

## **Intercontinental Geoinformation Days**

http://igd.mersin.edu.tr/2020/



## Land readjustment method: Professional merit in determining implementation boundary

Halil Burak Akdeniz\*10, Şaban İnam10

<sup>1</sup>Konya Technical University, Engineering and Natural Sciences Faculty, Geomatics Engineering Department, Konya, Turkey

#### Keywords

Implementation boundary Implementation area Land readjustment Merit

#### **ABSTRACT**

The development plan implementation in the land readjustment method made in accordance with the 18th article of the Land Development Act, No. 3194, consists of technical implementation stages that are related to each other. Determining implementation area and implementation boundary, constitute first and important stage of land readjustment method. The implementation boundary should determine to considering the implementation regulation, providing homogeneous distribution of government agency and public areas, protecting rights to use property and social justice, in other words, it should determine principle of professional merit consideringly. This case loom large in terms of the accuracy of the implementation in technical, economic, sociological dimensions. Although administration has legal authority on "where boundary will be determined in the implementation area", ithas responsibilities in terms of establishing the trust of the property owner in administration/state in an incorrect boundary detection. Therefore, technical personnel being in charge of on behalf of the administration and department making the approval of the boundary should act in professional/administration merit. In this study, will investigate to determining implementation boundaries studies in the development plan implementations are made by two different district municipality of Turkey's. Then, alternative suggestions will offer consideringly professional merit, ethical principles and the provisions of the legal legislation (Land Development Act No. 3194, Land Readjustment Regulation).

### 1. INTRODUCTION

The development plan are made in order to create a modern, aesthetic and livable city suitable for the science, health and environmental conditions of the settlements. With the implementation of development plans to field, possible ownership problems were solved and it is aimed to reveal the proper building parcels and public space with the construction conditions stipulated by the plan. 1/1000 scale implementary development plan are applied on any of in accordance with 'expropriation', 'applications on demand of owners' and 'land readjustment' method according to 03.05.1985 date, Land Development Act No. 3194 in Turkey. And this is done using a method "designated by the administration that will approve the implementation" (İnam et. al. 2015). However, "development plan implementation in the land readjustment method" is recommended method due to its advantages. Likewise, implementation in the land readjustment method; it is accepted as the most technically appropriate, economically most efficient, sociologically most equitable method. Both "opening planned use as a result of the ownership-development relationship with the existing public spaces and real estates which can't be built in their current form that are in the implementation area" and "after the implementation of the plan, changing ownership structure is accepted by the public and state" put forward this method (Çay and Özen 1998; Çelik 2006; Yıldız 2014). The purpose of the development plan implementation in this method create building parcels suitable according to the plan report, plan notes, Land Development Act and implementation regulations (Köktürk 1997; Köktürk and Köktürk 2007). When different applications around the world and the legislations in Turkey analyzed, it is seen that this method provides responsibilities and opportunities to the administrations which implement plan and real estate owners (Yıldız 1987; Bıyık and Uzun 1990; Atasoy et al. 2002). The plan implementation in the land readjustment method consists of many interrelated application stages. After determining implementation area by the administration responsible for the implementation, the process 'determining

Cite this study

<sup>\*</sup> Corresponding Author

implementation boundary' constitutes the most important stage of implementation (Uzun 1992; Ülkü and Olgun 1993). As a matter of fact, when 'cancellation of development plan implementation' cases fiiled before in the administrative jurisdiction are examined, it has been determined that real estate owners generally object to 'inaccurate determining implementation boundary' and 'building parcel allocation' (Karavelioğlu 1999).

Land Readjustment (LR) made in accordance with Article 18 of the Land Development Act No. 3194 are the most important method for plan implementation (Yomralıoğlu 1992). However, technical and legal features of the real estate remaining within implementation boundary will undergo a change after the implementation and these changes will have to be equally allocated to each real estate. If this equality is not provided, specific problems will arise. One of these problems which is the subject of our study, is the incorrect and unsuitable problem of 'determining boundary'. implementation The implementation boundary are determined, according to 9th and 10th articles of the Land Readjustment Regulation 22 February 2020 date and number 31047;

- -on the settlement area boundaries where settlement areas end,
- -on the axis of the roads in the settlement areas,
- if implementation boundary divides a parcel into two or more parts, boundary includes those that do not enter another urban block outside the implementation area, -anywhere appropriate on park, square and car parks (and similar areas) in accordance with the development

readjustment share ratio (DOPO).

The implementation area should not be smaller than an urban block.

However, there are worthy of notice issue apart from these principles of implementation, they are a issue of professional ethics and merit. Also, the development readjustment share ratio values which determine the amount of land allocated to public use, which will be provided with without charge deductions to be made from the parcel in the area of implementation, should be as balanced as possible between implementation areas (İnam 1989). Therefore,

- -implementation areas should not determine to cover a few urban blocks, they should be determined as subregions with common character (settlement area, trade area, industrial area) as much as possible. Thus computation of different amounts of DOPO in the implementation areas with similar features will be prevented.
- The amount of DOPO should determine, not to exceed upper limit of 45%, which is the upper limit of without charge deductions. Thus, an expropriation burden should not be created for the administration, except in compulsory situation.

In this study; the development plan implementation in the land readjustment carried out in the "settlement area" in Çayır, Fevzi Çakmak, Saraçoğlu and İstiklal neighborhoods of Karatay district, Konya province and in Çaylı neighborhoods of Dörtyol district, Hatay province will investigate. It will examine to what extent consider implementation legislation, principles of professional merit, public interest and social justice by local

government that responsible determining implementation boundary. Information and documents regarding the application areas were obtained from the relevant administration. Alternative solutions will be suggested to taking into account principles of professional merit and public interest about subject.

#### 2. METHOD

The sample implementation areas in this study are located within settlement area in the development plan. Determining implementation areas and implementation boundary were carried out by responsible municipal administrations. The implementation boundary has been approved by the municipal board and the implementations have been registered in the land registry. When sample implementation areas are examined; it can be said that boundaries are correctly in terms of "technical principles stipulated by land development implementation legislation", but wrongly in terms of "professional merit" and "ethical values in the protection of property rights".

The implementation legislation stipulates accurate calculation of the amount of deduction in other words "development readjustment share" rate (DOPO) to be made from the real estates included in the implementation. However, implementation the boundary was determined considering only technical principles in the sample implementations. Since the boundary is determined without paying attention to the homogeneous distribution of public space and government agency area included in the development plan, different DOPO rates has been calculated and hence it has been observed that causes unfairness in real terms in protecting property rights.

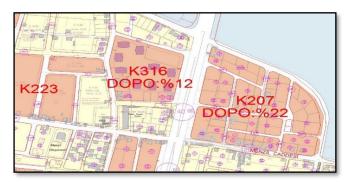
#### 3. RESULTS

## 3.1. Evaluation of Implementation Areas in the Neighborhoods of Karatay District, Konya Province

Sample implementations areas are located in Fevzi Çakmak and İstiklal neighborhoods of Karatay district, Konya province. Implementation areas are adjacent to each other and they are separated by a 40.00-meter urban road. The site selection and determining boundary studies of the implementation areas in the settlement area were made by the responsible municipal administration and the implementation boundary was approved by the municipal board (Figure 1 and Table 1).

When the implementation areas which are similar land use decisions in the 1: 1000 scale development plan were examined, the boundaries were determined correctly in terms of technical principles, wrongly in terms of professional merit and ethical values by local government. When analyzed implementations, free DOP deduction of %35 was applied in one implementation area and %12 DOP deduction was applied in the other implementation area in Fevzi Çakmak neighborhood but the DOPO value of the neighborhood sub-region in the Fevzi Çakmak neighborhood was calculated as %14. In the other implementation areas in the İstiklal neighborhood, which is separated from the Fevzi Çakmak

neighborhood by a 40.00 meter road, %22 and %37 free DOP deduction were applied but the DOPO value of the neighborhood sub-region in the İstiklal neighborhood was calculated as %30. Although the implementation stages were considered "correct" in terms of implementation legislation, it was determined that they are "wrong" because "unjust / unbalanced free DOP deduction was made with different DOPO applications in the same region".



**Figure 1.** Implementation areas in the neighborhood of Karatay district, Konya province

**Table 1.** Implementation areas DOPO rate in the neighborhood of Karatay district, Konya Province

Name of Implementation Areas	DOPO	Area (m²)
Fevzi Çakmak Neighborhood	35%	368.038
Fevzi Çakmak Neighborhood	12%	4.836.650
Sub-Region DOPO Average	14%	
İstiklal Neighborhood	22%	141.095
İstiklal Neighborhood	37%	164.431
Sub-Region DOPO Average	30%	

# 3.2. Evaluation of Implementation Areas in the Neighborhoods of Dörtyol District, Hatay Province

Sample implementations areas are located three separate stages in Çaylı neighborhood of Dörtyol district, Hatay province. Implementation areas are adjacent to each other. The site selection and determining boundary studies of the implementation areas in the settlement area were made by the responsible municipal administration and the implementation boundary was approved by the municipal board (Figure 2 and Table 2).

When the implementation areas which are similar land use decisions in the 1: 1000 scale development plan were examined, the boundaries were determined correctly in terms of technical principles, wrongly in terms of professional merit and ethical values by local government. When analyzed implementations, free DOP deduction of %27 was applied in the 1st implementation area, %19 DOP deduction was applied in the 2nd implementation area and %32 DOP deduction as applied in the 3rd implementation area but the DOPO value of the

neighborhood sub region was calculated as %26. Although the implementation stages were considered "correct" in terms of implementation legislation, it was determined that they are "wrong" because "unjust / unbalanced free DOP deduction was made with different DOPO applications in the same region".



**Figure 2.** Implementation areas in the neighborhood of Dörtyol district, Hatay province

**Table 2.** Implementation areas DOPO rate in the neighborhood of Dörtyol district, Hatay province

Name of Implementation Areas	DOPO
Çaylı Neighborhood (1st Stage)	27%
Çaylı Neighborhood (2nd Stage)	19%
Çaylı Neighborhood (3rd Stage)	32%
Çaylı Neighborhood Average DOPO	26%

# 4. DISCUSSION AND CONCLUSION

It is not sufficient to consider only technical principles in determining the boundary that determining area of implementation. Balance of income and expenditures should preserve in the provision of free of up to 45% of government agency area and public spaces which have a significant contribution to the value of the region. The DOPO value should determine approximately equal or balanced to each other in the implementation areas and the implementation boundary should determine according to this approach.

Since 'site selection' and 'boundary determination' in the each implementation areas are rested with by responsible administration, DOPO values can be different from each other. Since stages on the implementation areas are accepted legally independent and different from each other, the judgments on the transaction files submitted to the court are also specific within implementation. For this reason, this kind of problem arising from determining implementation boundary but affecting the ownership should resolve on the basis of 'professional merit, equity and social justice' on the basis of 'institutional ethics and state guarantee'. Ownership of real estates owners must protected under all conditions. For this, the boundary of the implementation area should determine by making use of the developing information

technologies, in such a way that the government agency areas and public spaces corresponding to the implementation areas are balanced and the DOP rates are equal or close to each other; and then it is expected that the administrative management responsible for the implementation and the technical personnel will work within professional competence and ethical principles.

#### REFERENCES

- Atasoy M, Demir O, Uzun B & Nişancı R (2002). İmar uygulamalarının iptal nedenleri ve öneriler. Selçuk Üniversitesi Jeodezi ve Fotogrametri Mühendisliği Öğretiminde 30. Yıl Sempozyumu, 184-192, Konya, Turkev.
- Bıyık C & Uzun B (1990). Mevzuat ve uygulamaların ışığında arsa ve arazi düzenlemesinin proje çerçevesinde incelenmesi ve karşılaşılan problemler. 18. Madde Uygulamaları Semineri, 25-36, Ankara, Turkey.
- Çay T & Özen H (1998). İmar uygulamalarında karşılaşılan problemler ve Konya örneği. Mülkiyet Dergisi, 28, 8-13.
- Çelik K (2006). Planlama ve imar kanunu uygulaması, arazi ve arsa Düzenlemesi. Devran Matbaacılık, Ankara.
- İnam Ş (1989). Arsa ve arazi düzenlemesi ve 3194 sayılı İmar Kanununun 18. maddesi uygulamaları. Phd Thesis, Selçuk University, Konya (in Turkish).
- İnam Ş, Çay T & İşcan F (2015). Planlama ve İmar Kanunu tasarısının uygulanabilirliğinin araştırılması. S.Ü. Teknik Bilimler Meslek Yüksekokulu, Teknik-Online Dergisi, 14(1), 12-14.
- Karavelioğlu C (1999). 3194 sayılı İmar Kanunu 18.madde uygulaması arazi ve arsa düzenlemesi – parselasyon. TOP-KAR Matbaacılık. Ankara.

- Köktürk E (1997). İmar planı uygulamalarında karşılaşılan sorunlar ve kavramlaşma. TMMOB Harita ve Kadastro Mühendisleri Odası, Türkiye 6. Bilimsel ve Teknik Kurultayı, 15-22, Ankara, Turkey.
- Köktürk E & Köktürk E (2007). Arsa düzenlemesinde eşdeğerlik ilkesinin modellenmesi. 11. Türkiye Harita Bilimsel ve Teknik Kurultayı, TMMOB Harita ve Kadastro Mühendisleri Odası, 1-8, Ankara, Turkey.
- T.C. Resmi Gazete. 3194 sayılı İmar Kanunu, (18749), 03.05.1985.
- T.C. Resmi Gazete. Arazi ve Arsa Düzenlemesi Hakkında Yönetmelik, (31047), 22.02.2020.
- Uzun B (1992). Kentsel arsa düzenlemelerinde imar parseli üretme yöntemleri ve sonuçlarının irdelenmesi. PhD Thesis, KTÜ, Trabzon (in Turkish).
- Ülkü H & Olgun Ö (1993). Arsa düzenleme sorunlar ve öneriler. TMMOB Harita ve Kadastro Mühendisleri Odası, Türkiye 4. Harita Bilimsel ve Teknik Kurultayı, Ankara, Turkey.
- Yıldız F (2014). İmar bilgisi, planlama-uygulamamevzuat. Nobel Yayınevi, ISBN: 978-605-5426-04-0
- Yıldız N (1987). Arsa ve arazi düzenlemelerinde eşdeğerlik ve eşitlik ilkelerinin karşılaştırılması. Türkiye 1. Harita Bilimsel ve Teknik Kurultayı, 415-428, Ankara, Turkey.
- Yomralıoğlu T (1992). Arsa ve arazi düzenlemesi için yeni bir uygulama şekli. HKMO Dergisi, 73, 30-43.