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## OVERLAPPING MINING PROBLEMS WITH THE RIGHT TO THE LAND AND THE MECHANISM OF ITS SETTLEMENT

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		ABSTRACT
Keywords:	Geospatial	The issue of overlapping mining permits with land rights is prevalent in
Information;	Overlapping;	Indonesia. The factors contributing to this overlap problem include
Mining Area; Land Rights.		disparities or lack of synchronization in basic geospatial information and
		regulations. The Directorate General of Mineral and Coal has developed
		- a Geological Information System (IGT) for the mining sector with an
		accuracy of approximately 3 cm, equivalent to a scale of 1:600. This
		spatial database is further expanded through a web-based application
		called Minerba One Map Indonesia (MOMI) and Minerba One Data
		Indonesia (MODI) as the sole recognized source of mining licensing data
		used by the Central Government and Regional Governments in policy-
		making. The resolution of overlapping mining permits with forest areas
		and land rights should still consider business assurance and legal
		certainty so as not to disrupt the investment climate in the mining sector

### Introduction

The problem of overlapping the mining sector with other sectors such as forestry and plantations is no longer new. For example, based on data from the Coordinating Ministry for Economic Affairs in July 2021, there were 5,262,955 hectares of Mining Business Permits (IUP) located in forest areas. Of the total IUP area within the forest area, an area of 4,700,525 hectares (89.3%) has not been equipped with a forest area use loan permit (IPPKH) and only 562,430 hectares (10.7%) have been equipped with IPPKH.

One of the factors that causes this overlapping problem is the inequality / dissynchronization of the base map used between agencies, both the Central Government (Ministries / Institutions) and Regional Governments. The Government of Indonesia on April 21, 2011 issued Law Number 4 of 2011 concerning Geospatial Information (UUIG) which regulates the use, creation, provision and maintenance of Geospatial Information (IG) in Indonesia.

As is known, all Ministries and Institutions in Indonesia work with spatial data both in planning, development, monitoring and evaluation, issuing permits and making policies. Various problems arise due to the inequality of basic IG used as a reference, such as overlapping mining areas with forest and/or plantation areas, administrative boundary issues and others. Because a lot of decision-making involves IG, it is necessary to ensure that IG must have good up-to-date and accuracy to minimize errors, errors, and overlapping information that result in legal uncertainty, development budget inefficiencies, and information ineffectiveness. IG is divided into 2 (two), namely Basic Geospatial Information (IGD) and Thematic Geospatial Information (IGT).

IGD is a base map that must be referred to by Ministries/Agencies and anyone who produces IGT. IGT is thematic, for example such as mining, forestry, fisheries, agriculture, and others (Geospatial, 2013).

This research will be studied related to regulations in the preparation of IGT in the mining sector with national standards and discuss overlapping mining permits with other sectors such as forestry and plantations and options for resolution.

#### **Research Methods**

The process of compiling a spatial database of the mining area sector is preceded by a process of reconciliation and data alignment between the Central Government and Regional Governments. Data collection is carried out nationally for all provinces. The process of integration, verification and validation of IGT is carried out by the Central Government in this case the Ministry of Energy and Mineral Resources. The validation and verification of IGT data follows the mapping standards prepared by the Geospatial Information Agency in the one map policy program and sectoral regulations in the field of mineral and coal mining (Law No. 3 of 2020 concerning amendments to Law No. 4 of 2009 concerning Mineral and Coal Mining).

Due to the large amount of data, and the vast research area, a database is needed that is able to manage and store all the data, so that the PostgreSQL database is used. The use of the database system is done with consideration, the system can manage data spatially quite well.

Once the IGT database is compiled, it is then integrated with other sectors of IGT data and used in decision making. The research flowchart can be seen in Figure 1.



**Figure 1 Research Flow** 

## **Results and Discussion One Map Policy**

The presence of Law No. 4 of 2011 concerning Geospatial Information affects the spatial world in Indonesia. Every agency that produces Thematic Geospatial Information (IGT) must be guided by and refer to the Basic Geospatial Information (IGD) published by BIG. Furthermore, in article 6 and Article 34 of Law No. 4 of 2011 it is stipulated that the processing of geospatial data must be carried out in accordance with standards which include:

- 1. Datum (Geodesy Control Net), a projection system and coordinate system that can clearly and definitely be transformed into a national standard coordinate system, and
- 2. Formats, databases, and metadata that can be easily integrated with other Geospatial Information (IG).

The use of the same mapping reference system (datum, projection, coordinates) and the same mapping scale (at a scale of 1:50,000) is expected to minimize cases that occur due to inaccuracies and IG up-to-date can be minimized. Overlapping mining permits and land rights in various sectors as well as territorial boundary issues should no longer be a problem.

Some important elements in the creation and management of spatial data / spatialbased data are datum, projection, and coordinates. By adhering to the IGD provided by BIG, every IGT created, elements such as datum, projection and coordinate system must refer to the IGD. To understand what is meant by datum, projection, and coordinate system are outlined respectively as follows (Subarya, 2016):

1. Datum is a model of the shape of the earth's surface that is used to improve accuracy in an area. The latest datum used in Indonesia is the Indonesian Geospatial Reference System 2013 (SRGI, 2013)

- 2. Map projection is the way we move the location of a spheroid (spherical) shape of the earth into a flat plane. Projections will always produce distortions and errors. Distortion and errors can be minimized by maintaining several aspects:
  - i. Shape  $\rightarrow$  conformal
  - ii. Distance  $\rightarrow$  equidistant
  - *iii.* True Direction  $\rightarrow$  true direction
  - iv. Area  $\rightarrow$  equal area
- 3. The coordinate system presents a frame of size of the location, be it in the form of a spherical surface or a flat surface. In the context of map projection coordinate systems, there are 4 types of coordinate systems that are closely related to each other, namely: Cartesian Geocentric; topocentric local cartesian; Geodetic; and Cartesian Planimetric.

## **IGT Mining Sector**

## 1. IGT Mining Area

The Mining Area (WP) as part of the Mining Jurisdiction (WHP) is the basis for the determination of mining business activities. WP is an area that has mineral and coal potential and is not bound by government administrative boundaries which are part of national spatial planning (RI, 2020; RI, 2023). WP is part of the national spatial planning and is the basis for the determination of mining activities. WP is determined by the Minister after being determined by the Governor in accordance with his authority and in consultation with the House of Representatives of the Republic of Indonesia (Articles 1 and 9, Law No. 3 of 2020, Article 3, Government Regulation No. 25/2023).

Areas that can be designated as WP have criteria for the presence of: (i) distribution of rock formations carrying Minerals and/or Coal; (ii) Mineral and/or Coal indication data; (iii) Mineral and/or Coal resource data; and/or (iv) Mineral and/or Coal reserve data. WP consists of Mining Business Areas (WUP), Special Mining Business Areas (WUPK) People's Mining Areas (WPR); and the State Reserved Area (WPN) and between WUP, WPR, WPN and WUPK do not overlap each other. Furthermore, mining business is carried out in the form of IUP, IPR, or IUPK and must be in WUP, WPR and WIUPK determined by the Minister through WP Determination (Article 35 of Law No. 3/2020, Article 6 of Government Regulation No. 96/2021) (RI, 2020; RI, 2021).

In spatial planning, the allocation of space for mining activities for the mining sector is accommodated in the form of Mining Designation Areas (KPP). Thus, the determination and determination of KPP is absolutely necessary, as a form of legalization of mining activities (RI, 2020). Mining activities outside KPP are declared unlawful and will be subject to criminal sanctions (RI, 2007). WUP and WPR are mining designation areas (KPP) in accordance with the spatial plan. Local governments should synchronize WPs (WUP, WPR and WPN) with KPPs in Regional Spatial Plans (Figure 2).

Referring to the provisions of Article 12 of the Minister of Energy and Mineral Resources no. 7 of 2020 that the Ministry of Energy and Mineral Resources in preparing a mining area information system (WP) must standardize the use of coordinate systems and base maps issued by agencies that carry out government affairs in the field of national

surveys and mapping. WP information systems must apply geographic information system technology that is universal considering the vast territory of the Republic of Indonesia.

Furthermore, article 13 states that Mining Business Areas, People's Mining Areas, State Reserve Areas, Mining Business License Areas, and Special Mining Business Areas are depicted on a closed polygon-shaped situation map bounded by lines parallel to latitude and longitude in multiples of at least one thousandth of a second (0.001") and use the WIUP or WIUPK mapping coordinate system using a geospatial reference system that determined by the agency that organizes government affairs in the geospatial field which in this case is the Geospatial Information Agency (BIG).



Figure 2 Relationship of mining area with spatial planning

### 1. IGT Mining License

IGT Mining Business License Area (WIUP) covers all permits issued by the Central Government and Regional Governments in the form of Contracts of Work (KK), Coal Mining Concession Work Agreements (PKP2B), Mining Business Licenses (IUP), Special Mining Business Licenses (IUPK), Batuab Mining Permits (SIPB) and People's Mining Permits (IPR). The issuance of mining permits must be in accordance with the spatial planning of mining areas that have been stipulated in the WP.

The boundaries of mining permit concessions must be drawn in the form of closed polygons bounded by lines parallel to latitude and longitude in multiples of one thousandth of a second (0.001") or equivalent to or equivalent to 3.09227 cm in the area at the equator, and the further away from the equator, the smaller the relative distance. With an accuracy of about 3 cm, IGT mining permits and mining areas are already on a scale equivalent to 1:600. The mechanism parallel to latitude and longitude was created to facilitate boundary mapping and reduce overlap between mining IGT.



Figure 3 Types of Permits in the Mining Sector

The concept of mining areas with the types of mining permits that can be granted is seen in Figure 3. IUP and SIPB must be issued in WUP, IUPK must be issued in WUPK, IPR must be issued in WPR. Between IUP, IUPK, IPR and SIPB should not overlap with each other's commodities. The status on September 1, 2023 recorded the number of mining sector licenses as many as 4,345 permits consisting of 31 Contracts of Work (KK), 59 Coal Mining Concession Work Agreements (PKP2B), 4,058 Mining Business Permits (IUP), 9 Special Mining Business Permits (IUPK), 83 People's Mining Permits (IPR), and 105 Rock Mining Permits (SIPB) (Figure 4).

All mining permit data is then stored in an IGT database which is guaranteed validity and security. The Directorate General of Mineral and Coal developed Minerba One Map Indonesia (MOMI) which serves as regional information for mineral and coal mining business activities and Minerba One Data Indonesia (MODI) as the main mining data source (Figure 5). MOMI and MODI are IUP databases that meet the provisions as per Article 54 of the Minister of Energy and Mineral Resources No, 26 of 2018. MOMI together with MODI was initiated as the only recognized data source (single source of truth) mining licensing data used in the internal environment of the Ministry of Energy and Mineral Resources and other agencies, both at the provincial and central government levels. Currently, the MOMI application has been updated both in terms of adding data in it and from the side of the application system.



**Figure 4 National Mining License Status** 



Figure 5 Relation of MOMI and MODI with other applications

### **Mining Paradigm Shift**

The paradigm of the mining sector changed from what initially had to be prioritized related to spatial planning to having to follow the spatial sector rules that have been set both RTRWN, RTRWP and RTRWK. The provisions of Law No. 11 of 1967 concerning Basic Provisions of Mining which essentially say that if a mining power permit for an area or region has been obtained (a company), then those who are entitled to land are required to allow the work of the mining power holder on the land concerned on the basis of consensus (Article 26).

The holder of a mining power of attorney is required to compensate for losses resulting from his business on everything on land to those entitled to land within the mining power area or outside it (Article 25). Presidential Instruction No. 1 of 1976

expressly states: if overlapping land determination/use cannot be prevented, then mining priority rights must take precedence. This means, in Law No. 11 of 1967, there is no choice for land rights holders other than to accept the presence of mining business license holders. In fact, holders of land rights who obstruct or interfere with legitimate mining businesses are threatened with criminal penalties.

Mining Law No. 4 of 2009 concerning Mineral and Coal Mining (Minerba) and Law No. 3 of 2020 concerning Amendments to Law No. 4 of 2009, take a declining stance. Articles 134 to 138 of the Mining Law clearly emphasize that mining companies (IUP and IUPK) must first settle land rights with land rights holders in the area to be worked on, the implementation of which can be carried out gradually as needed.

Furthermore, Article 17 of Law Number 11 of 2020 related to changes in several provisions in Law Number 26 of 2007 concerning Spatial Planning there are changes in articles 61, 62 and 69 which in essence everyone is obliged to obey spatial planning and for people who in carrying out their business and / or activities use space without having approval for the suitability of space use which results in changes in the function of space punishable with a maximum imprisonment of 3 (three) years and a maximum fine of IDR 1,000,000,000 (one billion rupiah). Article 100 of Government Regulation Number 21 of 2021 concerning the Implementation of Spatial Planning, states that the implementation of the Suitability of Spatial Utilization Activities for business activities is obtained through OSS, and after obtaining the Suitability of Spatial Utilization Activities, Business Actors can apply for business licenses in accordance with the provisions of laws and regulations. Furthermore, Article 4 and Article 5 of Government Regulation Number 5 of 2021 concerning the Implementation of Risk-Based Business Licensing, which states that to start and carry out business activities, business actors must meet the basic requirements of business licensing and risk-based business licensing. The basic requirements for business licensing include the suitability of space utilization activities, environmental approvals, building approvals and functional feasibility certificates.

With the regulations in Law No. 3 of 2020 and Job Creation Law No. 11 of 2020 along with their derivative rules, mining permit holders before carrying out mining activities (production operations) must first solve land rights issues. If it is in a forest area, the permit holder must take care of a forest area loan and use permit (PPKH). Meanwhile, if the mining concession area is in another use area (APL), the permit holder must settle with the owner of the land rights, with a business-to-business mechanism.

#### **Overlapping Mining Permits with Land Rights**

As part of the national spatial planning, the Mining Area (WP) is the basis for the determination of mining activities determined by the Government after coordinating with local governments and consulting with the House of Representatives of the Republic of Indonesia. Mineral and Coal mining activities include part or all of the stages of activities in the framework, management and exploitation of Minerals and Coal which include general investigation, exploration, feasibility studies, construction, mining, processing and / or refining or development and / or utilization, transportation and sales, as well as post-mining activities, where in the implementation of these activities can be carried out

after obtaining permission from the government in accordance with regulations applicable legislation.

IUP/IUPK holders can only carry out their activities after obtaining approval from land rights holders and before carrying out production operations are required to complete land rights in accordance with applicable laws and regulations by providing compensation based on the approval of unreleased land owners in the form of agreements and/or compensation for freed land parcels, Then the land parcels that have been acquired can be given land rights according to applicable regulations.

Thus, Mineral and Coal mining activities are inseparable from land and management in the land sector which in its implementation sometimes intersects which causes land disputes and conflicts, both between the community and the community, the community with mining entrepreneurs and mining entrepreneurs with other rights holders, especially business use rights holders. In the land perspective, land disputes are land disputes between individuals, legal entities, or institutions that do not have a broad impact, while land conflicts are land disputes between individuals, groups, groups, organizations, legal entities, or institutions that have a tendency or have a broad impact. Land disputes and conflicts often occur in Mineral and Coal mining activities.

Mineral and Coal Mining License is a concession permit for the area of Mineral and Coal mining area regulated by the Ministry of Energy and Mineral Resources, while Land rights are rights granted by the Ministry of ATR / BPN over land in accordance with applicable laws and regulations. In the implementation of mining there are various problems related to land rights, including:

- 1. Claims of land ownership by individuals or community groups. Before the mine operated, there were no ownership disputes, but after the mine operated, there were claims of land ownership by individuals or community groups.
- 2. Land parcels that have been acquired and/or compensated to those who control and claim to be land owners, but there is recognition of other parties based on certificates of land rights and other evidence of rights.
- 3. Most of the land ownership by communities in mining areas has not been certified. Only based on a certificate of land ownership from the village/kelurahan. Some land ownership is only based on oral (stories) for generations.
- 4. Above the Mineral and Coal Mining Business License there is a right to land and the landowner is not willing to be released or carried out a land use agreement, especially for the Right to Use.

Based on data from the analysis of mining permits in 2022 with business use rights in 2018, there is overlapping between the two as many as 1,411 loci equivalent to an area of 448,632.2 Ha. If detailed, the area is divided into two categories, namely exploration stage mining permits which overlap with HGU permits as many as 28 loci equivalent to an area of 6,282.98 Ha and mining permits for the production operation stage that overlap with HGU permits as many as 1,383 loci which are equivalent to an area of 442,349.27 Ha. The greatest amount of overlap occurred on the island of Sumatra and Kalimantan

Island (Figure 6). This is because mining permits and HGU permits are mostly distributed on the two islands.

The same condition also occurs in mining permits with forest areas. Based on the Decree of the Coordinating Minister for Economic Affairs No. 164 of 2021 dated August 13, 2021 concerning the Overlapping Indicative Map (PITTI) of Spatial Utilization of Mining Permit Nonconformities in Forest Areas, there are mining permits in forest areas covering an area of 5,262,955 hectares. Of this area, only 10.7% or around 562,430 hectares of mining permits in forest areas are equipped with IPPKH. The remaining area of 4,700,525 hectares or about 89.3% is equipped with IPPKH (Figure 6).



Figure 6 Overlapping Mining with Business Use Rights



**Figure 7 Overlapping Mining with Forestry** 

Referring to the provisions of Article 38 of Law number 41 of 1999 concerning Forestry, that the use of forest areas for purposes outside forestry activities is allowed with restrictions that can only be carried out in production forest areas and protected forest areas. In protected forest areas, mining can only be done by the closed mining method. The use of forest areas for the non-forestry sector can be carried out through the mechanism of Forest Area Borrowing and Use Permits (IPPKH) or Forest Area Exchange (TMKH).

### **Overlapping Solution Efforts**

Because the regulation of the mineral and coal sector does allow overlap with land rights (Article 134 paragraph (1) and Article 138 of Law No. 4 of 2009), overlap or incompatibility between the mining sector and other sectors such as forestry and plantations or agriculture must occur. The mining process business also begins with an exploration process that is still looking for mining targets (resources and reserves) so it is logical if it has not controlled or acquired land. The settlement of land rights can be carried out in stages according to the needs of land by mining permit holders (Article 136 paragraphs (1) and (2) of Law No. 4 of 2009).

Article 12 of Government Regulation No. 43 of 2021 concerning Resolution of Discrepancies in Spatial Planning, Forest Areas, Permits, and/or Land Rights: Resolution of discrepancies between Permits, Concessions, and/or Land Rights owned by Government Agencies, Business Entities, and/or Communities with RTRWP and/or RTRWK in continuity is carried out by: a) in the event that it has not been effectively pursued, then the permit/concession is reduced, shrinking, or retraction of nonconforming territory; b) In the event that it has been effectively pursued and does not exceed the carrying capacity and carrying capacity of the environment, the permit/concession remains valid until the period expires and can be extended according to the provisions. Article 22 of PP No. 43 of 2021 states that the resolution of discrepancies between permits related to activities that utilize marine space and RTRL, RZ KSNT, RZ KAW, and/or RZWP-3-K in the continuity, in the event that permits have been issued before the stipulation of RTRL, RZ KSNT, RZ KAW, and/or RZWP-3-K, then the licenses remain valid until the expiration period and can be extended according to the provisions. Thus, permits that fall into the category of sustainability, then the mining permit will still be respected until the permit period expires.

For the settlement of overlapping mining permits with land rights, several settlement options are:

- 1. Mediation/deliberation to obtain a win-win solution
- Joint land use as stipulated in Article 12 PP No. 43/2021 concerning Resolution of Spatial Discrepancies, Forest Areas, Permits and/or Land Rights so that the parties can continue to carry out their business activities in accordance with the scope of their respective authorities.
- 3. Divestment, land rights which are assets of SOEs The procedure for writing off books can be done by a transfer mechanism in accordance with the Regulation of the Minister of SOEs Number Per-02.MBU/2010 Year 2010 concerning Procedures for Bookkeeping and Transfer of Fixed Assets of SOEs.

To resolve overlapping mining and forestry permits, several settlement options can be carried out, namely:

- 1. For IUP/PKP2B/KK holders whose part or all of the area is within a conservation forest area that has not been active in the field to request an addendum or revocation so that mining activities are not in conservation forest areas.
- 2. For IUP/PKP2B/KK holders whose areas are in protected forest areas and/or production forests but do not yet have a Forest Area Use Agreement (PPKH) and have not been active in the field, to make a statement of commitment not to do activities in the field before having PPKH.
- 3. For IUP/PKP2B/KK holders whose areas are in forest areas but do not yet have PPKH and have been active in the field, to report their activities to the Minister of Environment and Forestry, for further review with mechanisms in accordance with Government Regulation Number 24 of 2021 concerning Procedures for Imposing Sanctions; Administrative and Procedures for Non-Tax State Revenues Derived from Administrative Fines in the Forestry Sector.
- 4. PPKH/IPPKH holders are required to carry out all obligations as stated in the Decree of the Minister of Environment and Forestry concerning PPKH/IPPKH.

# Conclusion

- 1. The mapping reference system used in compiling the IGT in the mining sector already refers to the system established by government agencies that carry out government affairs in the geospatial field. WP and WIUP/K maps are made in the form of closed polygons bounded by lines parallel to latitude and longitude with an accuracy of one thousandth of a second (0.001") or the equivalent of 3.09227 cm which is equivalent to 1:600.
- 2. The Directorate General of Mineral and Coal developed Minerba One Map Indonesia (MOMI) which functions as regional information for mineral and coal mining business activities and Minerba One Data Indonesia (MODI) as the only recognized data source (single source of truth) mining licensing data used in the internal environment of the Ministry of Energy and Mineral Resources and other agencies, both at the provincial and central government levels.
- 3. The right to IUP is the right to utilize a particular commodity. The right to IUP is not a land right so the IUP owner must settle obligations with the land rights holder. The settlement of land rights can be done gradually according to needs.
- 4. In the event of nonconformity, in the event that the permit has been issued before the spatial planning is determined, the mining license remains valid until the expiration period and can be extended according to the provisions.

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