

Boštjan Cotič, Boštjan Kerbler: ANALIZA TEMATIK RAZVREDNOTENIH OBMOČIJ V SLOVENSKI PROSTORSKI ZAKONODAJI OD LETA 2002 DO 2017

THE ANALYSIS OF BROWNFIELDS RELATED TOPICS IN SLOVENIAN SPATIAL PLANNING LEGISLATION FROM 2002 TO 2017

DOI: <https://dx.doi.org/10.15292/IU-CG.2019.07.022-027> ■ UDK: 711.585 ■ SUBMITTED: August 2019 / REVISED: September 2019 / PUBLISHED: October 2019



1.02 Pregledni znanstveni članek / Review Article

IZVLEČEK

Slovenija se je kot industrializirana država soočila s problemom razvrednotenih območij šele po osamosvojitvi leta 1991. S ponovno uvedbo tržnega gospodarstva je več gospodarskih področij postalo nekonkurenčnih, tako v evropskem kot tudi v svetovnem merilu. Zaradi premajhne ozaveščenosti o problematiki razvrednotenih območij je trajalo vse do leta 1998, da smo v Sloveniji dobili jasno definicijo razvrednotenih območij (takrat poimenovanih Degradirana urbana območja). Prostorska zakonodaja je na tem področju še bolj zaostajala za stroko, saj je šele ZPNačrt v letu 2007 postavil uradno definicijo pojma degradiran prostor. Namen tega članka je analizirati razvoj terminologije v slovenski prostorski zakonodaji, vezano na razvrednotena območja, še zlasti v zvezi z definicijo pojma razvrednotenega območja in definicijo procesa regeneracije razvrednotenih območij.

Vsi trije zakoni s področja prostorskega načrtovanja (ZUre-1, ZPNačrt in ZUreP-2), ki so bili sprejeti v samostojni Sloveniji, so bili analizirani na podlagi istih ključnih besed vezanih na tematiko razvrednotenih območij. Vsi trije zakoni so v več poglavjih vključevali tematiko razvrednotenih območij. Terminologija s področja razvrednotenih območij se je spreminjala z vsakim novim zakonom, čeprav ponekod vsebinsko ni bilo večjih sprememb. V definiciji procesa regeneracije je nenehno pojavlja terminološko razlikovanje za območja v urbanih (prenova) ter območja izven urbanih območij (sanacija). Zdi se, da je ena terminologija prišla s področja urbanističnega načrtovanja, druga pa iz okoljskega oziroma krajinskega področja. Potreben je bolj standardiziran pristop v terminologiji in splošen premik k razumevanju razvrednotenih območij kot prostorskemu pojavu, ki ne glede na lokacijo potrebujejo celostni pristop k regeneraciji.

KLJUČNE BESEDE

razvrednotena območja, prenova, sanacija, zakonodaja, terminologija

ABSTRACT

Slovenia as an industrialized country faced the problem of brownfields only after independence in 1991 when market economy principles were re-introduced, and several industrial sectors became uncompetitive in a European and global scale. Lack of the awareness of the problem made it possible that no clear definition of the brownfields has been developed until 1998. The spatial planning legislation was lagging even more with a first formal definition of a brownfield made only in 2007. The aim of the paper is to analyze the development in brownfield related terminology in Slovenian spatial planning legislation, especially related to the definition of the brownfield site and brownfield regeneration process. All three spatial planning acts (ZUreP-1, ZPNačrt and ZUreP-2), adopted in independent Slovenia were analyzed based on the same brownfield related keywords. All three laws included the topics related to brownfields in several section of the respective document. The terminology changed with each new law and the formal definitions as well. There is a pattern in terminological differentiation of the definition of the regeneration process, one for urban brownfields and other for non-urban. It seems that one terminology came from the urban planning field and the other one from the environmental and landscape field. There is a need for a more standardized approach in terminology and an overall shift towards understanding brownfields as a spatial phenomenon that regardless of its location needs a holistic approach in regeneration.

KEY-WORDS

brownfields, regeneration, rehabilitation, legislation, terminology

UVODNIK
EDITORIAL
ČLANEK
ARTICLE

RAZPRAVA
DISCUSSION
RECENZIJA
REVIEW
PROJEKT
PROJECT
DELAVNICA
WORKSHOP
NATEČAJ
COMPETITION
PREDSTAVITEV
PRESENTATION
DIPLOMA
MASTER THESIS

1. INTRODUCTION

Western countries faced the problem of brownfields in 1970s with the closure of large industrial sites followed by the recession in USA and Western Europe. Slovenia as an industrialized country faced the problem of brownfields only after independence in 1991 when market economy principles were re-introduced, and several industrial sectors became uncompetitive in a European and global scale. Consequently, several factories were closed, and large industrial complexes became vacant or underused (Cabernet, 2006). This was accompanied by the processes of deindustrialization, internationalization of production and capital mobility and relocation of labour-intensive production to third countries, especially China (Koželj et al, 1998; Lampič, 2017). In 1990s also the processes of military downsizing and vacation of transport industries contributed to creation of additional type of brownfield sites (Cabernet 2006; Cotič, 2018). This process was particularly intense not only in Slovenia, but also in others Central and Eastern European countries (Ferber (Ed.), 2006; Garb, Y., Jackson, J., 2011). However, there are only few examples of heavily polluted brownfield sites in Slovenia, which are usually the result of the abandoned heavy or chemical industry. (De Sousa, 2017). In Slovenia, no mayor analysis of the Brownfields problem existed until 1998. This resulted in many new greenfield developments, such as large shopping centers that were built on a best farm land (Cotič, 2018). Lack of the awareness of the problem even among professionals made it possible that no clear definition of the brownfields has been developed.

The importance of the problem of Brownfields eventually became too important to neglect it, so the Ministry of Environment and Spatial planning of the Republic of Slovenia, office for physical planning and Ministry of Science and Technology of the Republic of Slovenia tendered a research project in 1996 to tackle this problem. The result of the project was a 1998 handbook *Degradirana urbana območja* (Koželj et al 1998) which became the most important document for several years in the topic of the Brownfields regeneration in Slovenia. The book also firmly set a standard term for Brownfields in Slovenian language as a Degraded urban area (*degradirana urbana območja*, DUO).

The first complete new spatial planning legislation in independent Slovenia, the Spatial planning law (ZUreP-1) was adopted only in 2002. The legislation integrated several new approaches in spatial planning and was quite advanced at that time. The problem of brownfields was also tackled; however, a clear definition was missing. The ZUreP-1 seemed to use the terminology of the handbook from 1998, so the legislator probably decided, that the definition from the handbook will be considered as a standard.

The Spatial planning act from 2007 introduced some changes in terminology, but 20 year after first definition the Spatial planning act from 2017 introduced a new term for brownfields as a devalued area (*razvrednotena območja*). However, English expression "Brownfield" as a term was never used in Slovenian language as in some other non-English spoken countries like in Czechia for example (Ilik, J. and Bergatt Jackson, J., 2006), but was instead always used a term in Slovenian language.

The aim of this paper therefor is to analyze the development of the brownfield's definition and brownfields related terminology in spatial planning legislation in Slovenia after 1991 and give recommendations for potential improvements in the formal terminology.

2. METHODOLOGY

To evaluate the development of formal brownfield related terminology and formal definition of the brownfield, the research was focused on the Slovenian spatial planning legislation with regards to Brownfields. We analyzed all spatial planning laws, adopted after the independence of Slovenia:

- Zakon o urejanju prostora (ZUreP-1) Official gazette, no. 110/02 in English: Spatial Management Act 2002
- Zakon o prostorskem načrtovanju (ZPNačrt) Official gazette, no. 33/07 in English: Spatial Planning Act 2007
- Zakon o urejanju prostora (ZUreP-2) Official gazette, no.61/17, in English: Spatial Planning Act 2017

The official translation of the ZUreP-1 was Spatial management act (web1), however, the ZUreP-2, the law with the exact same title, passed in 2017 was translated as a Spatial Planning act. Also, ZPNačrt, passed in 2007 was officially translated as Spatial Planning act. In this paper, all three spatial planning laws are translated as Spatial Planning Act combined with the year when the law was passed. (e.g. 2002, 2007 and 2017) or defined by the official acronym in Slovenian legislation; ZUreP-1 (2002), ZPNačrt (2007) and ZUreP-2 (2017).

To ensure that the research was up to date, the methodology used the following process (Oliviera, 2015): downloading the latest version of all three spatial planning laws as PDF files from their original sources; using the command "find" in the Acrobat reader program; and scanning page after page to extract the section, paragraph, and sentence in which the terms are noted. The source for all analyzed documents was the webpage of the Slovenian official gazette.

Since Slovenian language uses six cases for nouns (nominative, genitive, dative, accusative, locative, instrumental) and three grammatical numbers (singular, dual and plural) who change suffix of nouns into up to 18 variation (Gomboc, M., 2018), only the fixed part of the noun was selected for the search. For example, instead of the whole word "prenova" (renewal) only the fixed part of the word was used for the search. The word was shortened to the extend, if the term was used as a verb or adjective, the search would also find them.

Based on the preliminary analysis of all three Spatial planning acts, the following keywords were selected for the detailed search; *Degrad** (for degradation), *Razvrednot** (for devalued) *Opušč** (for abandoned), *Prenov** (for regeneration, renewal) and *Sanacij** (for rehabilitation) in that specific order.

3. RESULTS AND DISCUSSION

3.1. The Spatial Planning Act of 2002 (ZUreP-1)

the analysis of the Spatial Planning Act 2002 showed that the main term used for brownfields is a Degraded area (*degradirano območje*). There was no explicit definition of the brownfield site in the first section of the law, but instead the definition of the regeneration (*prenova*), a process which is in this act closely connected to brownfields.

The term degradation is explicitly mentioned in article 5 (Settlements distribution), in the section 2, where the law prioritizes the development of new settlements inside existing underused build-up areas and through brownfields regeneration and rehabilitation (*sanacija*). Article 57 defines the content of the

Municipal Spatial development strategy and identifies planning of rehabilitation of (urban) brownfield sites as an important part of the strategy. Article 60 defines a landscape design concept (krajinska zasnova) which should be according to this article also prepared for brownfield sites outside urbanized areas.

The methodological approach included also the analysis of the terms devalued and abandoned and their grammatical derivatives, however those two terms were not mentioned in the Spatial planning law of 2002.

As mentioned in the first paragraph, the term regeneration (prenova) is mentioned in the article 2, where all mayor definitions are listed. The term is defined in section 23 as "a set of planning and other measures for the economic, social and cultural regeneration of degraded settlements and other areas". Based on the definition, it is clear, that the term is used in relation to Brownfields and is equal to the term regeneration in English language and not only as a renovation, as it would be a direct translation from Slovenian to English. Brownfields regeneration is mentioned in article 5 (Settlements distribution), where new settlements should be developed inside existing underused build-up areas and through brownfields regeneration (prenova) and rehabilitation (sanacija). It is interesting how the law uses both terms regeneration and rehabilitation. It seems, that the term regeneration (prenova) relates to the "spatial planning" components of the brownfields regeneration, while the term rehabilitation (sanacija) relates with the remediation of polluted areas.

Article 12 (jurisdiction of the municipality in the field of spatial planning) also mentions the term "prenova", however in this case it might mean both, the regeneration of brownfield sites, but also renovation of buildings, since the law uses the word brownfield in relation to the word real-estate.

In article 57 (the content of the Municipal spatial development strategy) the section 3 defines, that the document should include basic concept for the rehabilitation of the brownfield sites. It is interesting, that in this article, the legislature used the term rehabilitation, which in this case seems that the term regeneration would be more appropriate, especially related to other topics in this section. (e.g. settlement structure).

Article 58 defines the urban design concept and Section 2 determines, that Urban design concept (urbanistična zasnova) should also define areas in need of regeneration and present basic concepts of regeneration.

Article 72 describes the purpose of the Municipal detailed spatial plan and defines, that this type of document must be prepared for the arrangement of the areas intended for rehabilitation and regeneration.

Article 91 is connected to the article 133 and article 134 where in all articles, the term "prenova" is used in a relation to the renovation of poorly maintained buildings and not with brownfield sites.

The Analysis of the term rehabilitation (sanacija) showed the use of the term in five articles of the Spatial planning law of 2002. The term is mentioned in article 5 (Settlements distribution), where it is used directly connected with the brownfield sites, together with the term regeneration as mentioned in previous paragraphs. The term in article 6 is not used in relation to brownfields. The article 57 uses the term rehabilitation in direct relation with brownfields, however it is not very clear if the meaning is related to just environmental issues or more holistic regeneration viewpoint. Article 72 (the purpose of the Municipal detailed spatial plan) uses both terms, rehabilitation and

regeneration and again the distinction between the two terms is not very clear in relation to brownfields.

3.2. The Spatial Planning Act of 2007 (ZPNačrt)

The Spatial planning act of 2007 (ZPNačrt) introduces a new term in Slovenian language for a brownfield site – a degraded space (degradiran prostor) which substitutes the old term from the ZUreP-1, the degraded area. This time, the law provided the exact definition of the term in the article 2, where all mayor definitions are explained. The brownfield is defined as "a part of a settlement or an area outside a settlement, in which the technical, spatial, living, economic, social, cultural and ecological conditions are reduced to a useless state where regeneration is necessary for the recovery of the area. Or it is an area outside the settlement where (improper) human activity or the omission of the latter caused the degradation of it and its rehabilitation is urgent. This is the first official definition of the brownfield site in Spatial planning legislation in Slovenia.

The term degraded or it's variations are also found in article 3 (the goals of spatial planning), where law prescribes that spatial interventions and spatial arrangements should be designed in such a way as to enable renovation of the existing one, which has priority over the construction of the new ones and with the rehabilitation of brownfields (e.g. degraded space).

Article 6 (the spatial development principles for settlements) defines that the Spatial development is prioritized within existing settlement, on vacant, underused or brownfield sites.

Article 85 introduces the new nationwide Spatial information system. Among other databased, article 5 predicts also a database of brownfields, on which a special legal regime is established based on special regulations. The only special regulation in 2007 related to brownfields, when the Spatial planning Act was adopted, was related to pollution or contamination based on the Environmental protection Act (ZVO-1, 2004). Article 86 is closely related to the article 85 and directs municipalities and ministries to use the state-of-the-art data from the Spatial information system as an obligatory background analysis in the preparation of all types of spatial planning document, which includes also the list of polluted or contaminated brownfields.

The methodological approach included the analysis of the term devalued and its grammatical derivatives, however this term was not mentioned in the Spatial planning law of 2007.

Spatial Planning act 2007 introduces a new term abandoned. Article 44 (spatial arrangements and interventions planning outside the settlement area) defines that some interventions are possible also outside the settlement area and in paragraph 6 mentions the case for the use of natural resources and rehabilitation of abandoned exploitation areas, which are one type of brownfields.

The ZPNačrt upgraded the term (in article 2) for brownfields regeneration from term renovation (direct translation) used in ZUreP-1 to complete or comprehensive renovation (direct translation). The process is defined as a "collection of various activities that improve the functional, technical, spatial-design, living, economic, social, cultural and ecological conditions in a particular area by means of appropriate spatial planning, which help to ensure the preservation of built structures and revitalize urban and other areas". "The regeneration (complete renovation) carried out in the cultural heritage sites is performed by maintaining the distinctive characteristics of the area and the cultural values of the protected area.

Article 2 also defined the term brownfield (as described in previous earlier paragraph) and the definition involves the meaning of regeneration as a process. However, in this definition, they didn't use the term comprehensive renovation, but renovation for revival (direct translation) instead, even the meaning in the context is regeneration.

Article 3 (goals of spatial planning), section 2 defines, that the spatial development should be planned in a way, where renovation of existing structures has priority over building new ones. This article strongly refers to brownfields' regeneration. Article 6 (the principle of settlements spatial development) have a similar meaning and promotes the use of brownfields (through regeneration) and underused sited for spatial development.

The use of term renovation in article 9 is mostly related to the preservation of cultural heritage, nevertheless many brownfields have a potential of industrial cultural heritage, so this article can be considered as linked to brownfields regeneration as well.

Article 39 (the contents of the Municipal spatial plan) defines in paragraph 2, section 2 that strategic part of the Municipal spatial plan must set guidelines for settlement development and for comprehensive renovation - regeneration (of brownfields), while article 41 (urban plans) outlines, that urban plan must define regeneration areas (inside urbanized areas) with solutions and comprehensive renovation measures. Article 45 is not related to brownfields

The article 56 (contents of the municipal detailed spatial plan) defines in section 3 that if the municipal detailed spatial plan is intended for the comprehensive renovation (regeneration) of the area, its mandatory component is a conservation plan prepared in accordance with the regulations on the protection of cultural heritage. The article uses the term comprehensive renovation (regeneration) in a way, that it might be understood that this process is related only to renewal of historical parts of towns and cities. Still, also historic settlements can be considered brownfields with social, functional or other type of degradation.

The term rehabilitation is mentioned in article 2 in the definition of the term degraded space (brownfield). The term is used in a relation to an area outside the settlement where (improper) human activity or the omission of the latter caused the degradation of it and its rehabilitation is urgent. Paragraph 20 of article 2 explains the negative phenomenon of dispersed urbanization and the need for its rehabilitation so the term is not directly connected to brownfields.

Article 3, which defines the goals of the spatial planning, mentions brownfields in paragraph 2, section 6 as a principal, that spatial planning should enable rehabilitation of brownfield sites.

Articles 15, 27 and 39 also uses the term rehabilitation, but not connected to brownfields.

As mentioned in the section analyzing the term abandoned, Article 44 (spatial arrangements and interventions planning outside the settlement area) defines that some interventions are possible also outside the settlement area and in paragraph 6 mentions the case for the use of natural resources and rehabilitation of abandoned exploitation areas.

3.3. The Spatial Planning Act of 2017 (ZUreP-2)

The 2017 Spatial planning Act introduced a new Slovenian term for brownfields – a devalued area. Based on the inquiry at the Ministry of environment and spatial planning, the main reason

for this mayor terminology change is the fact, that the Environmental protection Act (ZVO-1, 2004) uses the term degradation strictly related to environmental pollution or contamination and the legislature for Spatial planning Act had to find a different term. The exclusion of the term was so thorough that the term was not even used as a generic adjective, so the general search didn't find any match related to the term degradation.

Article 3 (definition of terms) set a new definition for a brownfield site (devalued area) as an "area which, due to its inappropriate or abandoned use, has reduced the economic, social, environmental or visual value or value according to the criteria for the protection of cultural heritage and is in need of regeneration. Devalued area (brownfield) may show different types and levels of devaluation, based on functional, environmental, social and cultural heritage criteria.

Article 20 (rational use of space) defines that rational use is primarily achieved through the regeneration and land use change of existing brownfields and settlement areas.

Article 21 (settlements and landscapes identity) in paragraph 1, outlines that the spatial planning of settlements must protect their image, scale and landscape framework, plan brownfields rehabilitation and create new architectural and landscape identity in harmony with the existing qualities. Paragraph 3 also outlines the importance of Brownfields, however this time in relation to the term rehabilitation. Due to the fact, that the whole section of Paragraph 3 is mostly associated to landscape issues and was probably prepared in co-operation with landscape architects and might indicate, that the landscape architects define a process of brownfields regeneration with a term rehabilitation. In previous sections and even previous Spatial Planning Acts, the use of term rehabilitation was also associated to Brownfields but was mostly understood for a definition of regeneration of non-urban brownfield sites (in landscape), while in this section, it might be understood for all types of brownfields.

Article 24 defines settlements development principles and promotes inner urban (densification) development of settlements on brownfields and low-density areas.

Article 26 further explains inner urban developments, and again directs to the reuse of brownfields, but instead uses term devalued land and not devalued area as standardized in the introductory part of the law.

Article 62 defines obligatory background analysis, like urban and landscape design concepts, while Article 63 further explains the Urban design concept and Article 64 Landscape design concept. Article 62 defines, that there is a need for a Landscape design concept for rehabilitation of Brownfield land. This diction again points as to understanding that the term brownfield in combination with the process related term rehabilitation implicate relation to (polluted) brownfield sites outside urbanized areas. It is interesting, that in Article 64, which explains Landscape design concept in detail, brownfields are not mentioned. On the other side, article 63, which explains Urban design concept in detail defines Brownfields regeneration as the obligatory content of the document.

The adjective Abandoned is used in the article 3 (definitions) when explaining the term brownfield. In article 29 it is used to define a green or open public space, that was used for a new development and not related to brownfields.

In article 32 (planning spatial arrangements in other regulatory areas) which mentions rehabilitation of abandoned exploitation

areas (probably meant quarries and other opencast mines). Article 242 uses term abandoned for inactive construction pit or construction site, which can be considered as a type of brownfield as well.

Article 3 (definition of terms) in paragraph 1 defines the purpose of the so-called balance-sheet of available build-up areas. The obligatory analysis doesn't involve only the summary of available build-up areas but must also take into consideration areas for potential densification and regeneration.

Paragraph 28 explains the term brownfields regeneration. Direct translation would be "renovation of the area", however the definition follows the common definition of brownfields regeneration as a "collection of various activities for the regeneration of a devalued area (brownfields), which, through spatial planning and land policy instruments and other measures, ensure the preservation of quality built structures and the improvement of functional, technical, spatial-design, living, economic, social, cultural and environmental conditions.

Article 20 (rational use of space) defines that rational use is primarily achieved through the regeneration and land use change of existing brownfields and settlement areas. Article 24 and 26 were explained in the definition of the term Brownfield and are also related to the regeneration.

Article 27 (settlements expansion) defines, that only if inner development and brownfields potentials are already exploited (regenerated), existing settlements can be expanded into greenfield areas, while article 61 only defines the tendering procedures and mentions regeneration processes.

Article 63 defines the purpose and the content of the Urban design concept. It is interesting, that this article as main topics directly mentions brownfields and "the way of their new arrangement" and doesn't use the term used in the definition section for brownfields regeneration. However, the next indent explains the areas of renewal, which might also be understood as brownfields (e.g. social, functional degradation). It seems, that the law distinguishes between brownfields as a result of abandoned industry and defines "areas of renewal" as housing, mixed use or similar areas that need interventions, renewal.

The same can be assumed in article 107, which defines the content of the Municipal Spatial plan and in article 116, which describes the Municipal detailed Spatial plan.

It is also interesting that in article 117, which determines the obligatory content of the Municipal detailed spatial plan, nothing points to brownfields regeneration, except indirectly in the last section, which explain the cultural heritage protection.

The Spatial planning law of 2017 have a whole chapter (chapter 5) devoted to the renewal or regeneration. The article 3 introduced a new term for regeneration direct translation would be renovation of the area (prenova območja) and represent a term for a process (of regeneration). While article 5 (and some articles before) uses the term area for renovation (e.g. regeneration area) which indicated the area and not the process. It remains unclear what is the difference between the term brownfield (razvrednoteno območje) which is defined in the definition section of the law (and is clearly a brownfield) and the "renovation area" (območje prenove). Perhaps both terms can be translated as brownfields with just different typology.

For example, article 238 paragraph 1 explains, that "Property owners in the renovation area are required to make changes

to their properties in accordance with the Detailed Municipal Spatial plan made for the area. Other paragraph also indicates, that this might be understood in the case of renovation of the exterior of the buildings, predominantly in the old city centers and large housing estates.

The term rehabilitation (or maybe even remediation) is translated from Slovenian term "sanacija" It is mentioned in article 21, which was explained in detail in the section of the term brownfields with the assumption, that this term is mostly used in relation to the landscape related topics. The pattern is also seen in article 32 (planning spatial arrangements in other regulatory areas) which mentions rehabilitation of abandoned exploitation areas (probably meant quarries and other opencast mines). On the other hand, article 62 (related to landscape design concept) uses the term in direct relation with the term brownfield (razvrednoteno območje). It is then possible that it was meant to understand it as a remediation and even as a renaturation process in this section. Article 166 (Detailed Municipal spatial plan) uses the term rehabilitation in relation to the exploitation of mineral resources.

Article 252 also uses the term rehabilitation, yet in relation to implementation of land policy measures for a more effective parcel and ownership structure, while Articles 273, 280, 281 and 301 relate to rehabilitation of the urban sprawl.

4. CONCLUSIONS

Brownfield regeneration plays an important role in avoiding urban sprawl, improving the quality of urban environment and therefor create the conditions necessary for sustainable development. (Mušič and Cotič, 2012). The word "brownfield" is translated into many languages in many different ways. This may result in substantially different understanding when other nations (or disciplines) describe their own understanding of brownfields (Ferber (ed), 2006). Since, Brownfield regeneration is a complex and a long-term process that involved several disciplines and many stakeholders (Tabasso et al (ed), 2019), it is of vital interest to enable common understanding in order to achieve effective results. The terminological analysis of the three post-independence Spatial planning laws in Slovenia show that the Brownfield related content increased with each new version of the law. The terminology changed with each new law and the definitions as well. The ZUrep-1 didn't provide a definition of the brownfield in introductory part of the law, but the topic is included, and the main term used for a Brownfield is a degraded urban area as defined in the important research project made by Faculty of Architecture in 1998 (Koželj et al, 1998). The ZPNačrt changed the terminology for a Brownfield from Degraded urban area to degraded space. It is a step forward, since the research showed that brownfields can also occur in rural or other non-urbanized areas. Also, the definition of a regeneration process changed from renovation in ZUrep-1 to comprehensive renovation which is again in line with new findings at the time of the new law was prepared. Also, both main terms were clearly defined. ZUrep-2 again changed the terminology. Brownfields were defined as devalued areas and the regeneration process definition abolished the adjective comprehensive, which is a step back is the clarity viewpoint of definitions. There is a constant terminological differentiation in all three laws in the definition of the regeneration process. One is used for urban brownfields (prenova) and other for non-urban (rehabilitation, sanacija). It seems that one terminology came from the urban planning field and the other one from the environmental and landscape field. There is a need for a

more standardized approach in terminology and an overall shift towards understanding brownfields as a spatial phenomenon that regardless of its location needs a holistic approach in regeneration. It is interesting to notice, that the research project made by Faculty of Architecture, which strongly influenced the ZUreP-1 in the topic of Brownfields (Koželj et al 1998) and which definitions were used as standard for many years also used the term devalued when defining the term degraded urban areas. So, we can assume, that even after more than 20 years, the book also influenced the preparation of the latest Spatial planning act in Slovenia, the ZUreP-2. As Brownfield related knowledge is relatively new, it is normal that due to the constant and intensive flow of new knowledge, terminology cannot be fixed. However, the terminology used in certain law, should follow clear and concise common definition during the entire content of the law. Spatial planning legislation is such forum, that can and should set basic fundaments for such common understanding in the field of Brownfields regeneration.

Acknowledgement

This research paper is elaborated as a reflection on the author's Ph.D. progress entitled: "Evaluation and Development of a Brownfields Inventory Methodology in Slovenia, the Case of the City of Kranj", at the University of Ljubljana- Faculty of Architecture, Ljubljana, Slovenia. Supervised by: prof. dr. Lucija Ažman Momirski.

References

- Cabernet (2006). Sustainable Brownfield Regeneration. *Cabernet Network Report*. Nottingham, University of Nottingham, 134p.
- Cotič, B. (2018). Industrial symbiosis in brownfields in Kranj, Slovenia. *V: 3rd World Multidisciplinary Civil Engineering, Architecture, Urban Planning Symposium (WMCAUS 2018), 18-22 June 2018, Prague, Czech Republic*. IOP conference series, ISSN 1757-899X, Materials science and engineering, 471. Bristol: IOP. 2019, 471, 1-10. <https://iopscience.iop.org/article/10.1088/1757-899X/471/1/112073>.
- De Sousa, C. (2017). Trying to Smart-In-Up and Cleanup Our Act by Linking Regional Growth Planning, Brownfields Remediation, and Urban Infill in Southern Ontario Cities. *Urban Planning*, 2(3), 5. <http://dx.doi.org/10.17645/up.v2i3.1026>
- Ferber, U. (ed.). (2006). *Brownfields handbook*, Poland, Ostrava, LEBOP, Leonardo da Vinci pilot project. http://fast10.vsb.cz/lepob/index1/handbook_eng_screen.pdf, Accessed on 3rd July 2019.
- Garb, Y. In Jackson, J. (2011). Brownfields in the Czech Republic, 1989–2009: The long path to integrated land management. *Journal of Urban Regeneration and Renewal, Henry Stewart Publications*, 3(3), 263–276.
- Gomboc, M. (2018). *Mala slovnica slovenskega jezika : priročnik za šolo in vsakdanjo rabo*, 1. izd., 7. natis, dotis, DZS, Ljubljana 2018.
- Ilik, J. and Bergatt Jackson, J. (2006). *Dobrodružství kocoura Brownfielda: kocour Brownfield přináší nové příležitosti našim městům a obcím*. Ostrava: IURS. Retrieved from <https://www.iurs.cz/www/files/upload/file/Kocour%20Brownfield.pdf>
- Koželj, J., Ažman Momirski, L., Maligoj, T., Omerzu, B. (1998). *Degradirana urbana območja*. Ljubljana: Ministrstvo za okolje in prostor, Urad RS za prostorsko planiranje.
- Lampič, B., et al. (2017). *Celovita metodologija za popis in analizo degradiranih območij, izvedba pilotnega popisa in vzpostavitev ažurnega registra: končno poročilo*. Ljubljana: Filozofska fakulteta, Univerza v Ljubljani, 2017.
- Longo, A., Campbell, D. (2017). *The Determinants of Brownfields Redevelopment in England* *Environmental and Resource Economics*, 67(2), p. 261. <https://doi.org/10.1007/s10640-015-9985-y>
- Mušič, B. and Cotič, B. (2012). *Brownfield regeneration management: From education to practice*, final Brochure of the project INTERREG Central Europe COBRAMAN, Urbanistični inštitut Republike Slovenije, Ljubljana, 2012.
- Oliver, L., Ferber, U., Grimski, D., Millar, K. and Nathanail, P. (2005). *The Scale and Nature of European Brownfield*. Berlin: Federal Environment Agency Germany.
- Oliviera, E.H. da S. (2015). Place branding in strategic spatial planning: A content analysis of development plans, strategic initiatives and policy documents for Portugal 2014-2020. *Journal of Place Management and Development*, 8 (1), pp. 23–50.
- Tabasso, M., Marietta, C., Melis, G. (ed). (2019). *Implementation of Sustainable Land Use in Integrated Environmental Management of Functional Urban Areas*, LUMAT project Booklet, <https://www.interreg-central.eu/Content.Node/LUMAT/Final-Booklet.pdf>.
- Pravno informacijski sistem. (2002). *Zakon o urejanju prostora*. Retrieved July 15, 2019 from <http://www.pisrs.si/Pis.web/pregledPredpisa?id=ZAKO1581>
- ZPNačrt. (2007). *Zakon o prostorskem načrtovanju*, Ur. l. RS št. 33/2007. Retrieved June 1, 2019 from <https://www.uradni-list.si/glasilo-uradni-list-rs/vsebina/2007-01-1761?zop=2007-01-1761>
- ZUreP-1. (2002). *Zakon o urejanju prostora*, Ur. l. RS št. 110/2002. Retrieved June 1, 2019 from <https://www.uradni-list.si/glasilo-uradni-list-rs/vsebina?urlurid=20025386>
- ZUreP-2. (2017). *Zakon o urejanju prostora*, Ur. l. RS št. 61/2017. Retrieved June 1, 2019 from <https://www.uradni-list.si/glasilo-uradni-list-rs/vsebina/2017-01-2915>
- ZVO-1. (2004). *Zakon o varstvu okolja (Environmental Protection Act)*, Ur. l. RS št. 41/2004. Retrieved June 1, 2019 from <https://www.uradni-list.si/glasilo-uradni-list-rs/vsebina/172890>