



Legal considerations for urban underground space development in Malaysia

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Abstract

In 2008, the Malaysia land code, named the National Land Code 1965 (NLC 1965), was amended to add Part Five (A) to deal with the disposal of underground space. In addition, the Circular of the Director General of Lands and Mines No. 1/2008 was issued to assist the application of Part Five (A) of the NLC 1965. However, the legislation is still questionable and has instigated many arguments among numerous actors. Therefore, this research was undertaken to examine legal considerations for the development of underground space. The focus is on four legal considerations, namely underground space ownership, the bundle of rights, depth, and underground space utilization. Rooted in qualitative methods, interviews were conducted with respondents involved in the development of underground space in Malaysia. The obtained data were then analyzed descriptively. The findings differentiated the rights of landowners for surface land and underground space, and their liability for damages and the depth. It was indicated that the current legislation in Malaysia, namely Part Five (A) of the NLC 1965 and the Circular of the Director General of Lands and Mines No. 1/2008, is adequate to facilitate the development of underground space in terms of legal considerations. However, to further facilitate the development of underground land in the future, based on the research, four enhancements are recommended for legal considerations pertaining to the development of underground space in Malaysia.

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Introduction

The underground solution provides a better option for development. A well-planned subway system, road tunnel, underground parking, and underground cultural facilities enable more efficient use of the area above ground. This maximizes prospects to intensify land use where accessibility is at a premium and for development gain. These potential benefits depend on realizing effective planning in practice (ITA Working Group., 2012).

By going underground, land resources can be optimized and land utilization maximized. Underground space development has a positive impact when related to underground or surface development. It is important to examine the current need for underground space development and whether the development of infrastructure and utility or commercial development will benefit the economy. In Malaysia, the current underground space development pattern is more oriented towards infrastructure and public benefit; however, commercial development can possibly take place in the near future.

Various influencing factors complicate the development of underground space, especially in terms of ensuring sustainability. Before planning and development starts,

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whether in the pre-development, development, or post-development phase, various considerations influence the decisions made in terms of developing underground space. Important aspects that require extra deliberation include geological, engineering, safety and psychological, legal and administrative, as well as economic considerations (Golany & Ojima, 1996; Dobinson & Bowen, 1997; Goel, Singh, & Zhao, 2012; Vähäaho, 2014).

Of the abovementioned considerations, this paper focuses on legal considerations. Barker (1991) agrees on the importance of reviewing legal considerations to identify problems and solutions regarding the integrated planning of underground space, speculation, environmental protection, and construction liabilities. This ensures that the development of underground space does not create problems in the future alongside the influence of other aspects. The restrictions imposed by legal considerations are one obstacle in developing and using underground space (Barker, 1991; Sterling, 2012; Xu & Zhu, 2013). Obstacles to development include ambiguity in the regulations, the unclear implementation of legislation, and uncertainty in matters relating to the ownership of and rights to land including mineral and natural resources (Sterling, 1996). Generally, the framework for surface land development is available and clear, but this is not the case for underground space. Therefore, it is important to review and revise the legislations and regulations concerning underground space development. Thus, in this paper, the legal considerations for the development of underground space were examined to address the needs of underground space utilization in the future.

Legal considerations for underground space development

Any development of land on the surface or underground must comply with the relevant rules, regulations, and legislations. For land development, the main legislation in Malaysia is the National Land Code 1965 (NLC, 1965). For strata development, the Strata Title Act 1985 applies. Furthermore, the main laws governing the development of underground space are the NLC 1965 and Circular of the Director General of Lands and Mines No. 1/2008. In 2000, Part Five (A) regarding the disposal of underground space was added to the NLC 1965. In 2008, the Circular was gazette to assist in applications to develop underground space, as mentioned in Part Five (A). Both the legislation and Circular must work together to ease the process of underground space development, especially by clarifying legal considerations.

Since the development of underground space comes later in urban planning, legal considerations must be integrated with that of the surface space (Barker, 1991). A suitable legal framework is needed to ensure that the

underground space is systematically developed, because once excavated it cannot be restored (Golany & Ojima, 1996). In addition, legal considerations affecting the underground space must first be established. Since the landowner is the main actor in land development, we must study land ownership and the land rights pertaining to the underground space. It is hoped that these issues will not become more complicated in terms of the future development of underground space.

As the primary concern here is the legal considerations for the development of underground space, key elements of the legal and administrative aspects must be identified. Even though no single legislation for underground space development fits all countries (Donnelly, 2012), the key elements are similar. In this research, four key elements of legal considerations for the development of underground space were identified, namely underground space ownership, the bundle of rights, depth, and underground space utilization.

Underground space ownership

In Malaysia, the State List in the Federal Constitution positions land under the jurisdiction of State Authority. According to Section 'Enhancing the policy for underground space development' of the NLC, the State Authority is the Ruler or Governor of the State; thus, all land in the State belongs to the State Authority. However, the land becomes private when it is transferred to whoever applies for the title. The power for land disposal in Malaysia is completely controlled by the State Authority. Under Section 40 of the NLC 1965, all properties at or in the State, including the minerals and rocks not yet disposed, are bound by the rights and power of the State Authority. Furthermore, Section 42 (1) of the NLC 1965 states that the State Authority has the power to dispose of the land through alienation to eligible applicants under Section 43, NLC 1965. After approval, the State Authority issues a qualified title to the landowner where details of the area and boundaries of the land have not yet been endorsed. Only after the land has been surveyed is the qualified title changed to the final title. In the final title, the boundaries of the alienated land are clearly stated in terms of width and length.

Nowadays, the trend in urban areas is considering underground space as an option for development. Usually, the surface boundaries of all alienated land are clearly determined, although this is not the case for underground space. The State Authority does not directly extend land ownership to include the utilization of underground space by the landowner, as this space is not included in the title document. This condition creates an obstacle when the

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