision of this data, a premium service could be offered for a fee for exploration and mining companies.

The Land Registry only operates in England and Wales, there is a separate Land Register of Scotland and it is important that both organisations work together on these issues.

RECOMMENDATION

1. Create a central registry of mineral rights similar to that which exists for land surface rights, facilitating searches for existing registrations of mineral rights, and encouraging wider and more comprehensive registration of rights in the Land Registry.

2. Ensure a clear and consistent Land Registry mineral rights registration process to make registration straightforward.

3. Improve the searchability of the register on the Land Registry website.
ISSUE 3: NEGOTIATION

Once mineral rights owners are identified, royalties are negotiated between the owners and operators. Differences in deposit type and exploration projects must be considered during negotiations.

Many larger mineral rights owners will already have their own standardised licence agreement processes in place. All mineral rights owners are different and where they own the surface rights as well, a single standardised option/lease approach would not be workable as land use, revenue requirements, timescales and taxation positions vary. In some cases, it may not be attractive for mineral rights owners to tie up their land with a mineral company. As all mining projects are different, it would be unnecessary for Government to consider the standardisation of terms for all projects.

However, for smaller mineral rights owners, there could be an optional, standard, pro-forma licence agreement that covers terms, length of licence, and royalties on the Government website which smaller owners and operators could use as an optional template.

RECOMMENDATIONS

1. Government to have a draft standardised licence agreement available which can be optionally used by private entities and mineral rights owners as a template.

SOLUTION: UK MINING AGENCY TASKED ON CRITICAL MINERALS

A UK Government coordinating body or a mining agency (e.g. re-tasking the Coal Authority) would help operators in navigating the mineral rights system, as well as the smaller / less experienced landowners who have mineral rights and are unsure how to deal with them.

Renaming and repurposing the Coal Authority as the Minerals / Resources Authority would signal that the UK Government is moving away from coal and is actively working to secure the critical minerals and resources needed to achieve net zero ambitions.

Minerals extraction has been under-resourced by UK Government for many years. In the past, there were business relationship managers for UK mineral extraction projects, but as these roles have ceased to exist, much of this knowledge and skill has been lost. The UK Government can rebuild its expertise in critical minerals extraction and supply chains by creating specialised roles within a coordinating body or a mining agency for various topics including mineral rights. A mining agency or coordinating body / repurposed Coal
Authority could join up and coordinate different regulatory and relevant bodies. The Environment Agency (England), Natural Resources Wales, Scottish Environment Protection Agency, and Health & Safety Executive Mines Inspectorates need to be coordinated to effectively collaborate in areas such as mineral rights.

**RECOMMENDATIONS**

1. Government to **re-task the Coal Authority as the UK mining agency or coordinating body** to support mineral extraction stakeholders and be responsible for identifying mineral rights owners, and the registration of mineral rights, and to collect, store and make available exploration and mining data. The body could equally be set up as a new entity in BEIS and would coordinate the BGS, Coal Authority, Land Registry, and Devolved Administrations.
ISSUE 4: GEOLOGICAL DATA

While BGS can access drill core and logs from operators, the UK is one of the few countries where the geological survey does not require the submission of diamond drilling core results and other geological data collected by exploration and mining companies during their operations. Hence, when exploration companies close down a project, this geological information is lost.

The Geological Society of London Geoscientist article by University of Newcastle Lecturers ‘Digging into data access: The need for reform’ states: “Challenges in accessing archived geoscience data could hinder the UK’s adoption of new low-carbon technologies”.

Data from commercial projects should be made available to the public after a certain time limit, to ensure companies do not have to give up their trade secrets. Similar pre-competitive datasets are made available in other mining jurisdictions, such as Australia and the Republic of Ireland. Once private companies have finished their activities, they could then be obligated to file core samples, and other geological data with BGS to be made publicly available. Mineral rights owners are usually supportive for the geological information to be made public, but would not themselves make this information publicly available, as this costs money and time.

Future mineral rights licences could follow the example of offshore oil and gas exploration, in which reporting of seismic and drilling data is strictly controlled (most of the drilling data must be made publicly available after two years). Problems with reporting and accessing onshore data are not restricted to the mineral sector, with many historical hydrocarbon and coal-mining datasets being difficult to access. Access to all onshore data, including mineral datasets, could be most efficiently improved in one comprehensive overhaul.

A repurposed Coal Authority could store and publish data and require data to be submitted when licenses are resubmitted. The Geospatial Commission is undertaking a programme of work looking at joining up its data with geological data from BGS, Land Registry, Coal Authority. The CMA is not aware of mineral rights featuring in Geospatial Commission plans or of the Geospatial Commission’s involvement in mining-related work. A mining agency or coordinating body, such as a repurposed Coal Authority, could have a greater focus on critical mineral extraction.

The BGS has a borehole archive that anyone can access, but there is data that cannot be shared due to ‘confidentiality’, even though the related business no longer exists, and the data is from decades ago. This data held by the BGS should be deemed ‘historic’ and made available. Confidentiality should not be a blocker if the business no longer exists. This archive currently only contains data that has been submitted to the BGS, and

4 & 5 https://geoscientist.online/sections/features/digging-into-data-access-the-need-for-reform/
therefore does not contain the full record of GB boreholes. The datasets are usually not digitalised (i.e. in paper and/or PDF format) and therefore effort should be expended on modernising the data and digitalising the datasets for accessible use.

**RECOMMENDATIONS**

1. **The National Geoscience Data Centre holds geological data and a selection of drill core and other samples** at the British Geological Survey (BGS). This is part of the national capability funding to the BGS but would require additional funding for modernisation. Submitting data regularly and at the end of a project should be compulsory. This data could be embargoed for a short period owing to commercial sensitivity but would then be available under the normal BGS data exploration license for research and further use in exploration by any party.

2. **Legislate** to ensure that geological data and a selection of core sample are collected from operators in order to retain the information for future exploration. Require operators to record and preserve drill core for a period of time as part of permitted development rights and planning permission for exploration and mining.

3. **BGS to digitalise critical minerals datasets** currently in paper and/or PDF format for accessible use.
CONCLUSION

The mineral rights system in England, Scotland and Wales is hampering the commercialisation of many critical mineral resources. The UK has geological prospectivity for critical minerals such as copper, lithium, nickel, tin, and tungsten, but the challenges with the mineral rights system can be a factor resulting in operators investing in other countries. If the UK wants a critical minerals extraction industry and security of supply, it needs to have a transparent process for acquiring mineral rights and be open for foreign companies to come in. No other country has the same mineral rights system that exists in England, Scotland, and Wales.

There is no reason why there cannot be a system that is beneficial to mineral rights owners, operators, Government, and the general public. Larger mineral rights owners are interested in working with operators and facilitating deals, as royalties are a revenue source. There should be continued engagement and discussion with landowners about the opportunities around critical minerals extraction.

Only certain parts of the UK are prospective for critical minerals. Rather than invest in improving the mineral rights process nationwide, there could be a staged approach, and a focus on specific prospective regions, such as the South West of England, North East of Scotland and several other sites in Scotland, Wales and England.

The mineral rights system is embedded in UK law and executed by various Government departments. Only UK, Scotland, and Wales Governments can make amendments to the current mineral rights process, taking into consideration the needs of the different stakeholders including mineral rights owners, to help develop a process that attracts foreign investment, royalties, jobs, and critical minerals supply for the UK.
CASE STUDY: IRELAND AND NORTHERN IRELAND

Great Britain has been left behind and is almost unique in not having reformed its mineral rights system and exploration and mining licencing. “In the 20 years to 2006, over 110 nations had either replaced or amended their mining law”. Ireland previously had a similar system to GB. This was reformed under the Irish Minerals Development Act 1979, and as a result:

- The right to work almost all minerals was vested in a minister by the act.
- The Minerals Department carries out title searches to determine the ownership of minerals before a lease or licence is issued, and must notify possible owners.
- Compensation is payable to a private mineral owner, either as agreed or by arbitration by the Mining Board.
- The process allows an initial statement of interest; prospecting licence (six years with a renewal option), and mining leases and licences.
- Ireland has nationalised the administration of mineral rights, which means they are still privately owned, but Government can give exploration rights to companies in situations where mineral rights are not registered until the owner comes forward. The system enables the explorer to obtain a licence and engage with the government.

The following extract from ‘Nature and Use of Mining Cadastres’ by Joseph Mankelow, British Geological Survey, June 2019 provides an overview of the system:

*In Ireland/ Northern Ireland, legislation is contained in the Minerals Development Acts (1940 to 2017). The 2017 Act consolidated and modernised a range of earlier pieces of legislation on exploration and extraction of minerals. It provides a modern regulatory regime for exploration and mining of the mineral resources of the state. Via the Act, the Minister for Communications, Climate Action and Environment has a statutory responsibility for regulation of exploration for and development of all minerals (with the exception of stone, sand, gravel, and clay – these belong to the landowner). These responsibilities are implemented via the Exploration and Mining Division (EMD) of the Ministry. As the mining authority the EMD maintains and makes available information on mining licences (mining cadastre).*

The Ireland and Northern Ireland systems are similar but not the same. The Mineral Development Act 1969 in NI vests all mineral rights in the Department, with a few minor exceptions, which has greatly facilitated prospecting and has overcome the complications which can be caused by the necessity to investigate the title to mineral rights elsewhere.
in GB. In Ireland, not all mineral rights vest in the State but licences for prospecting and mining are controlled at a regulatory level by the State with either a mining lease (for State-owned minerals) or a mining licence governing minerals in private ownership. NI, by vesting mineral rights in the Government, has a more comprehensive system.

**DEEP DIGITAL CORNWALL – MINERAL RIGHTS VISUALISATION**

A 4D visualisation suite to improve the visibility of mineral rights and their relation to regional geology and surface land uses. This rapid solution would use data hubs in Great Britain metals exploration hotspots: Cornwall and West Devon, Scotland, North Wales, North East England.

The Deep Digital Cornwall project is creating a ‘Cornwall Geovision’ that brings together multiple geological and surface data, working with the region’s businesses to research how digital solutions can help them to innovate.

The project has launched its 4D visualisation suite and is undertaking a research project inviting mineral rights owners to voluntarily lodge their anonymous mineral rights digital files onto the hub. The result would be that known and declared mineral rights can be viewed and bona fide interested parties can contact the mineral rights owners.

The 4D visualisation can show areas under active exploration, and be combined with geological information, Tellus South West geophysical data, former mine workings, land designations, urban areas, planning constraints etc. It is a much more enhanced and attractive solution than just Land Registry records and can demonstrate geological prospectivity, and that the UK is ‘open for business’ regarding minerals exploration.

The Land Registry could support this project by working with the Deep Digital Cornwall convenors, and collating and sharing required data in a digital format. With additional funds (e.g. by tender from BEIS), further information could be extracted from the Land Registry and other records. This can be done by the University of Exeter and/or one of the private mineral rights specialists who hold much of this information in digital format. This could be available within 6 months (some information could be available in a few weeks) and help accelerate the initial stage of exploration. The longer-term administration of such a system would need to be defined as the research progresses. It would provide results to inform the creation of similar ‘accelerator’ schemes, e.g. in Scotland.
MINERALS PRODUCTS ASSOCIATION

The CMA is keen to work in collaboration with the Minerals Products Association (MPA), as both organisations seek to support the development of the UK’s domestic extractive industries.

The MPA highlights several recommendations in its 2022 paper ‘Delivering for the UK Priorities for Government’ (which the CMA supports) which include:

- Improving regulation by properly resourcing the mineral planning system and the environmental permitting system;

- Strengthening UK supply chains by prioritising and supporting the indigenous supply of minerals and mineral products, and replenishing reserves, in line with the UK Minerals Strategy.\(^6\)

It is important to note that there are differences between aggregates, asphalt, cement, concrete, dimension stone, lime, mortar, silica sand (industrial/construction minerals) and copper, lithium, tin, and tungsten (metals).

Every mine is unique, in its design and its setting. The IRP (2020)\(^7\) identifies several differences between construction, industrial and metal minerals that are relevant to minerals governance:

- Construction minerals producers are present in every country to supply local and regional construction and infrastructure projects. Industrial minerals are generally widespread, occurring in many countries, and products are not transported vast distances. Both construction and industrial minerals segments are commonly well integrated into the local economy and are less exposed to external shocks and price volatility. Also, these segments are less likely than metal minerals to be disrupted by automation due to their low value.

- Metal minerals are produced in a handful of countries, are widely traded and are commonly used in manufacturing processes remote from the locations where they are mined. Mining can only take place where geological conditions make it possible for economically recoverable mineral concentrations to exist. Not every country is geologically well endowed, and none can economically produce the diversity of metal minerals required by current manufacturing processes. Trade is

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supported by seaborne bulk transport connecting countries hosting mines to countries with downstream manufacturing processes.

- Metal mineral value chains tend to have weak linkages to other economic sectors in host countries.
- Metal minerals raise issues of supply security as disruption at either the supply source or the trading can disrupt economic activities at a global level. The high dependence of many countries on export revenues and domestic resources means that they may become key issues within local politics.