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Three-dimensional (3D) property – outline of the concept of zoning in Polish civil law

Abstract

The analysis deals with different legal institutions existing in various legal systems under the name of “three-dimensional property” (3D property). It also covers the existing proposals for regulating this institution which is currently unknown to Polish civil law. Being an exception to the rule of *superficies solo cedit*, the so-called “strata ownership” would require significant changes to the regulations governing the subject of ownership and other rights in rem, as well as the adjustment of the relations between the owner of “space” and objects within it and the owner of the land. In this regard, possible constructions were presented, recalling the innovative and original solutions that were proposed in codification works in the 1930s.

**Keywords:** Real estate, 3D Property, transfer of development rights, three-dimensional property, space rights, air rights, ownership, building rights

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1. The concept of ownership of self-contained objects

For several decades, attempts have been made in various legal systems to regulate by means of legal norms so-called 3D property, including the possibility of separating so-called spatial plots as an independent object of the right of ownership. This idea, leading to the limitation of the *superficies solo cedit* principle, has recently found its adherents in Poland as well. From time to time, ideas for legal regulations resurface that might lead to dividing space above ground by allowing those interested in its economic utilisation to isolate part of that space as the object of a separate right of ownership.

A similar idea in the form of so-called strata ownership has recently appeared in the “Polish Deal” document published in 2021 by the ruling coalition. The document mentions the existence of unused space, especially in large cities, including areas over railway lines, for which “current legal regulations preclude (...) the sale of space above tracks, which prevents their use for the purposes of urban development and deprives PKP S.A. from an opportunity to earn income.” The specifics of potential legal solutions called “strata ownership” are not given. The document does, however, stress that if appropriate regulations are introduced, the investment-making process in many cities will be simplified because of, among others, opportunities for easier financing.\(^2\)

The 3D property concept, sometimes related in literature to, among others, the institution of ownership of residential premises, remains closely linked to the establishment of a new object to this property right, which, following Mirosław Gdesz, can be defined as “that part of space which is not land.”\(^3\) Abandoning the Roman principle of *superficies solo cedit* supposedly consists in allowing, to a smaller or larger extent, to sever the future of anything build upon a piece of land from the legal status of the land itself. It is not obvious, however, whether and to what extent 3D (strata) ownership is supposed to refer solely to objects found above ground and possibly the space in which they are located, or also to fixtures (whether located on or below ground). In the latter case, this means objects that under specific regulations would no longer be considered constituent parts of land.

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\(^2\) „Polski Ład”, 2021, p. 60.

\(^3\) M. Gdesz, *O odrębnej własności obiektów budowlanych*, „Przegląd Sądowy” 2009, nr 9, s. 90.
Most generally, the new concept of property usually assumes the existence of constructions (buildings, structures and other facilities) not attached to the ownership of land. This means that these constructions do not form part of the land and do not contribute to it as a whole, but are instead separate, self-contained objects of property rights. Consequently, it is necessary to set up a legal framework in which separate ownership can be assigned not only to residential premises (which has long been possible in many legal systems), but also other material objects situated in the space of above ground, regardless of whether and in what manner they are physically attached to that ground.

The legal concept of the institution described here seems to require not only to allow the existence of separate ownership of different existing constructions (structures or facilities located below or erected on or above ground), but also to separate a certain portion of space in the legal (objective) sense regardless of whether the establishment of three-dimensional property thus understood is paralleled by the existence of the very facility that is to form a self-contained thing in the legal sense. Hence, legal analyses of these issues often use the term “spatial plot” or “strata ownership”. The prevailing view in literature is, however, that the so-called independent three-dimensional ownership is arranged similarly to traditional (two-dimensional) ownership, with the sole addition of “horizontal division.” Nevertheless, the view presented above seems to assume that ownership can relate not only to material property in the form of a “thing”, but also to “space,” which is intangible and, at least in systems based on German law, does not meet the essential elements of a “thing” (cf. Article 45 of the Civil Code). Previously existing solutions were based on the assumption, noted by Wit Klonowiecki, that “air by its very nature cannot be the object of property rights, other civil rights, or public law.” The same seems to apply to space as a gas-filled place above ground, which at least in the current legal environment may to a limited extent be owned by the owner of the land, but is not a separate subject of ownership. This is supported by Article 143, first sentence of the Civil Code, according to which the ownership of land is extended to space above and below ground within limits defined by the social and economic purpose of the land.

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5 W. Klonowiecki, Charakter prawny przestrzeni powietrznej, „Roczniki Nauk Społecznych – Prawo-Ekonomia- -Socjologia” 1949, s. 98.
In literature, the concept analysed above is known under various names, especially spatial ownership, three-dimensional property, virtual spatial plot, or air plot. The concept of three-dimensional property right is sometimes offered as a model. However, legal theory and especially various legislative systems are hardly able to offer a uniform solution. In particular, normative constructs existing in various states are varied. One of the ancient examples cited as real estate “detached from land” is the zoning at the Ponte Vecchio bridge in Florence. In contemporary times, the so-called three-dimensional property in its different varieties, taking into account certain specific regulations applicable to residential premises, is known to Swedish (3D-fastighet), Finnish (3D-ominaisuus), Norwegian (en selvstendig anleggseiendom, lit. independent building property), Singaporean, Australian and Canadian legislation. It is also called “independent 3D property,” further subdivided into air-space parcels and 3D construction property. The former is a certain separate volume of space which forms an immovable object independent from land in the legal sense, and the latter a building or other facility. The concept described here also includes the so-called strata title system known to Australian legislation in New Southern Wales and Victoria (Victoria Subdivision Act 1988). In the United States, an often utilised method is the transfer of development rights (TDR). A sui generis right to space is primarily a case law concept. For example in Macht vs Department of Assessments of Baltimore (1972), the Court of Appeals of Maryland

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6 D. Felcenloben, Pojęcie działki powietrznej jako obiektu przestrzennego umożliwiającego rejestrację trójwymiarowych praw do nieruchomości – kataster 3d, „Świat Nieruchomości” 2013, nr 84, s. 5.
7 D. Felcenloben, Czasowo-przestrzenne obiekty ewidencyjne w wielowymiarowym katastrze nieruchomości – perspektywa zmian istniejącego modelu, „Acta Scientiarum Polonorum. Geodesia et Descriptio Terrarum” 2013, nr 12, s. 7.
8 J. Paulsson, Swedish 3D Property in an International Comparison, s. 25.
9 Ibidem, s. 24.
10 M. Gdesz, op.cit., s. 84.
12 Laki 561/2018 kiinteistömuodostamislain muuttamisesta.
14 J. Paulsson, op.cit., s. 25, 26.
15 Ibidem, s. 25.
17 D. Felcenloben, Czasowo-przestrzenne obiekty..., s. 7; D. Felcenloben, Pojęcie działki powietrznej..., s. 6; J.M. Pedowitz, Transfers of Air Rights and Development Rights, „Real Property, Probate and Trust Journal” 1974, vol. 9, no. 2, s. 196.
found that the airspace superjacent to a building may be considered a leasable separate legal object. On the other hand, development of space was permitted by the US Supreme Court in the landmark *Penn Central Transp. Co. v New York City* decision (1978)\(^{19}\). An “air plot” is covered by a disposable subjective air right and may form a piece of real estate which is separate from the ground. As such, it can both be the object of subjective (property) rights and be divided into strata (both horizontally and vertically, above and below ground)\(^{20}\). In mutual relationships, it is permitted to encumber a piece of real estate in favour of another with a suitable easement. Strata ownership has also been permitted by

Canadian courts\(^{21}\), while the institution of “air space parcel” (French: “parcell d’espace aérien”) is also regulated in the legislation of various Canadian provinces (e.g. *Land Title Act* 1996 of British Columbia, Part 9, Ch. 250, *Air Space Act* 1982 of New Brunswick and also in Yukon, for example).

In Sweden, an analogous solution has been adopted in the 2004 Code of Land Laws (*Jordabalk*). The person entitled to “air” real estate should have a secure legal title allowing access to such estate\(^{22}\).

The essential that legal solutions now existing in various countries have in common is the possibility of demarcating real estate in the legal sense not only along horizontal (ground), but also vertical boundaries. Thus understood, the concept of three-dimensional property involves the institution of separate ownership of residential premises mentioned above (*apartment ownership, condominium* or the German *Wohnungseigentum*) and the construct of surface rights related to the separate ownership of buildings, including perpetual usufruct or development right\(^{23}\). These concepts are not, however, considered as “surface” or “three-dimensional” ownership properly strictly understood.

To summarise, in a general theoretical view the solution known as spatial property or 3D property means that the limits of the institution are defined by the vertical boundaries of space. A thing constituting a separate object of “vertical” ownership should form something that is structurally and functionally separate from other parts of space in which it exists or could exist. As a rule, a constituent part of

\(^{19}\) 438 U. S. 104 (1978).

\(^{20}\) D. Felcenloben, *Czasowo-przestrzenne obiekty...*, s. 7, 8; D. Felcenloben, *Pojęcie działki powietrznej...*, s. 6.


\(^{22}\) D. Felcenloben, *Czasowo-przestrzenne obiekty...*, s. 8.

\(^{23}\) Na temat kategorii praw powierzchniowych zob. bliżej K. Zaradkiewicz, *Podstawowe założenia dotyczące propozycji regulacji prawa zabudowy* (Materiał dyskusyjny przygotowany dla Komisji Kodyfikacyjnej Prawa Cywilnego), „Przegląd Legislacyjny” 2006, nr 2, s. 53 i n.
real estate or a thing which is closely attached functionally and structurally to another piece of real estate cannot be the object of surface property.

2. Motives and concepts of the new solution

Without deciding the possible shape of the potential legislative solution of the so-called three-dimensional property, this concept must not be rejected a limine. Yet, whether and to what extent it could become a useful solution in real estate transactions depends on the legal framework which should on one hand take into account legal constructs and institutions traditionally developed in legislative systems prevailing in Polish lands for more than two hundred years and on the other eliminate, if possible, any defective solutions which would also prevent the proposed concept from becoming reality.

The modification of property law institutions, including real estate ownership, by introducing the category of so-called three-dimensional (strata) property, is supposedly justified by the need for optimum use of space to carry out various necessary investments\(^\text{24}\). The solution is meant to allow the construction and operation of tunnels, bridges, multi-level communication routes and other similar facilities without attaching them to land as its constituent parts\(^\text{25}\). The “Assumptions for the Separate Ownership of Construction Facilities Act” drafted by the Ministry of Infrastructure in 2020 noted that “a solution based on the ownership of a construction facility offers a growth for the real estate market, including increased construction works in city centres, which so far have been considered fully urbanised. Because the law only allowed conventional buildings, no further development could occur there for architectural reasons” (p. 10).

What prompts the quest for such solutions is in particular the fact that, as noted in literature, “former means of establishing limited property rights or obligation rights do not, due to their nature, ensure that an investor with no ownership title can use these rights to effectively secure a pending investment financially and also do not guarantee full rights to use the land during the construction stage itself and subsequent maintenance of these facilities.”\(^\text{26}\)

Another notable aspect is the relevance of introducing solutions that allow to exploit objects located underground and not economically connected to the land

\(^{24}\) D. Felcenloben, Czasowo-przestrzenne obiekty…, s. 7.

\(^{25}\) Ibidem.

\(^{26}\) D. Felcenloben, Czasowo-przestrzenne obiekty…, s. 7.
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above\textsuperscript{27}. Statutory changes are supposedly justified in particular that the current legal environment causes problems with carrying out various investments, for example the Warsaw subway and the Kraków city tunnel\textsuperscript{28}.

Mirosław Gdesz, as one of the first authors noting the reasonableness of changes consisting in restricting the superificies solo cedit principle, proposes to introduce a solution consisting of so-called ownership of construction facilities pursuant to provisions on real estate development\textsuperscript{29} (and as such within the framework of regulations that normalise the forms of utilising public land owned by the State Treasury and local government units) paired with a possible amendment of the Civil Code. According to the author, the provisions of the general part of the Civil Code that pertain to things should include a new norm, pursuant to which “buildings and other facilities erected above or below ground, in particular tunnels, overpasses, bridges, underground parking lots, overground parking lots, buildings and structures superjacent or subjacent to construction facilities, which are not economically attached to land and do not prevent the use of land real estate by its owner or perpetual usufructuary according to its purpose, may be separated as independent pieces of real estate.”\textsuperscript{30}

According to Gdesz’s concept, the purpose is to allow for separation of the ownership of construction facilities erected above or below ground\textsuperscript{31}. In turn, where the facility and land are physically connected, the author cited above believes it possible that a suitable praedial easement could be established in favour of the owner of the former, while separate ownership of the building could, as is the case now for residential premises, be established on the basis of an agreement, unilateral legal transaction, or court decision\textsuperscript{32}. Gdesz also suggests providing for the possibility of establishing separate ownership of buildings on land held in perpetual usufruct if consent is granted by the land's owner. This would mean that the legal connection would be severed not only between the ownership of building and of the land but also of the perpetual usufruct (the ownership of the building would then be a right independent of the perpetual usufruct)\textsuperscript{33}.

The introduction of the notion of spatial real estate (“three-dimensional spatial

\textsuperscript{27} M. Gdesz, \textit{op.cit.}, s. 83.
\textsuperscript{28} \textit{Ibidem}.
\textsuperscript{29} Ustawa z dnia 21 sierpnia 1997 r. o gospodarce nieruchomościami (t.j. Dz. U. 2021 poz. 1899).
\textsuperscript{30} M. Gdesz, \textit{op.cit.}, 86.
\textsuperscript{31} \textit{Ibidem}, s. 86–87.
\textsuperscript{32} \textit{Ibidem}, s. 87.
\textsuperscript{33} \textit{Ibidem}, s. 88.
plot”) with a separate ownership title in Polish law is also proposed by Dariusz Felcenloben\textsuperscript{34}. Like M. Gdesz, this author notes that it would be possible to adopt this solution with respect to facilities not located directly physically on the ground, provided that acquiring separate ownership would be subject to obtaining a suitable (building) permit and possibly a covenant to establish appropriate easements\textsuperscript{35}. In his opinion, Articles 140 and 143 of the Civil Code would then have to be changed by introducing statutory methods of demarcating spatial boundaries of property whose scope would be subject to disclosure in the real estate cadastre. The author notes the possible amendment of Article 46 of the Civil Code by defining a category of real estate with reference to the term “construction facility” or similar. Such a facility would not be subject to the consequences of being connected to land, and thus to the \textit{superficies solo cedit} principle (Article 47.2 of the Civil Code)\textsuperscript{36}. Other voices, however, are sceptical, pointing that the existing regulatory framework should be tampered with as little as possible and that already known institutions and instruments be made use of instead. One of the proposed alternatives is the use of perpetual usufruct. While aware of the disadvantages of this solution, Grzegorz Matusik stresses that it would be possible not only to make suitable adjustments to the institution, but also to replace it with development right, “and then the objectives that prompted introducing the Separate Ownership of Construction Facilities Act would be achieved.” He rightly notes that “there is no sufficient cause to advocate a new statute that would do nothing but obscure property law regulations and make legal transactions complex\textsuperscript{37}.”

3. \textbf{The relations of “vertical” neighbours}

The principle of \textit{superficies solo cedit}, known to European legislative systems since Roman times, is used to structure relationships between owners of land while taking into account the security of legal transactions. It is related to the simple assumption that the consequences of property law depend on the existence of a permanent physical connection with objects located above or below ground. Each object permanently attached to land becomes part of the land itself and, as a part of

\textsuperscript{34} D. Felcenloben, \textit{Czasowo-przestrzenne obiekty…}, s. 12–13.

\textsuperscript{35} \textit{Ibidem}, s. 13.

\textsuperscript{36} \textit{Ibidem}, s. 14.

\textsuperscript{37} G. Matusik, \textit{Instytucje prawne pozwalające na korzystanie z przestrzeni „nad” powierzchnią gruntu, [w:] E. Giszte (ed.), Gospodarowanie przestrzenią „nad” i „pod” gruntem. XX Krajowa Konferencja Rzeczoznawców Majątkowych, Katowice, 28–30 września 2011, Katowice 2011, s. 74.
the whole, is subject to the same rules governing ownership as the remainder. This solution has been adopted as a general principle in multiple legal systems, even though the concept of “constituent parts of a thing” in its contemporary meaning was not distinguished in law until the 18th century. Regardless of whether and to what extent persons other than the owner can use anything contained within the horizontal boundaries of land, the fate of the land, its constituent parts and the space in which it is located is each time, by virtue of the accession principle, decided by the owner of the land.

Today, a number of exceptions from said principle is allowed to varying extent. They usually involve waiving the application of the superficies solo cedit principle ith regard to a specific category of objects (the waiver can be determined based on the nature of the object) or introducing special registers that allow to identify an object which is physically attached to land but not a constituent part thereof (for example separate land registers for buildings or their parts). No European legislative system has, however, fully abandoned the principle of accession, although various systems introduced varied constructs of ownership with respect to self-contained parts of structures, even individual premises (cellars, German Kellerrecht, or rooms, German Gelasseigentum)\textsuperscript{38}. It turned out, however, that jurisdictions in which the drive to subdivide buildings and trade them in whole and in part regardless of the ownership of land was too intense usually introduced solutions to oppose these trends\textsuperscript{39}. In addition, the space above the ground itself was not excluded from the principle, which would lead to considerable confusion as to what measure of control the owner of the land itself exercises over it.

While introducing smaller or larger exceptions from the principle of superficies solo cedit, legislators were not satisfied with establishing norms recognising specific objects above or below ground as separate things in the legal sense. The need to normalise mutual relationships involving the use of space or things belonging to others, which can be restricted due to the physical and spatial connections between these objects, has always been recognised. Thus, each limitation of the accession principle involves connecting the ownership of a thing newly built on, under or above land with a share in the joint ownership of the land itself (for example in the case of ownership of residential premises) or with an appropriate right that permits limited


\textsuperscript{39} Tak prawodawca austriacki w ustawie z dnia 30 marca 1879 r. o dziale budynków podług udziałów materialnych (Dz. u. p. nr 50) w § 1 wskazał, iż „nie można nabyć udzielnego prawa własności do materialnych części budynku, które nie są tego rodzaju, iżby można uważać je za samoistne rzeczy fizyczne, jak np. do pojedynczych pięter lub lokali jednego i tego samego budynku i w tym celu nie można wyjednać wniesienia do księgi gruntowej”. 
utilisation of the land in order to allow the owner to make use of the thing (examples in Polish law include among others perpetual usufruct, development right, use of State Treasury land by agricultural cooperatives etc.) The rights to exploit objects below ground are in turn usually regulated by separate mining laws, or possibly other special legal constructs (subsurface rights). In all these cases of special deviations from the principle of *superficies solo cedit* it is necessary to determine relationships between “vertical” neighbours: the party that becomes the owner of the thing spatially (physically) related to land and the owner of the land.

Relationships between neighbours are framed on one hand by spatial boundaries, and on the other by the scope of ownership of real estate. *De lege lata*, the latter is defined “vertically” by the provisions of Article 143 of the Civil Code. If the idea of detaching the space above or below ground from the land itself and establishing a so-called virtual spatial (airspace) plot were to be followed, a suitable legal instrument would certainly be required to set up relations between the owner of the land and whomever such “plot”, and especially any material objects situated thereon, belonged to. In adopting appropriate regulations that allow separating the spatial boundaries of control over property above or below ground it is therefore not enough to determine whether a separate ownership of a “spatial plot” or the objects situated thereon is permissible.

### 4. *De lege ferenda* model – zoning proposal

#### 1) Assumptions for the model

The previously mentioned “Assumptions for the Separate Ownership of Construction Facilities Act,” drafted by the Ministry of Infrastructure in 2020, offered a possibility of establishing separate ownership of construction facilities, enumerating some of their kinds by way of example (construction facilities or installations superjacent or subjacent to public roads, railways and flowing waters, including buildings, structures, tunnels, overpasses, bridges, underground and aboveground parking areas). It was noted that the newly proposed form of ownership does not conflict with the draft of the Civil Law Codification Commission (...) pertaining to development rights. The statutes are not exclusive of each other, and their provisions address similar, albeit different areas.” (p. 14). The document did not, however, contain any specific proposals of normative regulations, nor hint at any solutions that would allow to structure the aforesaid relations between owners of the spatial object on one hand and owners of the land on the other.

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40 D. Felcenloben, *Czasowo-przestrzenne obiekty*…, s. 7.
Considering potential amendments to the provisions of the Civil Code with a view to the possibility of separating the ownership of land from the superjacent and subjacent sphere (space and objects found therein), one should first and foremost agree with the view that it would be necessary to change the scope of the notion of real estate, or even, more generally, of a thing. The concept of “three-dimensional property” cannot be realised in the current legal environment, primarily because of limitations resulting from the definition of a thing (Articles 45 and 46 of the Civil Code) and spatial boundaries of ownership (Article 143 of the Civil Code).

Admitting the possibility of detaching an object in the space above or below ground would require an amendment to Article 46 of the Civil Code by stating that real estate consists not only of land, buildings or parts thereof, but also other structures (facilities).

If separating a so-called “spatial plot” was recognised as admissible, it would also be necessary to extend the scope of notion of property objects by space above ground. Such a solution would, however, mean a departure from the current definition of a thing found in Article 45 of the Civil Code, according to which things can be tangible objects only. In addition, it would trigger the need to determine the relations between the ownership domains belonging to the owner of land and to the “owner” of the demarcated space, accounting for the fact that ownership of the space would considerably restrict the exclusive sphere of the owner of land defined by Article 143 of the Civil Code. Due to such far-reaching interference with the legal system and its consequences it would be necessary to justify the concept of “ownership of detached space” without redefining a thing as a self-contained object not attached economically to the ownership of land when there are no material objects in this space to justify the emergence of such independent control.

2) Zoning as real estate

In the light of the above considerations, it seems justified to recall a solution which should be considered not only as vital and worthy of consideration, but also a novelty against the backdrop of various legal systems. I mean here an institution called “zoning”, formulated as a proposed separate category of ownership in the preliminary draft of property law provisions submitted to the Codification Commission of the Republic of Poland by Fryderyk Zoll Jr.

In the draft, Zoll proposed to introduce in property law a category of real estate called "zoning", which was separate from land (“domain”). Despite the term used, the solution was not equivalent to “development right” as a limited property right, which
had then been known for decades in some European legal systems, nor to that development right which today means one of the rights of the owner used to carry out construction designs.

The solution proposed by Zoll was novel mostly because zoning was to consist of buildings both on and below ground, both existing and future. On their own, however, they did not constitute separate real estate, but a separate thing together with, importantly, the area “intended for their use.” The entire "zoning" thus understood could, according to the draft, be established as separate real estate by using a legal transaction to exclude land from its scope. As already noted, zoning in this sense was not a property right, but a separate immovable thing which comprised both a tangible object in the form of a “structure” and the space around it. This is how the spatial structure arising when the surface related to use of a structure is detached should be treated. In consequence, zoning as a thing in the legal sense could be a separate object of ownership and other property rights, comprising not the surface of land but surface understood as an abstract, separate component of zoning which turns it into real estate.

The definition proposed by Zoll was not put into practice due to criticisms of the Codification Commission. During works in the pre-war period, an alternative solution proposed by J. Wasiłkowski was adopted, namely temporary property, which was used for some time after the war and was ultimately replaced by perpetual usufruct.

The critics of Zoll's concept of zoning failed to recognise its universal nature and originality. Zoning as a type of real estate can encompass (but is not limited to) not only land, but also tangible objects that can be used for various economic purposes and are located not only on, but also above or below the ground owned by someone else. In such cases, without doubt, the establishment of zoning would require setting up a land and mortgage register, since it is treated as real estate in the legal sense, and regulating the relations between utilising the zoning on one hand and adjacent land on the other. As noted above, similarly to other exceptions from the superficies solo cedit principle, exercise of the right of ownership of a zoning could encroach upon the sphere of rights of the owner of land, and vice versa.

3) Praedial easement on the zoning

Introducing zoning as a new type of real estate in Polish legislation would not
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determine what legal title could be used by the owner to control the ground above or below which zoning was established. There can be no doubt that such control should be limited solely by the scope required to properly utilise the zoning itself. A suitable subjective right that would allow for land to be utilised in this manner should thus be established together with the zoning itself based on an agreement with the owner of land. In this case, it would not be appropriate to duplicate an incorrect approach adopted in case of perpetual usufruct, which erroneously equates this special institution of law of contracts and property law with the right of ownership, giving rise to numerous difficulties in legal transactions. In practice, in the current legal environment this solution leads to stripping the right of ownership of its substance, preventing any transactions therewith while the use lasts, and makes the latter a stand-in for ownership.

Considering the above, regulation of zoning as separate real estate would require to allow interested parties to establish a separate right whose content mirrored praedial easement. Such a solution was provided for in the draft of the Civil Law Codification Commission under the name of development right. It was supposed to replace the defective, hybrid institution of perpetual usufruct, and in practice to help achieve at least some of the objectives for which a solution named “strata property” or “three-dimensional property” could be used. The development right concept, mirroring similar solutions in use in many other countries, connected limited property right to land with separate ownership of buildings on or below ground. In contrast with the pre-war concept of zoning, such solution did not allow for separation of the ownership of objects located solely in the space above ground.

Although a detailed analysis of the concept proposed during the work of the Codification Commission falls beyond the scope of this article, it should be stressed here that adopting a solution based on Zoll’s proposal would essentially eliminate the relevance of regulating the development right in a comprehensive manner. At the same time, it seems justified to introduce some of the detailed solutions provided for in the Codification Commission’s draft and add them to provisions on praedial easements (applicable to easements on development). Some of the solutions provided for in the draft provisions concerning the development right, for example

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42 Zob. np. K. Zaradkiewicz, Podstawowe założenia..., s. 55 i n.; idem, Prawo zabudowy jako instytucja służąca zagospodarowaniu przestrzeni w ramach nieruchomości gruntowej, [w:] E. Giszter (red.), Gospodarowanie przestrzenią „nad” i „pod” gruntami. XX Krajowa Konferencja Rzeczoznanowców Majątkowych, Katowice, 28–30 września 2011 Katowice 2011, s. 80 i n.; idem, Prawo zabudowy w pracach Komisji Kodyfikacyjnej Prawa Cywilnego, [w:] A. Olejnizak i in. (red.), Współczesne problemy prawa zobowiązań, Warszawa 2015; A. Bieranowski, Prawo zabudowy i ciężary realne w pracach nad projektem kodeksu cywilnego – podstawowe założenia konstrukcyjne, „Rejent 2012”, nr 12, s. 15 i n.
those related to periodic fees, appear relevant also to the concept presented above. Thus supplemented, the provisions of the Code on praedial easements could become a sufficient method to structure relationships between the owners of land and owners of development. An easement could then be established as a right that allows each owner of the development to use the land encumbered with the easement (“servient estate”) to the appropriate and necessary extent.

The easement model allows to establish, to the appropriate extent, analogous rights for facilities or structures for the benefit of other parties. A single facility does not always require “appropriating” the entire space which could be utilised for other economic purposes in a suitable, narrower scope while using the same legal instruments. On the other hand, it appears inadmissible to divide the objects of development themselves so that their physical components, for example floors of a building (German: Stockwerkeigentum, Etageeigentum) belong to different authorised parties (according to the dominium pro diviso construct, see for example Article 1014 of the German Civil Code).

A similar model, treating the development right (French: droit de superficie, German: Baurecht) as a form of praedial easement was adopted in the 1907 Swiss Civil Code (Article 779 et seq. and Article 675: “ihr Bestand als Dienstbarkeit in das Grundbuch eingetragen ist”)\(^43\). Moreover, the 2003 amendment\(^44\) allowed for establishing an easement analogous to the development right for plants or plant-related facilities under Swiss law (Article 678, item 2 of the Swiss Civil Code, dem Baurecht entsprechende Dienstbarkeit für einzelne Pflanzen und Anlagen von Pflanzen) Such an easement may be established solely for a limited time of ten to one hundred years. Introducing such right without limitations would result in the undesirable consequence of permanently restricting the ability to use the ownership of land.

5. Summary

Potential introduction in property law of the construct of owner control over space which de lege lata is included in the ownership of land (Article 143 of the Civil Code) would primarily require the establishment of a new object of so-called “strata property”. It must be admitted that establishing the institution of ownership of a

\(^{43}\) Ponadto, zgodnie z art. 674 ust. 2 k.c.szwajc., prawo do nadbudowy można wpisać w księdze gruntowej jako służebność (“Das Recht auf den Überbau kann als Dienstbarkeit in das Grundbuch eingetragen werden”).

\(^{44}\) Amtliche Sammlung 2003, s. 4121.
“spatial plot,” which is artificial and unknown to Polish legal tradition, would not be appropriate. On the other hand, there can be no doubt that regardless of the objective (from the economic viewpoint) and subjective scope (i.e. if the relevance of restricting the institution to public lands is potentially recognised), it would be necessary to amend general provisions related to things. Such provisions would have to decide that real estate may consist not only of land, buildings and parts thereof (including premises), but also surface areas above or below ground (development) in cases provided for in statute, i.e. on the basis of provisions that regulate their separation. If such development is established, it could constitute a separate object of ownership, provided that an appropriate easement is established on land for the benefit of the development owner.

Any potential changes would require appropriate special norms not only in the Civil Code, but also in provisions regulating land and mortgage registers and real estate cadastre (land register). Gdesz is right in noting that "establishing separate ownership of construction facilities would entail the need to extend the register of buildings into the third dimension." A similar view is offered by Felcenloben. According to him, “a 3D cadastre should include not only the ability to register geometrical (x, y, z) data of three-dimensional objects, but also spatial and temporal rights established on someone else’s things.”

The analysed solution may give rise to doubts whose detailed analysis is beyond the scope of this paper. Some reservations can be formulated in particular with respect to the concept of ownership of objects that do not yet exist, namely the facilities (buildings, structures etc.) to be erected in the future in the space not included in the ownership of land. Until that time, the object of ownership would be a surface alone, which unlike land would be intangible until a suitable facility is installed, developed or erected thereon. As noted by Gdesz, “separate ownership of air space or underground space with no reference to a specific construction facility would be (...) problematic in the context of assessment of such right by banks and the potential establishment of a mortgage.” The author rightly adds that “in such case one would have to introduce a somewhat futurological division of space in terms of geodesy.”

45 M. Gdesz, op.cit., s. 89.
46 D. Felcenloben, Czasowo-przestrzenne obiekty, s. 14.
47 Ibidem, s. 15.
48 M. Gdesz, op.cit., s. 84. Autor wskazuje na możliwość zawierania umowy zobowiązującej do wyodrębnienia własności obiektu budowlanego, na mocy której przyszłemu właścicielowi takiego obiektu przysługiwałoby obligacyjne „prawo do zabudowy części powierzchni”. Zawarcie umowy byłoby natomiast możliwe wyłącznie pod warunkiem uzyskania swoistej czasowej promesy w postaci postanowienia właściwego organu administracji budowlanej o dopuszczalności wydzielenia obiektu – zob. Ibidem, s. 88–89; Propozycja ta zdaje się nawiązywać do koncepcji przyjętej na gruncie prawa szwedzkiego w 2009 r., zob. D. Felcenloben, Czasowo-przestrzenne obiekty..., s. 9.
It is worth noting, however, that such a solution would not materially deviate from the legal fiction adopted in Polish law which equates subjective rights with material objects (actually pieces of real estate, cf. Article 50 of the Civil Code). Resorting to separate development each time, even before the installation of specific facilities (buildings and structures), would have to involve establishing an appropriate easement on land, which as such would constitute an object treated as real estate (being its constituent part). Similar solutions with respect to the development right have been adopted and are functioning in German and Austrian law, among others. In both these jurisdictions, the limited property right is treated as real estate in the legal sense, which in particular allows to accurately apply provisions related to real estate (and not to ownership – a premeditated design). As such, the development right is treated as replacing land in the legal sense, with the buildings belonging to the developer becoming its constituent parts. According to Article 6 of the 1912 Austrian act, the right to erect buildings is equated with real estate, and the building with the appurtenance of that right\textsuperscript{49}. Similarly, under German law it was provided that regulations concerning land apply to the development right (German: Erdbaurecht, Article 1017 of the German Civil Code, Article 11.1 of the 1919 Development Right Act\textsuperscript{50}). According to the construct of development proposed in this paper, the existing and self-contained ground would essentially be the development surface (located in space) together with an appropriate easement which pursuant to Article 50 of the Civil Code forms a constituent part of the development as a whole.

The above solutions should serve as a point of departure for potential modifications which could make land ownership more flexible. They could allow to reconcile traditional institutions anchored in Polish civil law with the needs of economic practice.

\textsuperscript{49} Ustawa z dnia 26 kwietnia 1912 r. o prawie budowli (Dz. u. p. nr 86, s. 277).

\textsuperscript{50} Erdbaurechtsgesetz in der im Bundesgesetzblatt Teil III, Gliederungsnummer 403-6, veröffentlichten bereinigten Fassung, das zuletzt durch Artikel 4 Absatz 7 des Gesetzes vom 1. Oktober 2013 (BGBl. I S. 3719) geändert.
Three-dimensional (3D) property – outline of the concept of zoning

Bibliografia

Akty prawne:

Australia:

2. Strata Schemes (Freehold Development) Act 1973 (N.S.W.).

Austria:


Finlandia:

1. Laki 561/2018 kiinteistömuodostamislain muuttamisesta.

Kanada:

1. Land Title Act of British Columbia 1996.

Niemcy:


Polska:

1. Ustawa z dnia 23 kwietnia 1964 r. – Kodeks cywilny (Dz. U. 2020 poz. 1740 ze zm.).
Szwajcaria:

Szwecja:

Książki i artykuły naukowe:


