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*Araştırma Makalesi*

## **REQUIRED OPERATING LICENSE BEFORE OPERATION PERMIT TO BE ABLE TO PERFORM MINING OPERATION ACTIVITIES IN TURKEY<sup>1</sup>**

*Taşkın Deniz YILDIZ\**

### **Abstract**

*For the realization of mining operations in Turkey; investors should take a mining operating license in the first place. According to mining legislation; different license areas and periods varying according to mineral groups are envisaged. After received the mining operating license, to conduct the activities shown in the mining operating project, the operation permit must be obtained. Operating permit area; is determined by reducing the mineral reserve to the proved reserve in the mining operating license area. Operation permit show that for mines within the mining operating license area, all permits have been obtained and there is no obstacle to the production of mines. Therefore, the period of mining operating licenses in Turkey (except 1, 2 (a) ve 2 (c) mineral groups); are an interim period before the mining operation permit process, which is necessary to start mining production, taken after the end of the mining exploration activities. During this transitional period; application for mining operating license; areas, and duration of mining operating license; operating project and the activities to be carried out accordingly, should be known for investors who will invest in mining. How can the mining investor proceed to operation permit process as soon as possible without the license security decline? Why is there a need for an operation permit along with a mining operating license in Turkey? Arrangements on these issues will reduce the risk of mining investments and will also contribute to the development of environmentally friendly mining.*

**Keywords:** *Mining legislation, Mining license, Mining project, Mining reserve, Mining right.*

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## TÜRKİYE'DE MADEN İŞLETME FAALİYETİ YAPABİLMEK İÇİN GEREKLİ İŞLETME İZİNİ ÖNCESİNDE İŞLETME RUHSATI<sup>2</sup>

### Öz

Türkiye'de maden işletme faaliyetlerinin gerçekleştirilebilmesi için yatırımcının ilk etapta maden işletme ruhsatı alması gerekmektedir. Maden mevzuatına göre, maden gruplarına göre değişen farklı ruhsat alanları ve süreleri öngörülmüştür. Maden işletme ruhsatından sonra maden işletme projesinde gösterilen faaliyetleri yapabilmek için işletme izninin alınması gerekmektedir. İşletme izin alanı, maden işletme ruhsat alanında bulunan maden rezervinin görünür rezerve indirgenmesi suretiyle belirlenir. İşletme izni, maden işletme ruhsat sahası içinde bulunan madenler için bütün izinlerin alınmış olduğunu ve maden üretimine bir engel kalmadığını gösterir. Dolayısıyla Türkiye'de maden işletme ruhsatı -1, 2 (a) ve 2 (c) maden grupları haricinde- maden arama faaliyetleri bitimi sonrasında alınan, maden üretimine başlanabilmesi için gerekli olan maden işletme izin süreci öncesinde bir ara dönemdir. Bu ara dönemde; maden işletme ruhsatı müracaatı; maden işletme ruhsat alanları ve süresi; işletme projesi ve buna uygun olarak gerçekleştirilecek faaliyetler, gibi konular maden yatırımı yapacak yatırımcılar için bilinmesi gereken konulardır. Ruhsat güvencesi zayıflamadan maden yatırımcısı işletme izin sürecine en kısa zamanda nasıl gelebilir? Türkiye'de maden işletme ruhsatı yanı sıra işletme iznine neden gerek duyulmuştur? Bu konularda yapılacak düzenlemeler maden yatırımlarının riskini azaltacak ve aynı zamanda çevreye duyarlı madencilik gelişmesine katkı sağlayacaktır.

**Anahtar Kelimeler:** Maden hakkı, Maden hukuku, Maden rezervi, Maden ruhsatı, Madencilik projesi.

### INTRODUCTION

Mining activities, starting with exploration, continuing with ore production-enrichment, following the depletion of resources, and covering the working places and covering the environmental activities is a set of processes (Tamzok, 2008, p. 12). Within these activities; it is very important to define the phase in which the mining operations started and ended, in the mining legislation, in terms of turning the mining investments into production. As well as the Mining Law in Turkey; In Article 4 of the Mining Regulation which entered into force in 2017; "mining operations" was defined as: "Preparatory activities for production and necessary activities for production". However, "Mining Operations" technically includes;

- Production: The extracting existence of a proved reserve is extracted from the ground or removing from the earth,
- Operating/processing: - Preparation, mineral processing and smelting phases of the produced ore,
- Rehabilitation the operated area, filling or arranging the opening gaps,

<sup>2</sup> Bu çalışma Taşkın D. Yıldız'ın 2020 yılında İTÜ Fen Bilimleri Enstitüsü tarafından onaylanan doktora tezindeki bir başlığın geliştirilmesi ve revize edilmesiyle yapılmıştır.

- Environmental activities and landscaping (Günay, 2016, p. 25-26).

The right to operation refers to a wide variety of rights, such as the discovery of the mine, the establishment of facilities above and below the ground for this purpose, and the ownership of the ore extracted (Telli, 1989, p. 102; Göğer, 1979, p. 207). For the realization of the mining activities, the investor must be entitled to mining right.

According to Turkish Mining Law; "mining rights shall be granted to Turkish citizens being qualified to enjoy their civil rights; to companies having legal entities, established in accordance with Turkish Republic Legislation and in whose article of association it is indicated that mining is included in their field of activity; to public economic enterprises having the authorization on this matter and their entities, affiliates and associates and other public institutes, establishments and administration (Topaloğlu, 2016, p. 33; Yıldız & Topaloğlu; 2021, p. 1124-1125; Mining Law, Article 6).

Mining in Turkey in terms of ownership "domanial system" and "regalian system" is valid. The domanial system considers mines as public property and gives the government the right to explore and operate. In the regalian system, it obtains the right to operate if it fulfills its obligations with the condition of financial and technical competence, to a certain extent, which locates the mine as public property (Yıldız, 2013a, p. 1962). The person who has explored and discovered the mine also has the right to priority<sup>3</sup> (Fındıkgil, 1966). In Turkey, mining rights are classified according to the rights of discovering, exploration, and operation. After the discovery and exploration periods, the operation period starts with the registration of the proved mine. After the exploration term, the operation period phases are presented in (Fig.1) (Yıldız, 2020h, p. 263; Yıldız & Kural, 2020). As shown in the figure 1, "mining exploration license can be obtained through tender, application or transfer. Exploration permits require property permits and permissions from other institutions<sup>4</sup>. Exploration activities include geophysics, geochemistry, and drilling operations. If the feasibility of the project is suitable for the operation, an operating license application is made upon the delivery of the operating project at the end of the exploration activities. "Operation permit"; Environmental Impact Assessment (EIA) decision shall be given to the operating license holder by obtaining the proprietary, workplace opening and work permit, and other licenses and permits. It is mandatory to submit an annual report after obtaining the operation permit (Yıldız, 2020b; 2020h, p. 264). Until the end of the mining operation, mine investor pays forest fees (Yıldız, 2020a; 2020f), pasture fees (Yıldız, 2019), private land permit or expropriation prices (Yıldız, 2020e), license fees (Yıldız, 2022c), state rights (royalty) (Yıldız, 2022b), municipal fee, fees of conformity to environment,

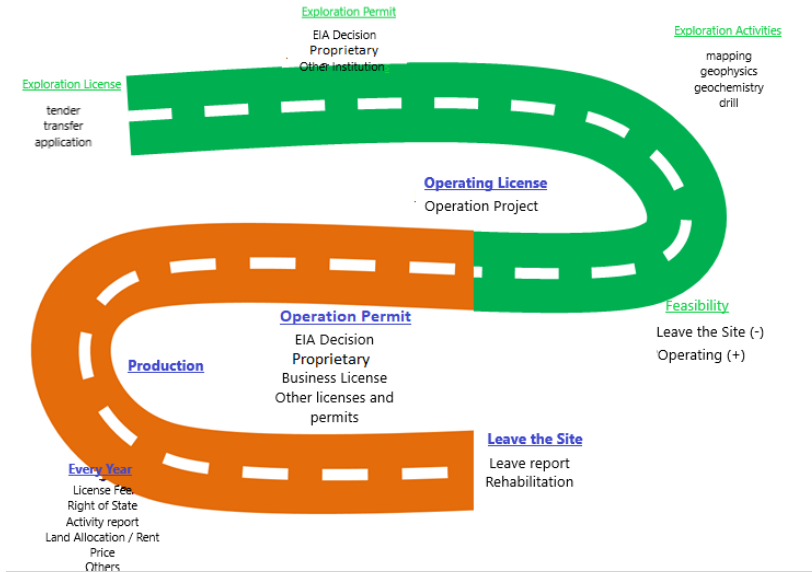
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<sup>3</sup> The mineral groups that make an exception to the priority right in the "regalian" system are mentioned below.

<sup>4</sup> For mining exploration license applications, permission periods, rights and other license conditions, see (Yıldız, 2013b).

rehabilitation costs, operating license extension fees, and various taxes. The rehabilitation process starts when the mine is in operation. After the mine production activities are completed, the abandonment report is given, and the mining field is abandoned (Yıldız, 2020b; 2020h, p. 264; Yıldız & Kural, 2019; 2020).

**Figure 1:** Licensing processes (as representative)



**Reference:** TÜMMER (2017). Mining operations permission processes (presentation).

In this context, "mining right" or the realization of mining activities; limited to the conditions in the declared operating project (Günay, 2016, p. 42). Generally, mining sector is riskier compared to other sectors. At the investment stages, good planning, and a project-based approach are needed for obtaining natural resources by extracting them optimally (Özel, 2006, p. 1). In order to achieve success from the expected results from mining projects, they need to be prepared by professional project makers (Utkan, 2011, p. 50). At this point, the operating projects to be delivered in the application of operating license in Turkey; the projects should be analyzed, after the mining operating license application, to avoid of the permission process be extended, and without being led to a sanction in the license. These projects should be prepared meticulously, and MAPEG (General Directorate of Mining and Petroleum Affairs) should provide the necessary promptness and controls in the project approval.

### Scope and Methodology

In order to start mining operations activities in Turkey, mining investors need to get some permissions (Yıldız 2020b; 2020h). The process of these permits can take 1-3 years and exceed this period. Unexpected land-use problem arises after

the mining operation activities started is a situation mine investor do not want at all. Because, mining investors pay high land permit fees due to land conflicts before obtaining an operation permit (Yıldız, 2019; 2020a; 2020e; 2020f; 2021a; Yıldız & Kural, 2019). Additionally, there are some problems in these land conflicts due to the permit processes (Yıldız, 2020i; 2021b; Yıldız et al., 2017; 2019a; 2019b; 2020; 2021). For mining investors, license security is one of the issues they consider most when deciding on their investments (Yıldız & Kural, 2020). When assured, the license should not be easily canceled and the license holder should not deal with unnecessary sanctions (Yıldız, 2017, p. 88).

Operating license within all this process shows that the mineral reserve is determined after the completion of the exploration license periods, and that the site to be operated is conducive to mining. (Kayserili & Topaloğlu, 1990, p. 68). Additionally, operating license indicates the legal readiness of mine site for operating. However, for the field to be legally ready for operating isn't enough for extracting mine. For this, it is expected from the right holder to render the field operatable on the condition that an operating permit is obtained. The investors who obtain an operating license should fulfill their legal obligations regarding this license within the periods stated in the law. On the contrary case, administrative fine and the cancelation of operating license sanctions are foreseen (Kurt, 2020, p. 37). How can the mining investor proceed to operating permit process in the presence of these kinds of conditions weakening the license security? Why is there a need for an operation permit apart from a mining operating license in Turkey?

This article; has a qualitative guide which will show in detail the procedure of the permits required by domestic and foreign mine investors to make mine investments in our country. Also, it contains recommendations that can accelerate the transition from operating license to operation permit. In this context;

- By explaining the difference between the mining license and the operation permit; In addition to the legal consequences of this difference, technical results on concepts such as mining operating project and reserve have been revealed.

- It has been explained which procedures and conditions under which mining application can be applied. The conditions of this application vary according to the mineral groups<sup>5</sup>.

- According to the different mineral groups mentioned in the table, the rights granted to the license holder. In this context; the areas of the mining license, durations of the license that this license entitles are specified.

- The mining operating project and the scope of the activities to be carried out accordingly are explained.

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<sup>5</sup> See the mineral groups stipulated by the Turkish mining legislation (Yıldız, 2019, p. 26-27; 2020g; Topaloğlu, 2016, p. 16-20).

• Thus; the requirements of a mining investor, which should be taken into consideration before the operation permit is obtained from the application that is required to obtain the required operating license before the operation permit, and the obligations envisaged, have been examined and proposals have been made especially regarding the operating project.

• In particular; the function of the operating license has been clarified from the application of the mining operating license to the operation permit stage and suggestions have been made in order to ensure that the characteristics of the operating projects submitted during this application are reflected in the operation permit process.

• Recent changes introduced by legislation on related issues within the scope of the study; in some cases, also with the situation in the legislation before the amendment has been shown and explained.

### **THE CONCEPTS OF MINING OPERATING LICENSE AND OPERATION PERMIT**

Mining rights in the Mining Law; It is used for four concepts such as license, permit and privilege<sup>6</sup>. Looking at the definitions in the mining law;

- “Operating License” is defined as “Certificate of authority for the conduct of necessary mining activities”,

- “Operation Permit” is defined as “Permit required for a mine to start operation”.

As can be seen in the mining law “license” and “permit” are two different terms in Turkey. License is considered as a whole showing the borders surrounding the mine site and preventing the distribution of the same mineral group licenses to others within these borders. However, “permit”; deemed to be the place where mining operations performed/will be performed, within the limits of the license (Yeşilyurt, 2009, p. 30; 2013a, p. 98).

The legal consequences of these terms are also different. In mining law, while the “license” is a certificate of authorization, “permit” is required for the beginning of mining activities. The license is issued to persons who are in compliance with the license requirements according to the mining law and authorizes to obtain a permit from the necessary institutions to start mining activities<sup>7</sup>. Permit

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<sup>6</sup> The concessions granted for mining operations were abolished by the Mining Law No. 3213, which entered into force in 1985.

<sup>7</sup> In addition to the authorization granted by the administration, other licenses/permits may be required for the continuation of the activity. Therefore, as in the case of the operating license, the license may require the acquisition of different licenses due to the different legal consequences of an activity (Günay, 2016, p. 81-82). For example, activities cannot be carried out without “business license and work permit”. If the mining operation is opened without permission for this license, mining operation cannot be started even if there is a mining operating license.

in mining law means the right of the applicant to apply for a permit from the institutions indicated in Article 7 of this Law to start the mining operation. In other words, the mine investor cannot directly commence operations with the license obtained, and it is the responsibility of the investor to obtain the permits. This means that the investor has to undertake risks on permitting after getting the license, in addition to risks of the mining sector (Günay, 2016, p. 80).

Therefore, as a rule, the "operating license" and then the "production license" must be taken in order to conduct the mining operation activities. As a matter of fact, after the operating license, a second area is determined in order to perform the activities shown in the mining operating project. This is called the production license area. This area field is always smaller than the operating license area. The operation permit area is not the projected area of the reserve<sup>8</sup> shown in the mining license. The operation permit area is the area that will be used during the extraction of the mine from the surface of the mine and the area in which the mine is to be processed, the necessary construction sites, stock areas, excavation areas or gallery areas. For this reason, in order to be able to perform these activities, it is obligatory to obtain the permits indicated in the mining law and other laws (Günay, 2016, p. 161).

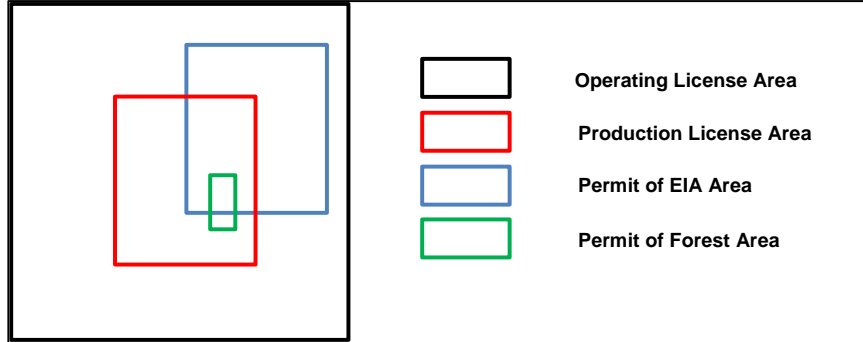
The mining operation permit indicates that all permits have been obtained for the mines in the mining license area and that there is no obstacle to mine production. In other words, the possibility of obtaining the "operation permit" necessary for mining operation can be realized by reducing the operating license areas, that is, by narrowing these areas for proved reserves. In the same way, mining operations can be carried out in the area permitted by the forestry administration, in the field allowed by the EIA, and in the area of full production license, except for short/medium range watershed protection zones (Yıldız et al., 2016, p. 7) (Fig. 2). As a result, having a mining license does not permit the holder to perform mining activities unless the permit is authorized for that license. In other words, the license and the permit are the sine qua non of the mining activity. When working with license and without a permit, the operation will be stopped, the license assurance shall be taken as revenue for the state, and the license shall be canceled if the act is repeated three times in five years (Yeşilyurt, 2009, p. 30).

The ore formation of an IV<sup>th</sup> Group (copper, lead, zinc, and silver) mining operation, and the planned main gallery, service ramp, and a three-dimensional model with inter-storeys are demonstrated as an example in (Fig. 3).

**Figure 2:** Mining operating license/operation permit area (representative)

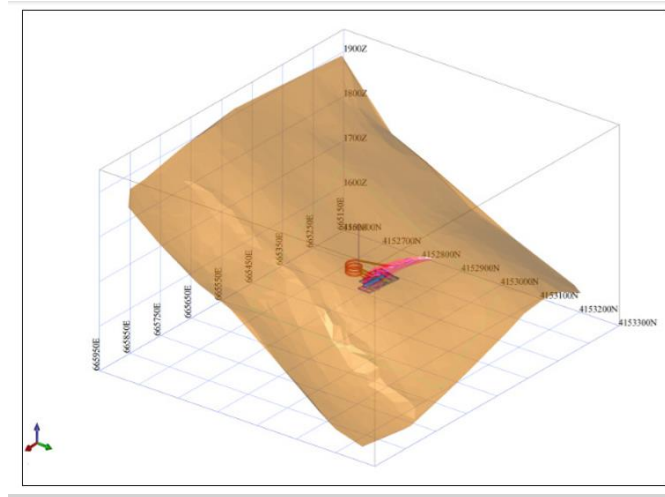
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<sup>8</sup> For the definitions of "reserve", "proved reserve", "probable reserve", and "possible reserve" in Turkey, see (Kahriman, 1993, p. 23, 36; Ersoy & Yünsel, 2008; Bumin & Kutluay, 2013, p. 5-6).



**Reference:** Yıldız, T.D., Samsunlu, A. & Kural, O. (2016). Urban development and mining in Istanbul – Ağacli coal field and its rehabilitation. SWEMP 2016, 5-7 October, Istanbul, 29, 1-13.

**Figure 3:** 3D Model showing planned main gallery, service ramp, and inter-storeys.



**Reference:** Koza, (2013). Karıncadag mining enterprise IVth group minerals (copper, lead, zinc, silver) final EIA report. Koza Gold Operations Inc.

It is explained that the project sites mentioned in the figures are covered with rugged lands; also there are forest, galleries worked in previous years, open-pit roads, open-pit and closed mining operations, and the production of raw complex ore is planned (Koza, 2013, p. 5). As can be seen; in fact, permissions are given to projects. It doesn't matter who will conduct the project. At this point; according to Günay; "in mining law, the mineral resources should be licensed, not the land". Namely; the basis of the mining law In the 1982 Constitution; in Article 168 under the heading "Searching for and exploiting natural wealth and resources," "Natural wealth and resources" is the object of the subject. If the relevant rule is applied in mining, it is



important the “mineral resource”. Therefore, mining activities; refers to the need to search for the resource, to operate the resource, or to authorize the resource for the discovery. Under the rule that "the sovereignty and disposition of the mines belong to State, they are not under the proprietorship of the landowners in where it exists" the subject of mining activity is the "mineral resource. In practice, most of the time, the same resource is operated based on more than one license/permit. According to Günay; this exploration and production are contrary to the discipline of mining. Mines are formed; not due to license limits, but for natural reasons and internal dynamics. The author, therefore, considers that mining activities should be resource-oriented and resource-based (Günay, 2015, p. 73-74; 2016, p. 85, 167). In Germany, for example, in the exploration license area, operating license area, and mine ownership area are shown and separated as boundary lines surrounding a selected piece of land on the surface and the volume surrounded by the vertical planes passing through these lines (Turhan, 2014, p. 175).

In this direction; if the operating license is a document issued on the determination of the proved and possible reserve in the license area as a result of the compliance of the operating project, the operation permit; after obtaining the operating license, it can be defined as the place where production activities can be carried out by obtaining the permits required by law. According to Yeşilyurt; there is no doubt that it would be useful to make these definitions more detailed. Because in the cases that are seen; the operating license and operation permit are technically different, and by the lawyers of the mining enterprises have to be explained firstly. Therefore; the definitions of "operating license," "operation permit" and "mining operation activities" should be very explanatory in the Law; it should also be ensured that there is no overlap and dilemma between definitions (Yeşilyurt, 2013a, p. 98).

It is the expectation of the mining sector, that when the license holder obtains the operating license, a legal regime has been established in such a way that all kinds of legal problems have been solved and all kinds of permits have been taken to start direct mining activities. This is the expectation of the mining sector. In this case, according to Günay, since the license will include permit, as “permit” and “license” will not need two different terms (Günay, 2016, p. 81). According to Yıldız, the concept “operation permit” should be removed. The permits such as EIA, business license and work permit foreseen in the other legislation for all of the same group minerals within the license area should be given once for the license area. Minerals within the license area should be able to be operated within the scope of a project without any restrictions (Yıldız, 2008; 2020j). According to Yeşilyurt, it is necessary to prevent that the “license” and “permit” concepts emerge under the name “license” in mining law and the permit is processed as a different document. Indeed; license fees are obtained immediately upon the granting of a license to the applicant for the mining operating license, but the licensee cannot operate the mine. Even in the fields given by way of tender, permission cannot be obtained after the license stage (Yeşilyurt, 2009, p. 30).

## MINING OPERATING LICENSE

### Operating License Application

An application for a mining license is made without obtaining exploration licenses for mineral groups 1 and 2 (a), but for mineral groups outside these groups, after the expiry of the exploration license. This application is completed by obtaining the following:

- Operation project,
- Document on financial sufficiency,
- Operating license base price,
- A document showing that there is no overdue debt within the scope of Article 22/A of Law No.6183. Otherwise, the request is rejected.

Financial sufficiency is at least 20% of the total investment declared in the project. However, these amounts may not be less than the amounts in the table of minimum financial sufficiency amounts determined according to the mineral groups in Annex-2 to the Mining Regulation (Mining Regulation Article 23 (1)). These amounts are presented in (Table 1). In previous periods; granting licenses to mining license applicants without any financial qualification led to speculation of the license and remained mineral resources idle long-term. In 2010, following the amendment in Law No 5995, financial capability was sought for the first time for mining exploration license before mining operating activities. This understanding has been useful in terms of preventing abuses from occurring as a result of closing mining sites for speculative purposes rather than practicing mining activities (Yıldız, 2012). Recently, (as explained above), after the Mining Regulation in force in 2017, requires financial sufficiency for mining license applications.

**Table 1:** The minimum amount of financial sufficiency that vary by license groups

Mining operating license groups	Minimum financial sufficiency amounts (TL <sup>9</sup> )
I (a)	200,000
I (b)	200,000
II (a)	600,000

<sup>9</sup> 1 USD = 6.00 Turkish Lira (May 06, 2019) (CBRT, 2019).

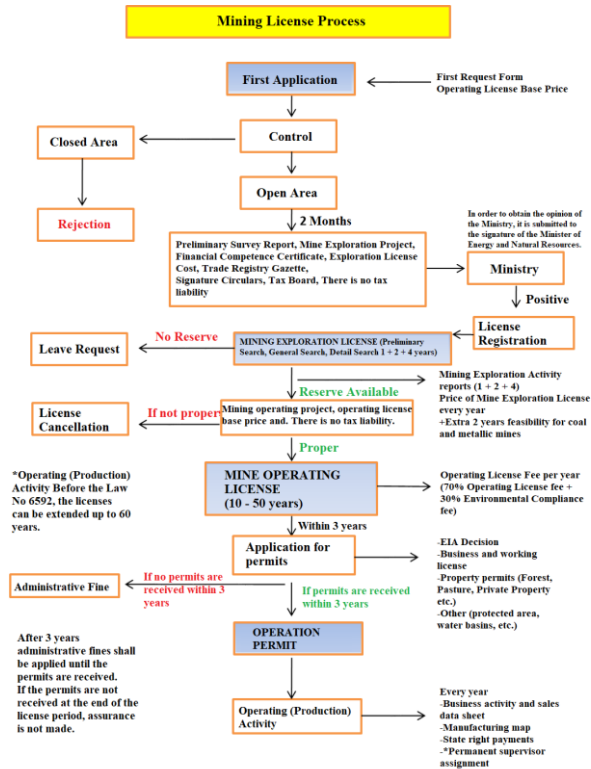
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II (b)	600,000
II (c)	600,000
III	200,000
IV (a)	600,000
IV (b)	1,000,000
IV (c)	1,000,000
IV (ç)	1,000,000
V	200,000

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The most important change in the application for the operating license was the "application method according to the mineral groups. In 2015, with the Law No. 6592; In Mining Law No. 3213, in obtaining exploration and operating license, "privilege rights for applications" procedure was abolished except for 2 (b) Group and 4th Group mineral licenses. In other words, Group 1, Group 2 (a) and Group 2 (c), Group 3, and Group 5 licenses are given through tender. Thus; in the past, priority right was given to all mineral groups; But, now only the priority right for 2 (b) and 4th mineral groups are given. Until obtaining the mining permit from mining exploration activities and starting production; not only the mining license but also some other licenses/permits by mining legislation are required to take (Fig. 4).

In the first place; if the necessary documents and projects for the application of the operating license are approved by MAPEG, the operating license is given to the applicant for a period of 10-50 years. The operating license holder is obliged to pay the operating license base price (70% operating license + 30% security deposit of conformity to environment) every year. The operating license holder is obliged to obtain all the permits specified below in three years. Upon the completion of all these permissions specified in three years, the operating license holder is issued the operation permit. However, if such permits cannot be obtained in three years, it is foreseen that the license holder will pay administrative fine until the permits are received.

**Figure 4:** License-permit procedures (Summary)

**Reference:** TÜMMER (2017). Mining operations permission processes (presentation)

### Mining Operating License Areas and Duration

The area boundaries of the activities to be carried out during the mining operation period and the determination of when the activities start and end are of great importance in many respects, in particular, the determination of the law rule and permits to be applied (Çevikçelik, 2017, p. 32). In this context, firstly, operating license area boundaries and combining these areas, and then mining operating license periods are explained.

### Mining operating license areas

It has been mentioned above that the concept of operation permit was created in the mining legislation in 2004 in line with the tendencies such as optimum use of reserves, making the fields which could not be proved reserves open to the exploration of mines. As a matter of fact, in order to can be started operation at the mine, the proved reserve is determined, and as a result of the narrowing of the

operating license area, the "operation permit area" is determined. That is to say, as a result of the amendment made in Article 24 of the Mining Law with Law No. 5177, it was envisaged that the operation permit would be given to the proved reserve area and the operating licenses would be given to cover the proved, probable and possible reserve areas.

The practice before the year 2004 when "the Law No. 5177" came into force was carried out in the way that operating permit was given along with mining operating license at the beginning. However, this provision, which caused several problems, was changed in 2004. For Topaloğlu, it is the right decision to base the operating permit on the condition of obtaining other permits (Topaloğlu, 2011a, p. 236)<sup>10</sup>. In this way; it was aimed to these large license areas to not remain idle for a long time, to explore these areas and to acquisition these reserves to the country's economy in time if new mine are discovered, to increase employment number in mining and to create employment (Dengiz, 2008, p. 43).

According to the paragraph 4 of the 24<sup>th</sup> article which amended by "Law No. 5995"; At the end of the exploration license period, the parts of these areas which are not designated as temporary facility areas and, probable and possible reserves which cannot be made proved were narrowed, and was provided that these were taken out of the license area. In the event that the possible reserve areas could not be converted to proved and probable reserves in five years, to being narrowed of the license areas were determined<sup>11</sup> (Yıldız, 2020h, p. 44). This reduction type is actually a method which is totally in favor of mining license holder. In case the mining license holders discover the ore amount the holders deems enough for their within the reserve category, the rest of the site can remain idle. Also, due to the prolonged procedure associated with obtaining an operating permit, operating activity may start late. For these reasons, the reduction is a right and convenience for the license holder in a way in the operating period. Thus, the investor will be able to get rid of paying license costs that are for the rest of the field (Çitil, 2018, p. 124).

With the amendment made in the Mining Law on February 28, 2019, the operating license will no longer be granted by narrowed the other parts of the exploration license over the "possible reserve" areas. This provision applies only to proved and/or potential reserves. It is envisaged that the IV<sup>th</sup> Group's mining license potential reserve areas (of that according to the UMREK Code<sup>12</sup> cannot be turned

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<sup>10</sup> It is also regulated that the license holder must start the mining operating in one year after the approval of these permits. So that the obligation to operating the mines in one year begins after the date of the operation permit. On the other hand, this period, which was determined as six months in the previous Mining Law Amendment, was increased to one year. It was also decided by the Council of State that production is not absolutely necessary in this period.

<sup>11</sup> By narrowing the remaining exploration license area, according to Article 30, it is envisaged to be opened to calls through tenders.

<sup>12</sup> The National Commission on Mineral Resources and Reserves Reporting in 2016 in Turkey (UMREK) Regulations were enacted. Thus, mining investments can be financed, and a reserve

into reserve areas) will be reduced in ten years, and the other group mining license areas in five years (Yıldız, 2021c; 2021d; 2022a).

With Law No. 6592 came into force in 2015 and the Law No. 7164 came into force in 2019, operating license areas changing among mineral groups as a result of the amendment in the Mining Law No. 3213 are revised. As of the exploration license period, the area amounts varying according to the mineral groups of these areas are presented in Table 2 together with the envisaged license. The amount of “area” and “license” characteristics of these areas which have changed since the exploration license period according to mineral groups are presented in (Table 2).

**Table 2:** Areas varying by mineral groups in mining license applications

Mineral group	Exploration license					Operating license			
	Maximum area	License life (year)				Maximum area	License life (year)	License/ permit application method	
	Hectares	Pre-exploration	General exploration	Detailed exploration	Feasibility duration	Hectares			
1 (a)	-	-	-	-	-	20	5-30 years	Extension possible, maximum 60 Years	Tender
1 (b)	-	-	-	-	-	50	10-30 years	Extension possible, maximum 60 Years	Tender
2 (a)	100	-	-	-	-	100	10-40 years	Extension possible, maximum 80 Years	Tender
2 (b)	100	1	1	-	-	100	10-40 years	Extension possible, maximum 80 Years	Priority right
2 (c)	100	1	1	-	-	100	10-40 years	Extension possible, maximum 80 Years	Tender
3	500	1	2	4	-	500	10-50 years	Extension possible, maximum 99 Years	Tender
4 (a)	2000	1	2	4	-	2000	10-50 years	Extension possible, maximum 99 Years	Priority right

report and classification system will be implemented with the aim of mining development (Yıldız, 2021d).

4 (b)	2000	1	2	4	2	2000	10-50 years	Extension possible, maximum 99 Years	Priority right
4 (c)	2000	1	2	4	2	2000	10-50 years	Extension possible, maximum 99 Years	Priority right
4 (ç)	2000	1	2	4	-	2000	10-50 years	Extension possible, maximum 99 Years	Tender
5	1000	-	-	-	-	1000	10-50 years	Extension possible, maximum 99 Years	Tender

**Reference:** Yıldız, T.D. (2020c). Evaluation of Forestland Use in Mining Operation Activities in Turkey in terms of Sustainable Natural Resources. *Land Use Policy*, 96, 104638. DOI: 10.1016/j.landusepol.2020.104638

As is seen in the table; 10 hectares (ha) of area for the 1 (a) group of the mineral has been increased to 20 ha. It is foreseen that operating license should be given in a way not to exceed 50 ha to 1 (b) mineral group; in a way not to exceed 100 ha for 2 (a) and (b) group (for 2 (a) group, is given directly operating license, and for 2 (b) group, is given exploration license); the exploration license is given in a way not to exceed 500 ha for 3<sup>rd</sup> mineral group, and in a way not to exceed 2000 ha to 4<sup>th</sup> mineral group (and in the way of not to exceed 50000 ha in the event of all of them given in sea). In the areas used for exploration licenses in Turkey, operating license applications can be made for the same amount of area when desired. However, to conduct mining operations, the mine reserve in the operating license area must be reduced to the proved reserve, as explained above. The operation permit is thus granted (for the area to which the proved reserve corresponds).

### **Duration of mining operating license**

The duration of mining licenses and the procedure to extend these durations are closely related to license assurance (Topaloğlu, 2011b, p. 44; 2019b, p. 45). In 2015, with the amendment of Law no. 6592, the total license periods were redefined. Accordingly, it is envisaged that the duration of the operating license shall be determined according to the mining operating project for at least five years for the license of Group I (a) minerals and not less than ten years for the other group minerals. In this context, the duration of the operating license; it cannot exceed 30 years in 1<sup>st</sup> mineral group, 40 years in 2<sup>nd</sup> mineral group and 50 years in other group minerals. In this context, the operating license period cannot be given by MAPEG for more than 30 years for the 1<sup>st</sup> group minerals, 40 years for the 2<sup>nd</sup> group minerals, and 50 years for the other group minerals. However, from 30 years to 60 years in 1<sup>st</sup> group minerals and from 40 years to 80 years in 2<sup>nd</sup> group minerals, the Minister of Ministry of Energy and Natural Resources is authorized whereas the President is authorized for other groups from 50 years to 99 years (Table 2).

Each license extension period may be longer than the first operating license period. It is because, with mining activity, the proved or probable reserve can now turn into a producible reserve and it can also be understood that the amount of the reserve is above the estimates (Çitil, 2018, p. 78). Therefore, it should not be ignored that the license extension period is a technical issue and mining operating projects and reserves are taken into consideration. In this direction, it was appropriate to bring the operating license extension criteria based on ore production performance to the Mining Regulation.

Regarding the extension of time, Law No. 5177 determined that "if an extension request is made with a new project before the end of the term, the period of the license may be extended.". This provision was also protected by Law No. 5995. Therefore; According to the rule of law in force, an extension request had to be made before the end of the operating license period. Please see the terms of operating license extensions during this period (Yeşilyurt, 2013c, p. 103). With the amendment of the Law No. 6592 in 2015 and the Mining Regulation enacted in 2017, the existing provisions were preserved. With the amendment made to the Mining Law in 2019; in article number 24 (3) determined that: "*1 (a) Group minerals' operating license period is five years. Other group minerals' operating license period is not less than ten years, according to the project. The license period may be extended six months before the end of the period if there is a request for an extension with a new project, and if deemed appropriate.*" By determining this provision, it was obliged to apply at least six months in advance for operating license revisions.

According to this; requests for extension are not made less than six months shall not be accepted, and the mining license shall cease. In this case; many licensors might miss the six-month period, resulting in a loss of license rights. According to Topaloğlu, this amendment was not comply with the license guarantee and sustainable mining principle (Topaloğlu, 2019a). On the contrary case, it is stated that the request will be declined and the field will be rendered into the tender site and will be licensed through tender. For mining operations not to be aggrieved, there is a benefit in removing the clause "in the time extension requests of the licenses; at the latest 6 months before the expiry date of the license" from the Law text (Yeşilyurt, 2020, p. 113). Taking these criticisms into consideration, the phrase "6 months" was changed into "12 months" stated in this paragraph with Article 3 of Law No. 7257 that came into force on the date of November 25, 2020.

The period granted to mining licenses and the extension of this period is directly related to the security of mining rights. In terms of mining investors, it is not desirable to be given a short period of time as well as to be determined the period left to the discretion of the administration. On the other hand, Article 39 of the "Mining Regulation"; in order to extend the operating license, many new criteria have been introduced such as carrying out environmental compliance activities and proximity to zoning areas (Topaloğlu, 2017).



Mining enterprises are desired that regarding the duration of the mining license, in particular, due to the administrative and/or judicial decision, the period between the cessation of the activity and the date of resumption of the activity shall not be counted from the license period. Since the activity was halted by an adjudication against the will of the licensee during this period, it was suggested (TÜMMER, 2010) that the period of inactivity should not be counted as the license period.

### **Mining Operation Project and Related Activities**

It is mentioned in the above section that operation permits can be granted to mining enterprises by staying within the boundaries of the license area and by determined the proved reserve. Thus; the operation permit area is finalized with an in-situ investigation by the administration in the period of operating license (Yeşilyurt, 2013a, p. 98).

The process for the operating project is as follows: The mine maps and all other necessary documents are evaluated by MAPEG in terms of compliance with the legislation, and in case of a deficiency in the file, the license holder has this deficiency completed. In the continuation of these procedures, MAPEG creates a committee for mine site audits. Following, the committee inspects the field in terms of compliance with the legislation and facts. In other words, while the committee holds an examination on the site in terms of compliance with the legislation, it investigates whether the declared or provided documents show the real situation of the site. If the mine area and reserve are suitable for the mineral group applied in the mining license, and if the committee gives assent within its authority, the process for obtaining an operating license is started. After the payment of the operating license fee, operating license is given (Kurt, 2020, p. 101-102).

Therefore, mining operating projects are an investment proposal that must be prepared and submitted to the relevant administration during the application for operating license in accordance with the provisions of law and regulation in order to obtain an operating license (Bayırlı, 2011, p. 74). The request for the operating project of the Mining Law also implies that a plan for the extraction of the mine is made and submitted for approval of administrating (Gülan, 2008, p. 225). According to Article 3 of the Mining Law; the "operating project implementation report" is the report "which should be submitted to MAPEG for the implementation of the operating project in accordance with the period and principles specified in the regulation" until the production activity starts. The Mining Law has assigned to the Mining Regulation how the project will be prepared, and its content<sup>13</sup>.

In the period before the Mining Law No. 3213, which entered into force in 1985, the investor; for a mine, it would prefer to prepare an operating project de covering the entire license area. However, in 2004, with Law no. 5177 that changed

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<sup>13</sup> See Annex-14 of the Mining Regulation on the content of the mining operation project.

Article 24 of the Mining Law, the implementation of the reducing of the areas whose proved and probable reserves were not located through technical reports was initiated (Çanga, 2005, p. 377). Therefore; operating license holders plan to will produce future reserves in the life of the mining operation and shows that in the operating projects.

According to Kayadelen; the operating project form (Annex Form-6) in the annex of the "Mining Law Implementing Regulation" in the past was not sufficient, and this inadequacy caused many basic problems. In this period, the content of operating projects did not include some basic research that should be included in an implementation report if their qualifications were kept aside. In fact, operating licenses had to be issued on the basis of comprehensive and qualified (feasibility) reports (Kayadelen, 2009).

In fact, in the past operating project format;

(1) There was no market analysis for the products to be produced in line with the project. This means that it is not taken into consideration whether the product (s) to be produced by the project can be sold at the price, quality, and quantity prescribed in the following period;

(2) The project is measured by many concepts in determining the profitability of the project, such as annual operating profit, the return of the money, break-even point. The time value of money is not taken into account in these concepts. Although it is not profitable, this makes it possible to perceive a mine as profitable. (As it is known, a mine that will not be operated profitably; should not be considered as a mineral deposit and should not be operated under current conditions.)<sup>14</sup>.

(3) The methods and criteria for analyzing the project in terms of the national economy are insufficient. Because; the criteria such as income tax and corporation tax, state's right, information on payroll taxes under the title Pro Contribution of the Project to Country Economy in the format are not sufficient to be determined the significant contribution of the mining project to the national economy. According to (Konukman et al., 2016), the requested information in the operating project has a very limited meaning in terms of public interest expression (p. 73-74). Operating projects that the reviewing institution considers sufficient; the fact that no institution within and outside the country, especially financial institutions, does not accept shows the characteristics of the projects (Kayadelen, 2009).

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<sup>14</sup> "Minerals and Mining Development Board in Australia"; if it determines that the mines are not operated effectively in accordance with the mining program, they may request the cancellation of the permit/right, considering the financial and technical status of the mine owner and the market conditions (Kayadelen, 2009). Turkey's legislation and application do not have such a situation. However, there are other cancellation provisions for the right of permission.

Aforementioned; In order to eliminate the deficiencies in the past operating projects, necessary amendments were made to Annex-14 of this Regulation as a result of the amendment made in 2017 with the Mining Regulation. But; it should be kept in mind that YTK<sup>15</sup> have a great responsibility in making operational projects submitted to MAPEG more qualified. The responsibility of the YTKs is not only the delivery of operating projects to MAPEG; but also preparation of the required reports, and, if necessary, the revision report of the operating project, in compliance with the operating project after obtaining the operating license and during the operation activity periods, and the submission of all these reports to MAPEG.

Mining Law leaves how the project will be prepared and in which context it will be to Mining Regulation. On this matter, with the amendment of Law No. 6592, it is foreseen that the "activity information form" and "sales information form" documents for the previous year, which are issued on behalf of the license holder at the end of April each year, will be given in a single format called "operation activity report". Mining operation activities are regulated in Article 29 of the Mining Law, and how to perform activities of mining operation are regulated in Article 35, 36, and some other articles of the Mining Regulation.

Operation activities; will be carried out according to the operating project submitted to the administration and accepted by the administration. But; as it is known, the submission of the operating project to the administration and its acceptance by the administration are not sufficient for production activities alone. It is possible to conduct mining production activities with the operation permit to be issued following the obtaining of the permits required by the Law (Yeşilyurt, 2013b, p. 94).

In the operating project required for a mining operating license application; many issues such as mining, occupational health and safety, and the economy are explained in detail by the operator. Also; another issue that needs to be explained in the operating project report is the "environment". As a matter of fact, the mining operating project is defined in Article 4 (kk) of the Mining Regulation as follows: The operating project includes environmental measures taken during the technological and economic operation of the mine in a mineral deposit whose reserve is determined in three dimensions, is a basic and detailed engineering project (included in Annex-14 of the Regulation), including the rehabilitation planning of

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<sup>15</sup> According to the Regulation on Authorized Legal Person given which entered into force on June 03, 2016, "Authorized legal person" (YTK) authorized by General Directorate; prepare the report, project and all kinds of technical documents required to be submitted to the General Directorate under the Mining Law. It refers to the organization that the owner of more than half of the shares of the company is the engineer, or within the structure of which the qualification and quantity of the engineer operating the license or business license owner.

the mine after the closure. Thus; the plan for compliance with the environment<sup>16</sup> will be implemented while the activity is in progress or after completion.

In Turkey, in a example of Group IV mining operating projects, after the conclusion of a “EIA positive decision”, forest permit, business license and work permit, after obtained all required permits, it is plan, to go into production after mining preparatory activities The schedule of the planned operation of the operation in relation to the project subject is presented in Fig. 5.

**Figure 5:** The period related to operation activities

Investment Related Operation Activities	Years	Months											
		1	2	3	4	5	6	7	8	9	10	11	12
Completion of EIA Process	2013												
Obtaining Forest Permits	2013												
Opening and Working Permit Getting	2013												
Field Preparation Activities and Production (open pit + closed pit)	2014												
Continuing Production Activities (closed pit)	2015												
Continuing Production Activities (closed pit)	2016												
Continuing Production Activities (closed pit)	2017												
Rehabilitation Activities	2017												

**Reference:** (Koza, 2013, p. 5; Yıldız, 2020d).

However, the permitting process in this operating project, as the majority, in Turkey for each mining operation, as shown in the example above, can not be completed in a short time. Therefore, mining investors do not foresee their permit periods and lose their investments.

In this respect, it is necessary to make an evaluation from another point of view. It means that obtaining a “mining operation permit” means a feasibility study and an accepted project. This means that the project was evaluated of environmental impact. To come to this level of mining in Turkey, as a result of MAPEG's applications, feasibility reports should be enhanced of the highest quality. So; the feasibility should be the basis for the evaluation of the reports during the permit process. These reports also include EIA issues. Thus; the operating projects prepared according to the Mining Law contain an environmental section. In such a case, the need for EIA reports, firstly, cannot be understood in the first place. Therefore; either the removal of the environmental section in the operating project or only the

<sup>16</sup> As specified in Section 5 of Annex-14 of the Mining Regulation; "the plans for compliance with the environment" must also be prepared in mining operation project. But; if the "EIA Positive decision" is made in the EIA Report for the areas to be taken, it is foreseen that the said section in the operating projects will not be filled.

evaluation of mining in the context of the EIA report comes to mind first. But at this point; it should also be taken into consideration that after the application of an operating license with the delivery of an operating project to MAPEG, in the decision of the Ministry of Environment and Urbanization "EIA is not required". So; considering the decision of "EIA is not required"; it is beneficial to continue the implementation of requesting a plan for compliance with the environment in the operating projects submitted before this decision. The fact that the "EIA is require" decision has not been issued does not mean that the mining operation will not be environmentally sensitive. In this direction; whether or not subject to EIA, the environmental compliance plans prepared in the mining operating projects, although not as comprehensive as the EIA, in detail, may be explained technical issues by way of legislation. However, legislation should be envisaged and implemented in a way that will not adversely affect the mining investment process. Thus; the process of transition from operating license to operation permit will accelerate.

## **CONCLUSION AND SUGGESTIONS**

Mining operating license that received after the end of mining exploration activities, It is an intermediate period before the mining permit process, which is necessary for starting mining production. During this interim period, It is decided the technical feasibility of environmentally friendly sustainable mining as a result of the examination of the mining operating project by MAPEG and the examination of the EIA and other permits by the authorized institutions. It is unlikely that a mining operating license and an operation permit may be issued at the same time due to technical reasons in the exploration and operation of the mine, and due to the administrative structure in which more than one institution is authorized. These issues are a separate study topic. However, it should be stated that, in order not to have mining investment losses, shortening all license and permit review processes before mining operating permit is highly important for mining sector.

Mining operating license applications in Turkey does not include long bureaucratic procedures as in past periods of Mining Law (Yıldız, 2020h). Additionally, in the next years, the increase of reserve determination based on UMREK (National Resources and Reserves Reporting Committee) is expected. It is foreseen that the parts of the areas (which are identified as possible reserves in operating projects) that cannot be turned into a resource and/or reserve in 5-10 years in consideration of UMREK will be narrowed down. Hence, the difference between "operating license area" and "operation permit area" will be reduced. In other words, for mining operating projects, it will be easier to proceed directly to the producing stage thanks to the determination of proved reserve in the whole field before the operating license application (Yıldız, 2021c; 2022a). In spite of this, there are the responsibility of the competent authorities in the authorization process in order to ensure that the phase after the application for an operating license does not harm the mining sector. In this direction, there is a need for an administrative structure that ensures that the operating license can be issued technically with the operation permit

in the near time. At this point; operating projects also play a key role. As shown in the study; operating projects also have a function in preventing the environmental impacts of mining from occurring. Whether or not subject to EIA, environmental compliance plans prepared in mining operations projects, although not as comprehensive as EIA, continue to function. Considering these and similar issues, in case the operational projects defined by the legislation can be prepared/controlled more qualified by the YTKs, with the other necessary amendments to regarding the administration, it may be possible to contribute to obtaining the operating permit in a few months after the acquisition of the operating license. Thus; the process of transition from operating license to operation permit will be accelerated. Better quality preparation of operating projects; will not only allow mining investors to dominate the issues specified in the operating projects together with the YTKs, but may also prevent the loss of time during the permit process, the giving of administrative fines to mining enterprises, or the cancellation of the license.

#### REFERENCES

Bayırlı, R. (2011). Açık ocak maden işletmeciliğinde üretim öncesi dönem muhasebe ve finansal raporlama uygulamaları (TFRS 6: Maden Kaynaklarının Araştırılması ve Değerlendirilmesi Standardı Çerçevesinde). (Pre-production accounting and financial reporting practices in open-pit mining (In the Framework of TFRS 6: Mineral Resources Research and Evaluation Standard)). Gazi Bookstore, ISBN: 9786054562237, Ankara.

Bumin, M. & Kutluay, N. (2013). Maden Kaynak ve Rezerv Sınıflandırması (Mineral resource and reserve classification). *Mineral Exploration And Exploration Institute*, Special series No. 29, Ankara.

CBRT, (2019). Gösterge niteliğindeki Merkez Bankası kurları (Indicative exchange rates & Central Bank rates by date). Türkiye Cumhuriyet Merkez Bankası (Central Bank of the Republic of Turkey) (CBRT), [https://www.tcmb.gov.tr/kurlar/kurlar\\_en.html](https://www.tcmb.gov.tr/kurlar/kurlar_en.html), (Accessed Date: May 06, 2019).

Çanga, H.E. (2005). 5177 Sayılı Açıklamalı Maden Kanunu ve Yönetmelikleri (5177 Annotated mining law and regulations). *Country Mining Development Foundation*, first edition.

Çevikçelik, M. (2017). Türk idare hukukunda maden işletme ve rödivans sözleşmeleri (Mining operating and royalty contracts in Turkish administrative law). Seçkin Publications, first edition, ISBN: 9789750245862, Ankara.

Çitil, B. (2018). Tüm yönleriyle maden hukuku (Cumhurbaşkanlığı Sistemi KHK ve Kararnameleri Işığında). (Mining law in all aspects (In light of presidential system, delegated legislation and decree)). Seçkin Publications, ISBN: 978-9750250095, first edition, Ankara.

Dengiz, N.T. (2008). *Effects of new mining law on mining sector*. (master's thesis). Süleyman Demirel University, School of Natural and Applied Sciences, Isparta.

Ersoy, A., Yünsel, T.Y. (2008). Maden rezerv hesapları & Klasik ve jeostatistik yöntemler (Mining reserve calculations: Classic and geostatistical methods). Nobel Bookstore, first edition, Adana, ISSN: 9786053970019.

Fındıkgil, Y. (1966). Maden hukuku (Mining law). *Istanbul Technical University*.

Göğer, E. (1979). Maden hukuku (Mining law). *Ankara University Faculty of Law Publications*, No: 441, Ankara.

Gülan, A. (2008). Maden idare hukukumuzun ana ilkeleri ve temel müesseseleri- mevzuat ve yargı kararları ışığında eleştirel bir yaklaşım denemesi (Main principles and basic works of mining administrative law - a critical approach by utilizing legislative and judicial decisions). ISBN 978-9944-469-17-3, Istanbul.

Günay, Ö. (2015). Maden hukukunda temel kavramlar (Fundamentals of mining law). *Mining Law Proceedings Book* (3-4 October), ISBN: 9786058365766, Astana Publications, Afyon, Turkey, pp.69-80.

Günay, Ö., 2015. Maden hukukunda temel kavramlar. Maden Hukuku Bildiriler Kitabı (3-4 Ekim 2015), Astana Yayınları, Afyon, s.69-80.

Günay, Ö. (2016). Maden hukuku kavramlar – ilkeler – tanımlar (Mining law concepts - principles – definitions). Seçkin Publishing, ISBN 978-975-02-4274-8, first edition, Ankara, Turkey.

Kahriman, A. (1993). Maden işletme projeleri hazırlama ve değerlendirme (Preparation and evaluation of mining projects). Cumhuriyet University, Sivas.

Kayadelen, M. (2009). Mining, problems, and suggestions for public interest.

[http://kayadelen.gen.tr/index.php?option=com\\_content&view=article&id=36:kamu-yarar-acsndan-madenciliimiz&catid=6:madencilik&Itemid=11](http://kayadelen.gen.tr/index.php?option=com_content&view=article&id=36:kamu-yarar-acsndan-madenciliimiz&catid=6:madencilik&Itemid=11) (Accessed: June 18, 2019)

Kayserili, Y., Topaloğlu, M. (1990). Türk maden hukuku ve yeraltı zenginlikleri mevzuatı (Turkish mining law and underground wealth legislation). Kazancı law publications no:75, ISBN: 978-975-37-6005-8, Istanbul.

Konukman, A., Kayadelen, M. & Turkyılmaz, O. (2016). Enerjide Toplum Yararı (Community benefit in energy). *TMMOB 10<sup>th</sup> Energy Symposium (December 3-5, 2015). Social Benefits and Publicity in Energy "Proceedings*. ISBN: 978-605-01-0868-2, Samsun-Sinop, 57-95.

Koza, (2013). Karıncadag mining enterprise IV<sup>th</sup> group minerals (copper, lead, zinc, silver) final EIA report. Koza Gold Operations Inc.

Kurt, H. (2020). Türk Hukukunda Maden Ruhsatı ve Sicili (Mining License and Registry in Turkish law). Yetkin Publications, ISBN 978-605-05-0625-9, first edition, Ankara.

Özel, M. (2006). *Investment product, analyzing and management of the mining sector*. (Master's thesis). Dokuz Eylül University, Institute of Science, Izmir.

Tamzok, N. (2008). Madencilik politikası ve maden hukuku (Bölüm 1) (Mining policy and mining law (Part 1)). Maden Mühendisliği Açık Ocak İşletmeciliği El Kitabı (For mining engineering open-pit operation handbook) (ISBN: 9789753959803). *Chamber of Mining Engineers*, (3-41). 2<sup>nd</sup> publication, Ankara.

Telli, S. (1989). İdare hukuku ve Uluslararası Hukuk Açısından Madenler (Mines in terms of administrative law and international law). Ankara.

Topaloğlu, M. (2011a). Maden Hukuku 5995 sayılı Kanunla Değişik Maden Kanunu ve İlgili Mevzuat (Mining law amended by Law No. 5995, and related legislation). ISBN: 6054454056, 1<sup>st</sup> edition, Adana.

Topaloğlu, M. (2011b). Maden ruhsatlarının güvenilirliği ruhsat güvencesi (Reliability of mining licenses: License assurance). *Turkish Miners Association (TMD), Sector News Bulletin*, 38, 44-45.

Topaloğlu, M. (2016). 3213 sayılı Maden Kanunu ve İlgili Yönetmelikler (Çeviri) (Mining law no. 3213 and related regulations (translation). *Istanbul Mineral Exporters Association*).

Topaloğlu, M. (2017). License assurance and changes in mining legislation (presentation). Available via: <<http://tmder.org.tr/uploads/pdf/ruhsat.pdf>>

Topaloğlu, M. (2019a). Maden hukukunda güncel sorunlar ve değerlendirmeler (Current problems and evaluations in mining law). *Country Mining Development Foundation Training Seminar*, 28-29 January 2019 (Presentation).

Topaloğlu, M. (2019b). Yeni maden kanunu nasıl olmalıdır? (How should the new mining law be?) *Turkish Mining Development Foundation Sector Mining Journal*, 73, 44-47.

Turhan, M. (2014). Madencilikte önemli bazı ülkelerde maden hukuku ile ilgili mevzuat (Legislation on mining law in some important countries in mining). *TMD*, Istanbul.

TÜMMER, (2010). TÜMMER (Turkey Marble Natural Stone and Machinery Manufacturers Association) council tax report.

TÜMMER, (2017). Mining operations permission processes (presentation).



Utkan, M. (2011). Madencilik sektöründe proje şirketlerinin kurulmasının önemi (Importance of establishing project companies in mining sector). *Country Mining Development Foundation, Mining Turkey Magazine*, 39, 50-51.

Yeşilyurt, C. (2009). Ruhsat ve İzin (License and permission). *Mining Turkey Magazine*, 1, 30-31.

Yeşilyurt, C. (2013a). Maden Yasasında Alınması Zorunlu İzinler (Compulsory permits in mining law). *Mining Turkey Magazine*, 28, 96-98.

Yeşilyurt, C. (2013b). İşletme Dönemi İşlemleri I (Property transactions period (I)). *Mining Turkey Magazine*, 33, 94-98.

Yeşilyurt, C. (2013c). İşletme Dönemi İşlemleri II (Operating period activities (II)). *Mining Turkey Magazine*, 34, 102-106.

Yeşilyurt, C. (2020). İzinler konusunda bazı ayrıntılar (Some details on permissions). *Mining Turkey Magazine*, 86, 112-114.

Yıldız, N. (2008). Operating license and operating license areas. Unpublished.

Yıldız, N. (2017). Madencilik sektörünün sorun ve çözüm önerileri (Mining sector problems and solution suggestions). *Mining Turkey Magazine*, 61, 84-90.

Yıldız, T.D. (2012). *3213 Sayılı Maden kanunu öncesinde ve sonrasında Türkiye’de maden mevzuatında yapılan değişikliklerin incelenmesi (Analysis of changes being done of the mine legislation of Turkey before and after the mining law no. 3212)*. (Master’s thesis). Istanbul Technical University, Institute of Science, Istanbul.

Yıldız, T.D. (2013a). The ownership of regime of mines in the evolution of Turkish mining legislation. *23<sup>rd</sup> International Mining Congress and Exhibition*, 16-19 April, Antalya, 1959-1980.

Yıldız, T.D. (2013b). Analysis of the changes in mining exploration activities before and after mining law no. 3213. *23<sup>rd</sup> International Mining Congress and Exhibition*, 16-19 April, Antalya, 1981-1994.

Yıldız, T.D. (2019). The share of required costs in investment amounts for mining operating activities in pasture lands in Turkey. *Journal of Engineering Science of Adıyaman University*, 6 (10), 23-31.

Yıldız, T.D. (2020a). Forest costs paid by enterprises during investment period to carry out mining operations in forestlands. *Journal of Engineering Science of Adıyaman University*, 7 (12), 24-33.

Yıldız, T.D. (2020b). Recommendations for authorized administration organization in the mining operation permit process in Turkey. *Trakya University Journal of Social Science*, 22 (1), 117-143. DOI: 10.26468/trakyasobed.533814

Yıldız, T.D. (2020c). Evaluation of forestland use in mining operation activities in Turkey in terms of sustainable natural resources. *Land Use Policy*, 96, 104638. DOI: 10.1016/j.landusepol.2020.104638

Yıldız, T.D. (2020d). The impacts of EIA procedure on the mining sector in the permit process of mining operating activities & Turkey analysis. *Resources Policy*, 67, 101681. DOI: 10.1016/j.resourpol.2020.101681

Yıldız, T.D. (2020e). Effects of the private land acquisition process and costs on mining enterprises before mining operation activities in Turkey. *Land Use Policy*, 97, 104784. DOI: 10.1016/j.landusepol.2020.104784

Yıldız, T.D. (2020f). Forest fees paid to permit mining extractive operations on Turkey's forestlands & The ratio to investments. *Gospodarka Surowcami Mineralnymi: Mineral Resources Management*, 36 (3), 29-58. DOI: 10.24425/gsm.2020.133935

Yıldız, T.D. (2020g). Waste management costs (WMC) of mining companies in Turkey: Can waste recovery help meeting these costs? *Resources Policy*, 68, 101706. DOI: 10.1016/j.resourpol.2020.101706

Yıldız, T.D. (2020h). İşletme izin sürecinin madencilik sektörüne etkileri (Effects of operation permission processes on the mining sector). *IKSAD Publishing House*, first edition, ISBN: 978-625-7897-95-2, 394 p.

Yıldız, T.D. (2020i). Madencilik sektörünün acil olarak çözülmesi gereken sorunları (Problems of the mining sector that need to be solved urgently). *10<sup>th</sup> International Science And Technology Conference (ISTEC 2020)*, (September 3-4, 2020), Nicosia, Turkish Republic of Northern Cyprus. pp.96-97.

Yıldız, T.D. (2020j). İşyeri açma ve çalışma ruhsatının (GSM) mevzuat ve madencilik sektörü açısından değerlendirilmesi: GSM ruhsatı ÇED kapsamına alınabilir mi? (Evaluation of business license and work permit (GSM) in terms of legislation and mining sector: Can GSM license be included in the scope of EIA?) *Journal of Cukurova University Faculty of Economics and Administrative Sciences*, 24 (2), 145-169.

Yıldız, T.D. (2021a). Possible effects of mining zone regulation on mining companies in Turkey & Evaluation of mining companies. *Resources Policy*, 71, 102011. DOI: 10.1016/j.resourpol.2021.102011

Yıldız, T.D. (2021b). How can the effects of EIA procedures and legislation foreseen for the mining operation activities to mining change positively in Turkey? *Resources Policy*, 72, 102018. DOI: 10.1016/j.resourpol.2021.102018

Yıldız, T.D. (2021c). Overlapping of mine sites and highway route in Turkey: Evaluation in terms of mining land use criteria and land use planning. *Land Use Policy*, 106, 105444. DOI: 10.1016/j.landusepol.2021.105444

Yıldız, T.D. (2021d). Overlapping of natural stone mining field with high-speed train project in Turkey: Was the economic public benefit evaluation made sufficiently? *Resources Policy*, 74, 102241. DOI: 10.1016/j.resourpol.2021.102241

Yıldız, T.D. (2022a). Are the compensations given to mining enterprises due to the overlapping with other investments in Turkey enough? Expectations of compensation for profit deprivation. *Resources Policy*, 75, 102507. DOI: 10.1016/j.resourpol.2021.102507

Yıldız, T.D. (2022b). How can be state rights be calculated by considering a high share of state right in mining operating costs in Turkey? *Resources Policy*, 75, 102509. DOI: 10.1016/j.resourpol.2021.102509

Yıldız, T.D. (2022c). Considering the recent increase in license fees in Turkey, how can the negative effect of the fees on the mining operating costs be reduced? *Resources Policy*, 77, 102660. <https://doi.org/10.1016/j.resourpol.2022.102660>

Yıldız, T.D., Güner, M.O. & Kural, O. (2017). The effects of the mineral waste regulation in Turkey on the mining sector. *25<sup>th</sup> International Mining Congress and Exhibition*, April 11-14, Antalya, Turkey, pp.457-472.

Yıldız, T.D. & Kural, O. (2019). Costs to be required in the conflict of mining operation activities and private property land of state's treasury & evaluation of legislation. *International Congress of Academic Research*, 16-18 September, Conference Abstracts, Bolu, Turkey, pp.201-202.

Yıldız, T.D. & Kural, O. (2020). The effects of the mining operation activities permit process on the mining sector in Turkey. *Resources Policy*, 69, 101868. DOI: 10.1016/j.resourpol.2020.101868

Yıldız, T.D., Kural, O. & Çatan, B.E. (2019a). Permission process for perform mining operation activities in pasture areas. *International 30<sup>rd</sup> August Scientific Research Symposium* (August 28-31), Full Text Book of Applied Sciences, Iksad Publications, Izmir, Turkey, pp.272-280.

Yıldız, T.D., Kural, O. & Aslan, Z. (2019b). Problems and solutions in relation to permits required to be perform mining operation activities in forest lands in Turkey. *1<sup>st</sup> International Şişli Science Congress*, 24-25 October, Istanbul, pp.159-160.

Yıldız, T.D., Kural, O. & Aslan, Z. (2020). Problems and solutions in relation to permits required to be perform mining operation activities in forest lands in Turkey. *Academic Studies in the Field of Science and Mathematics* (ISBN: 978-625-7912-04-4), Gece Bookstore Publishing, Chapter 2, Istanbul, pp.23-46.

Yıldız, T.D., Kural, O. & Aslan, Z. (2021). To what extent is it possible to conduct mining activities in agricultural areas and especially olive groves: Solution

expectations of enterprises. *The International Journal of Economic and Social Research*, 17 (1), 183-208.

Yıldız, T.D., Samsunlu, A. & Kural, O. (2016). Urban development and mining in Istanbul – Ağacli coal field and its rehabilitation. *International Symposium on Environmental Issues and Waste Management In Energy and Mineral Production (SWEMP 2016)*, 5-7 October, Istanbul, 29, 1-11.

Yıldız, T.D., Topaloğlu, M. (2021). Bringing mining rights as capitals to the trading companies from the perspective of valuations of licenses. *Dokuz Eylul University The Journal of Graduate School of Social Sciences*, 23 (3), 1123-1149. DOI: 10.16953/deusosbil.729746