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Identification and analysis of parcel-based plan amendment types: The case of Istanbul

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ABSTRACT

Planning system in Turkey is a plan-led system typically driven by national policies through a hierarchy of plans and land-use decisions are implemented at the local level. However, high number of planning amendment reverses the hierarchy of a planning system and transfers the power to the last level. Therefore, the main aim of this article is to identify and analyze the parcel based plan amendments. The research method used to identify the types of the parcel based plan amendments is a systematic review of the municipal council reports in Istanbul as an explanatory case study and to analyze the timing, location, and spatial distributions of different types of the parcel based plan amendments. Based on the case study, six main parcel based plan amendment type is defined. By using this classification more than 2.900 proposals between the years 2014 and 2020 are analyzed and preliminary results of the types, the scope of the change, location, responsible municipality, and approval status of the parcel based plan amendments are given.

1. INTRODUCTION

Spatial planning is the set of governance practices for developing and implementing strategies, plans, policies and projects, and for regulating the location, timing and form of development (Healey 1997). It is important for delivering economic, social and environmental benefits via creating more stable and predictable conditions for investment and development, securing community benefits from development, and promoting a prudent use of land and natural resources for development (UNECE 2008).

Planning systems in the world are generally divided into two main systems, which are development-led discretionary systems and plan-led regulatory systems. The plan-led planning system is designed to lead the development of space in accordance with the decisions of the plan (Özkan and Türk 2016). These systems are generally known with their hierarchical structure and legally binding, certain, inflexible and rigid spatial plans.

An effective plan-led planning system should be able to implement land policies through efficient means of land use control. Therefore, a coordinated planning hierarchy should imply consistency of land-use planning policy objectives from the national to the local and neighborhood scale, in a system that enables more

detailed plans to remain in line with the upper-level plans (UN-Habitat 2018)

In Turkey, the legal framework of spatial planning and physical development is provided by the Development Law No. 3194 dated 1985. Before this Law, urban planning departments were centralized government offices under the Ministry of Reconstruction and Resettlement. Their roles were to designate the land use, to preparation of land-use plans, to control the planning ordinances, to license new developments of private owners, and to locate public facilities. These privileges are decentralized and transferred to the local governments with the Development Law (Gülkan 2001). However, since the 2000s, significant changes in the planning system have led to a flexible planning system in practice, which is defined as regulatory planning system in theory (Tarakçı and Türk 2018). One change in the legal framework is realized by the establishment of the Ministry of Environment and Urbanism with the Decree Law No. 644 adopted in 2011. The Law sets forth the duties and responsibilities of the Ministry in urban planning and provides centralization of planning system. For instance, in Istanbul, Ministries have 74% of the planning authority, and Istanbul Metropolitan Municipality has 26% of the planning authority. The rates shows fragmented structure of planning, the power

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of government and centralization of planning system (Gürsoy and Edelman 2017).

Planning system in Turkey is typically driven by the national policies and through a hierarchy of plans land-use decisions are implemented at a local level. The hierarchy of the planning system is stated in the Regulation on Making Spatial Plans, which was accepted in 2014. According to the first paragraph of Article 6 of this regulation, spatial plans are prepared as Spatial Strategy Plans, Environmental Plans and Development Plans in terms of the area they cover and their purposes. The regulation defines the hierarchical system of the Turkish planning system as Spatial Strategy Plan, the Environmental Plan, the Master Plan and the Implementation Plan from upper level to lower level, respectively. The local detailed plan that provides the basis for the building permits is prepared by the municipalities in areas inside the municipal boundaries and by the governorships outside the municipal boundaries. For the coordination of the local and upper-level plans, Master and Implementation Plans have to be in accordance with the regional and environmental development plans prepared by the central government.

Master Plans are generally produced at 1/5000 scale and determine the block based land uses, zoning types, population densities and main social and technical infrastructure. Implementation Plans are produced at 1/1000 scale and show all the details of the building rights of the parcels. The implementation plans in Turkey determine the permitted usage, the amount and the characteristics of the development, therefore, has a fundamental impact on the values of land and property, which is the main driving force of planning amendments by developers and individuals.

Planning amendments or modifications of plans can be realized by two ways. Comprehensive modifications made through Revision, Partial and Additional Development Plans by public authorities and generally do not reflect the private interest. However, block or parcel based plan amendments are frequently used by landowners and developers to change the plan decisions, mainly for rent seeking via increment of the density, function or use.

Modifications in plans follow the same procedure as in the preparation and ratification of the plans and with the paradigm shift on decentralization of the planning powers in 1985, Municipal Councils becomes the only authority in the decision making of plan amendment proposals. Therefore, decentralizations of the planning powers to local governments with the Development Law resulted much easier and uncontrolled plan amendments.

One reason of the high demand in planning amendment can be that the value increase as a result of the planning decisions remain to the developers or the landowners and weak value capture tools result in plan amendments regarding value increases. Recently, as a solution to this problem, a development charge has been defined for plan amendments and rules about the development charges in plan amendments are added by the Article 12 Of The Law Amending Geographic Information Systems and Some Other Laws No.7221 as the Supplementary Article 8 of the Development Law

No.3194 in 2020. In addition, the Regulation on development charges for plan amendments is published in 2020. According to the law and the regulation, parcel-based plan amendments are prohibited and for the value increase as a result of block based plan amendments, a development charge is introduced. In a block-based plan amendment, the developer or the landowner receives additional development rights or a more profitable land use in exchange for obligation to compensate in cash. The charge will be shared among the public administrations. In metropolitan municipality provinces, development charges will be shared equally among metropolitan municipality, district municipality, the Ministry of Environment and Urbanization, and the Treasury. However, if the plan amendment is approved by the Ministry of Environment and Urbanization, then the value increase will be shared between the Ministry (75%), the metropolitan municipality (15%) and the district municipality (10%). In non-metropolitan districts, development charges will be shared among the administration that approved the plan amendment (40%), the Ministry of Environment and Urbanization (30%), and the Treasury (30%). However, if the plan amendment is approved by the Ministry of Environment and Urbanization, then the development charges will be shared between the Ministry (75%) and the relevant administration (25%). In addition, if the plan amendment is approved by a public administration, then development charge will be captured by the Treasury. The revenues from development charges are planned to be used in public services such as expropriation, urban transformation and infrastructure.

Parcel based plan amendments are perceived as corruption and irregularity by the society. Therefore, prohibition of the parcel based plan amendments highlighted the need for a comprehensive evaluation on amendments realized before the prohibition. However, there are few studies analyzing parcel-based planning amendments realized in Istanbul. For instance, Altın (2006) analyze a total of 1614 plan amendments realized between the years 1990 and 2004 in Üsküdar and Şişli districts of Istanbul. Kılınc and Turk (2018) analyze a total of 10.288 plan amendment proposals between the years 2008 and 2017 in Istanbul to identify the behavior of the distribution of demand and supply of plan amendments and influencing factors. Demir (2009) analyzed a total of 159 plan amendments realized between the years 1995 and 2009 in Zeytinburnu district of Istanbul. Yavuz and Sertyesilisik (2009) analyze a total of 105 plan amendments realized between the years 2007 and 2016 in Kağıthane district of Istanbul. The main reason of scare literature on the parcel based plan amendments could be that there are no statistical data regarding plan amendments and data can only be gathered from municipal council reports, which are paper based and not spatially enabled.

Therefore, the main aim of this study is to contribute to the existing scare literature on the parcel based plan amendments, which include identification of the amendment types and analyze of the timing, location, and spatial distributions of these types. For this aim, parcel based plan amendments in Istanbul is examined as an explanatory case study. This paper has been divided into

four parts. The first part makes an introduction and provides the aim of the study. Chapter 2 identifies the methodology and the data of the case study. Chapter 3 presents the result of the case study and identifies the parcel based plan amendment types of Istanbul. Chapter 4 makes a conclusion.

2. METHOD AND DATA

The main aim of this paper is to identify the leading types of the parcel based plan amendments and in addition, by using this classification to analyze the timing, location, and spatial distributions of these types. For this aim, parcel based plan amendments in Istanbul is examined as an explanatory case study. Istanbul is one of the world's largest city by its population, ranking as the world's fifteenth-largest city and the largest city in Europe with a total population of around fifteen million residents in metropolitan area.

The research data in this paper is drawn from the official council decision documents of the Municipal Council of Istanbul Metropolitan Municipality. The Municipal Council is the ultimate decision-making body of the Istanbul Metropolitan Municipality. Its members come from districts within the metropolitan boundaries and chaired by Metropolitan Mayor for a term of five years. Therefore, the time period of the data set is chosen as 2014-2020 to reflect political relations and decision making in a five-year period.

This study systematically analyzed the official council decision documents of the Municipal Council of Istanbul that includes a proposal or a decision related with parcel based plan amendments. As for case study, more than 2.900 proposals between the years 2014 and 2020 are analyzed and preliminary results on the types and the scope of the parcel based plan amendments, their location and approval status, and the responsible municipality are given in the next section.

3. RESULTS

The main aim of this paper is to identify the types of the parcel based plan amendments and by using this classification to analyze the timing, location, and spatial distributions of these types.

For this aim, parcel based plan amendments in Istanbul is examined as an explanatory case study. In the case study, more than 2.900 plan amendment proposals between the years 2014 and 2020 are analyzed. Based on this analyze, the main types of the parcel based plan amendments, and their classification are identified as;

- Type 1. Plan amendments between social or technical infrastructure and private ownership.
 - Type 1.1. Plan amendments reducing social or technical infrastructure areas.
 - Type 1.2. Plan amendments increasing social or technical infrastructure areas.
- Type 2. Plan amendments exchanging social or technical infrastructure areas.
- Type 3. Plan amendments in protected areas or for protection purposes.
- Type 4. Plan amendments causing value increase

- Type 5. Plan amendments for applicability and efficiency of a plan.

This classification defines all types of plan changes that may occur on a parcel basis. In addition, the classification is designed by taking account the content of the data, the typology specified in the law and the research design that enables analyzing different aims. The classification of the parcel based plan amendments and preliminary results of the type-based analyses are detailed below.

3.1. Type 1: Plan-amendments between social or technical infrastructure and private ownership

This type of plan amendments includes conversion between social or technical infrastructure and private ownership. According to the Article 26 of the Regulation of Making Spatial Plans conducted with the official Gazette numbered 29030 and dated 14.06.2014, certain rules must be fulfilled for these types of plan amendments. As a rule, plan amendments regarding the removal, reduction or relocation of social and technical infrastructure areas cannot be made unless there is a necessity. In case of necessity, in order to make such a change an equivalent new area within the service area of these facilities should be separated. In order to question whether this rule is applied or not, plan amendments that cause a decrease and an increase in these areas are defined separately under Type 1 as Type 1.1 and Type 1.2 as detailed below.

3.1.1. Type 1.1 Plan amendments reducing social or technical infrastructure areas.

The Type 1.1 includes plan amendment proposals aiming a reduction in social or technical infrastructure areas. Almost 24% of all plan amendment proposals between 2014 and 2020 includes Type 1.1 and Tuzla, Kartal, and Esenyurt are the leading districts.

3.1.2. Type 1.2. Plan amendments increasing social or technical infrastructure areas

The Type 1.2 includes plan amendment proposals aiming an increase in social or technical infrastructure areas. Almost 13% of all plan amendment proposals between 2014 and 2020 includes Type 1.2 and Tuzla, Kartal, Pendik, and Sancaktepe are the leading districts.

Plan amendment proposals within the scope of Type 1.1 should additionally include Type 1.2 in order to be legal and comply with the law. However, only 25% of the Type 1.1 plan amendment proposals also include Type 1.2. Kartal, Tuzla, Esenyurt and Çekmeköy are the leading Districts containing Type 1.1 proposals without Type 1.2 within the time frame of the study.

3.2. Type 2: Plan amendments among social or technical infrastructure areas

The Type 2 includes plan amendment proposals between social or technical infrastructure areas as exchange. Almost 25% of all plan amendment proposals between 2014 and 2020 includes Type 1.2 and Fatih,

Tuzla, Kartal, Bağcılar, and Pendik are the leading districts.

3.3. Type 3: Plan amendments in protected areas or for protection purposes

The Type 3 includes the plan amendment proposals in protected areas or for protection purposes. Almost 10% of all plan amendment proposals between 2014 and 2020 includes Type 3, and Fatih is the leading district by having 75% of all Type 3 proposals.

3.4. Type 4: Plan amendments causing value increase

The Type 4 includes plan amendment proposals causing a value increase such as the change of density, function or use. Almost 16% of all plan amendment proposals between 2014 and 2020 includes Type 4 and Tuzla, Fatih, and Bağcılar are the leading districts.

3.5. Type 5: Plan amendments for applicability and efficiency of a plan

The Type 5 includes the plan amendment proposals for applicability and efficiency of a plan. Almost 11% of all plan amendment proposals between 2014 and 2020 includes Type 5 and Fatih, Tuzla, and Kartal are the leading districts.

4. CONCLUSION

The main aim of this study was to contribute to the existing scarce literature on the parcel based plan amendments, which include identification of the amendment types and analyze of the timing, location, and spatial distributions of these types. For this aim, parcel based plan amendments in Istanbul was examined as an explanatory case study. In the case study, more than 2.900 plan amendment proposals between the years 2014 and 2020 are analyzed. Based on this analyze, the main types of the parcel based plan amendments, and their classification are identified. The case study reveals the distribution of the types between 2014 and 2020, and Type 2 and Type 1.1 are the leading proposals which constitute nearly half of the parcel based plan amendments. In addition, Type 1.1 and Type 4 together constitute the 40% of all proposals. One reason of the high number of planning amendment proposals in these types can be the weak value capture tools. These types generally cause a value increase and in the time frame of the study, this increase was remaining to the landowners. However, with the recent change in the law, this type of plan amendments will be subject to development charge; therefore, a sharp decrease is expected in these types.

When the change trend of the parcel based plan amendment proposals is examined, a decrease in 2016

and 2017 (~30%) and an increase in 2018 (~30%) is observed. The reason of the change in the trend may be the elections that took place in March, 2019. In addition, in the Istanbul case, only 23% of all plan amendment proposals between 2014 and 2020 are rejected by the Municipal Council of Istanbul. Therefore, high number of planning amendments seem to reverse the hierarchy of a planning system and transfers the power to the last level of the planning scale.

REFERENCES

- Altın Y (2006). İstanbul metropoliten alanında imar planı değişiklikleri ile ilgili bir analiz. YL Tezi, İstanbul Teknik Üniversitesi, İstanbul.
- Demir A M (2009). İmar planı değişikliklerinin değerlendirilmesi Zeytinburnu örneği. YL Tezi, İstanbul Teknik Üniversitesi, İstanbul.
- Güler Z E & Ünverdi L (2009). Desantralizasyon, basitleştirme, deregülasyon ve yeniden-regülasyon politikaları kapsamında planlamanın araçsallaştırılması; Bursa'da riskli yapı tespitine dayalı parsel bazındaki plan değişikliklerinin kentsel mekana etkisi, Planlama, 29(3), 210-228.
- Gülkan P (2001). Revision of the Turkish Development Law No. 3194 governing urban development and land use planning. NATO Science Series, Springer.
- Gürsoy N & Edelman D J (2017). Regional development planning in Istanbul: recent issues and challenges. Current Urban Studies, (5), 146-163.
- Healey P (1997). Collaborative planning, shaping places in fragmented societies, UBC Press.
- Numan K & Türk Ş Ş (2018). İmar planı değişikliği talebi-arzu ve sosyo-ekonomik değişkenler arasındaki ilişki: İstanbul örneği, II. Kentsel Morfoloji Sempozyumu, İstanbul, Türkiye.
- Özkan H & Türk Ş Ş (2016). Emergence, formation and outcomes of flexibility in Turkish planning practice. IDPR, (38), 25-54.
- Tarakçı S & Türk Ş Ş (2018). Impact of planning on land value in urban renewal practice: the case of Istanbul Fikirtepe. FIG Congress 2018, Istanbul, Turkey.
- UNECE (2008). Spatial planning: key instrument for development and effective governance, with special reference to countries in transition. UNECE.
- UN-Habitat (2018) Planning law assessment framework, UN-Habitat.
- Ünlü T (2006). Kentsel mekânda değişimin yönetilmesi. ODTÜ Mimarlık Fakültesi Dergisi, 23 (2), 63-92.
- Yavuz U & Sertyeşilışık B (2019). Mekânsal alanlarda plan değişikliklerinin gayrimenkul üretim/ arz eğilimlerine etkileri. International Journal of Political Science and Urban Studies, 7(2), 543-567.