

Specifics of brownfields prioritization in large municipalities (case study area Brno)

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Outline

- I. **INTRODUCTION – DIFFERENT APPROACHES OF LARGE CITIES**
- II. **SITUATION IN BRNO CASE STUDY AREA**
- III. **USE OF BRNO DATA FOR TESTING OF TIMBRE PRIORITISATION TOOL**
- IV. **NEW KINDS OF PRIORITISATIONS – FOLLOWING RESEARCH ACTIVITIES**
- V. **CONCLUSION AND DISCUSSION....**

I. Introduction – different approaches

- Czech Republic belongs to the countries with huge occurrence of the brownfields - long-term industrial tradition of the country

- the process of deindustrialisation started later than in West-European countries – in 1989 with the return of market economy

- there are databases of brownfields at regional and municipal level (large municipalities)

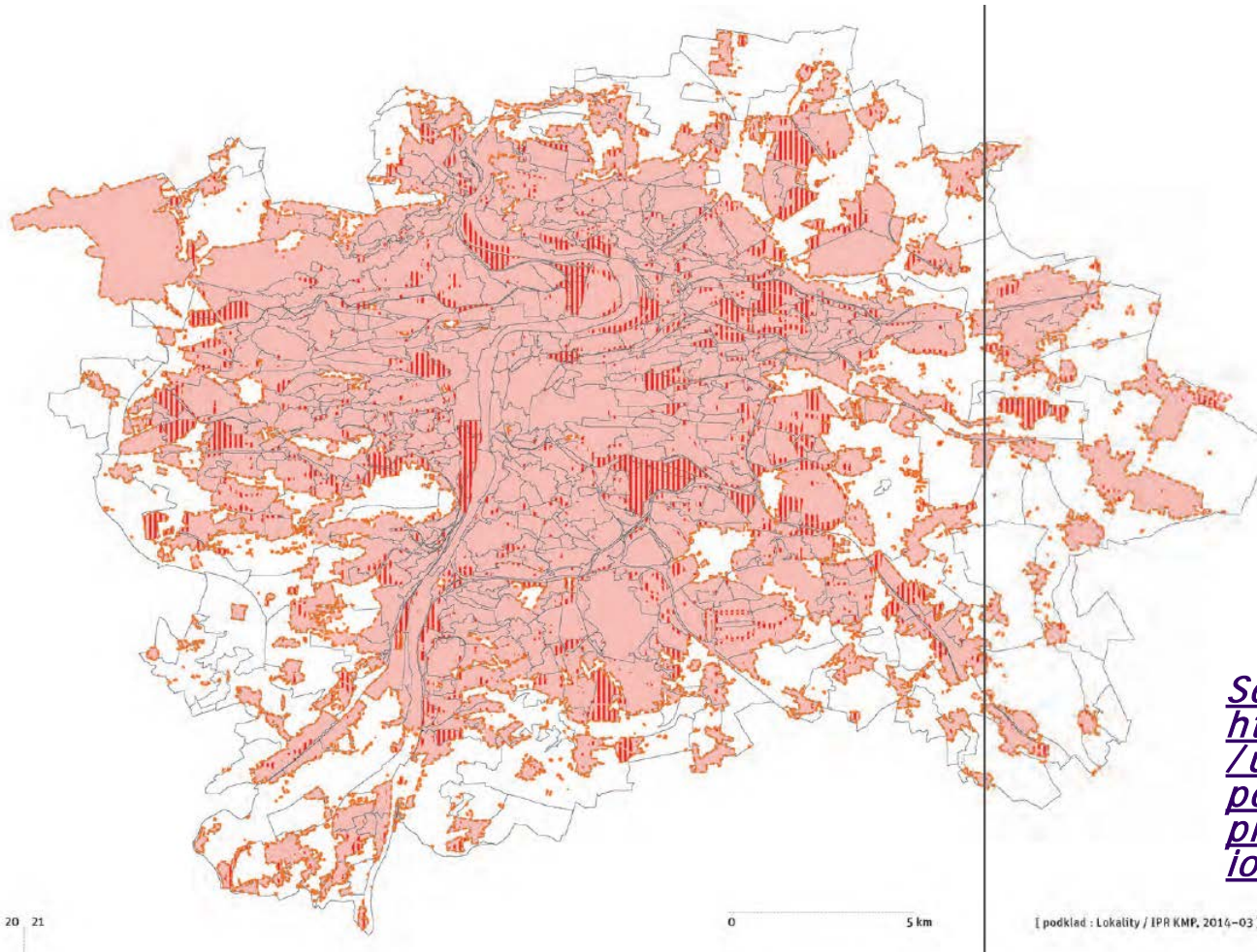
- Large municipalities developed the different approaches – part of them have active policy (interventionists approach), part of them have passive policy (non-interventionists approach)

- In urban space the issue can be also solved based on different methodological approaches



I. Introduction – different approaches

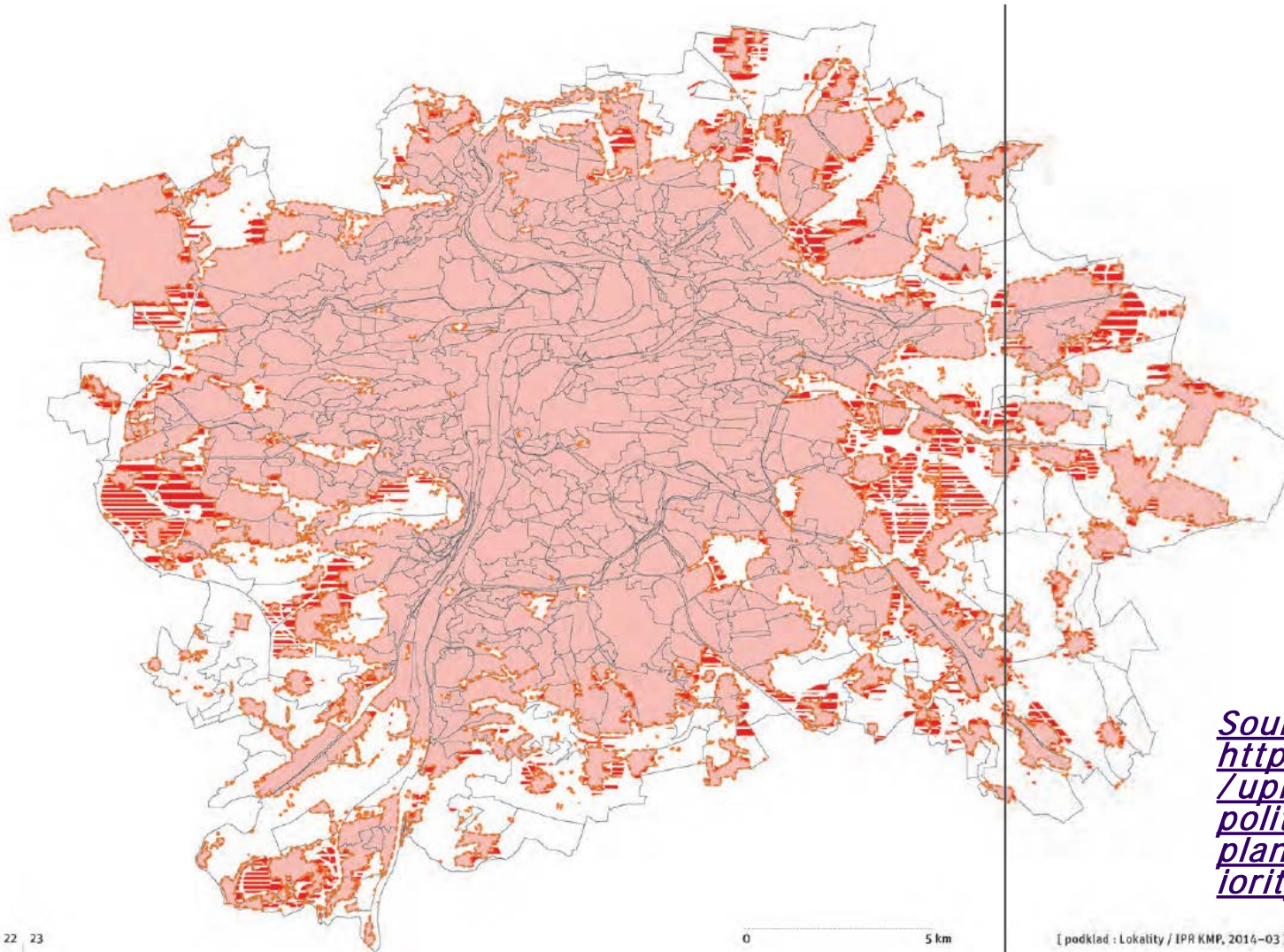
■ *In Prague* there is no urban database of brownfields – the issue is part of concept of transformation areas (=includes brownfields) and development areas (= greenfields)



Source:
http://plan.iprpraha.cz/uploads/assets/metro_politni-plan/400_Potencial_priority_a_flexibilita.pdf

I. Introduction – different approaches

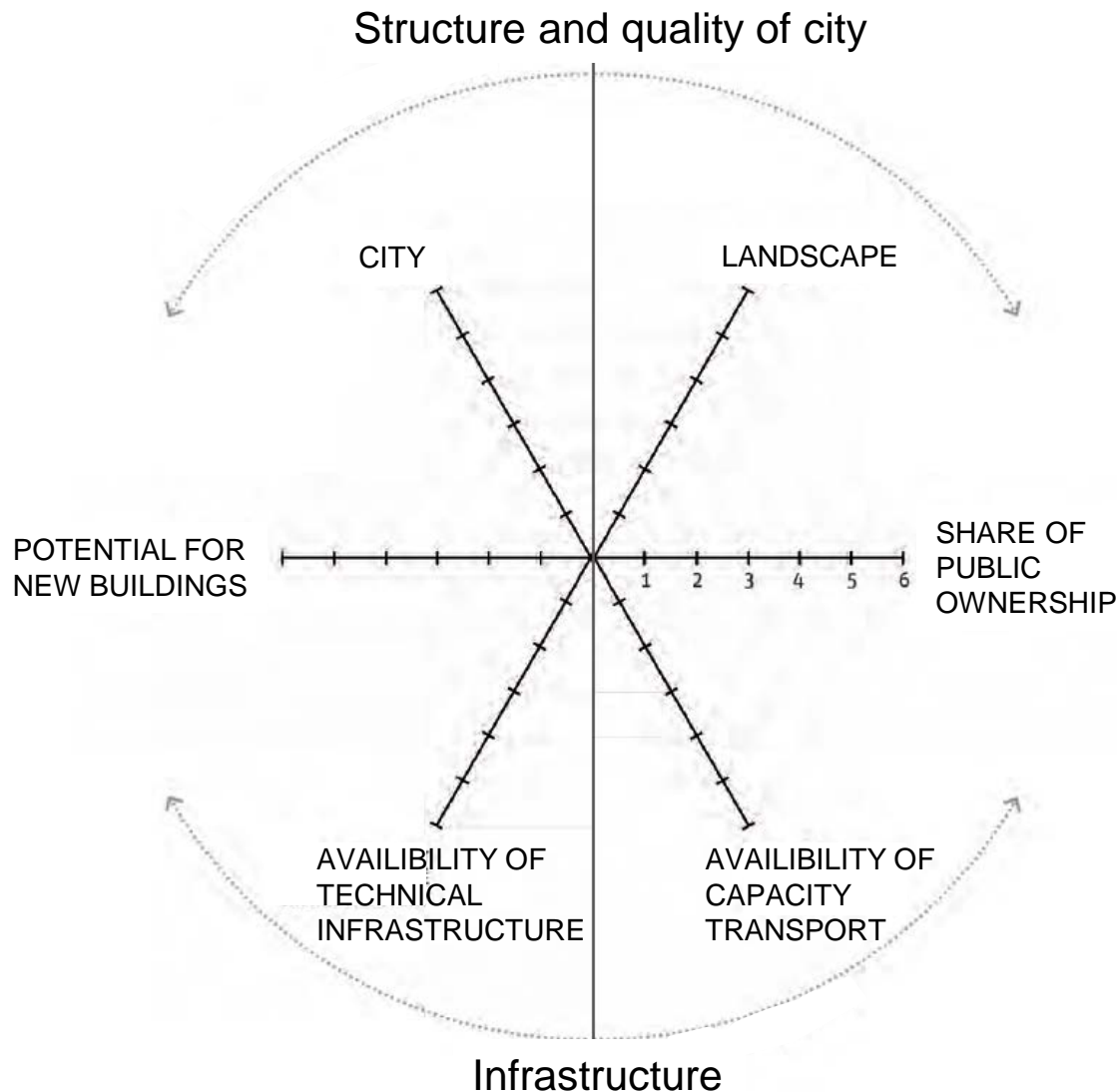
- New development areas (=greenfields) - located out of built-up areas



Source:
http://plan.iprpraha.cz/uploads/assets/metro-politni-plan/400_Potencial_priority_a_flexibilita.pdf

I. Introduction – different approaches

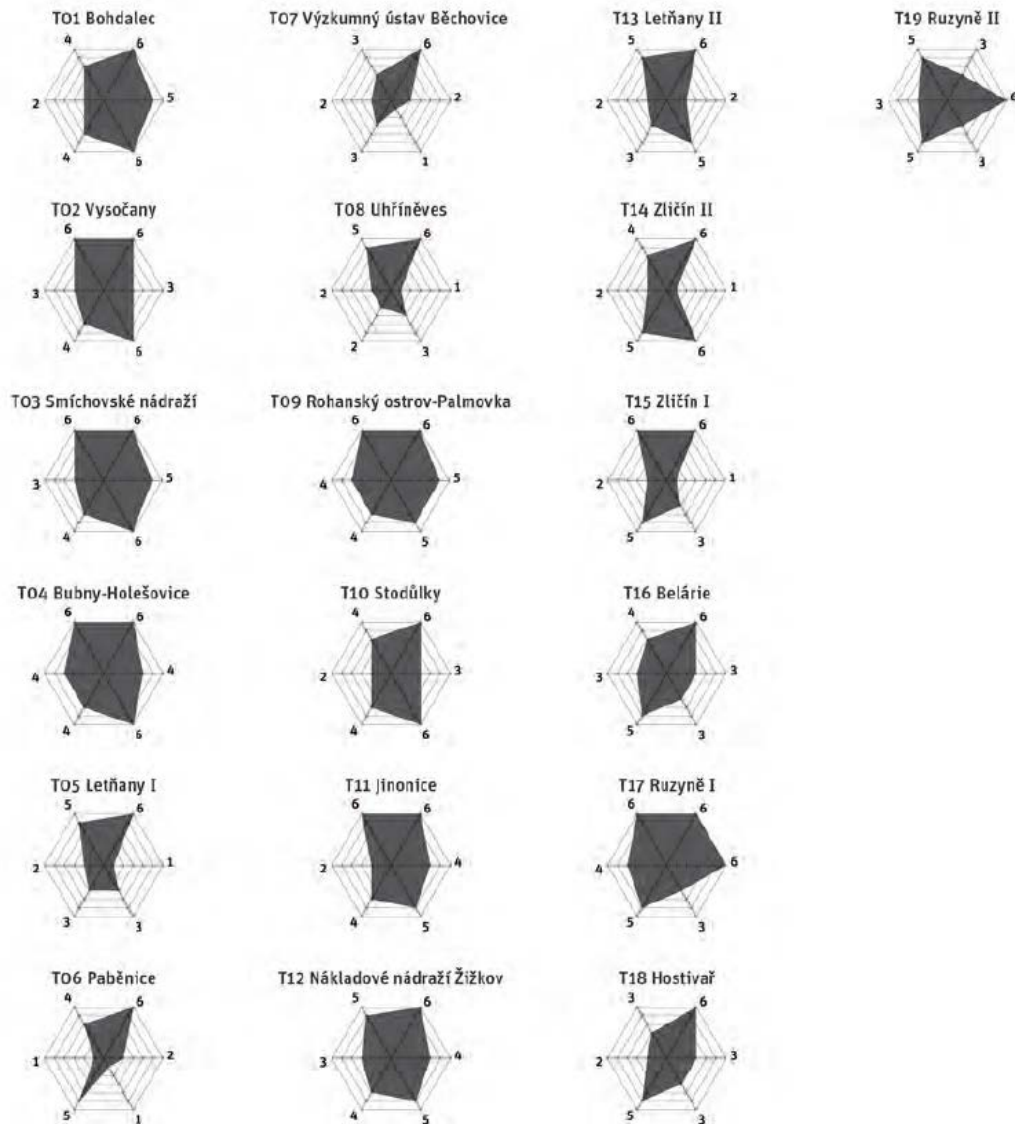
- The potential both transformation and development areas is evaluated from 6 perspectives



Source:
http://plan.iprpraha.cz/uploads/assets/metro_politni-plan/400_Potencial_priority_a_flexibilita.pdf

I. Introduction – different approaches

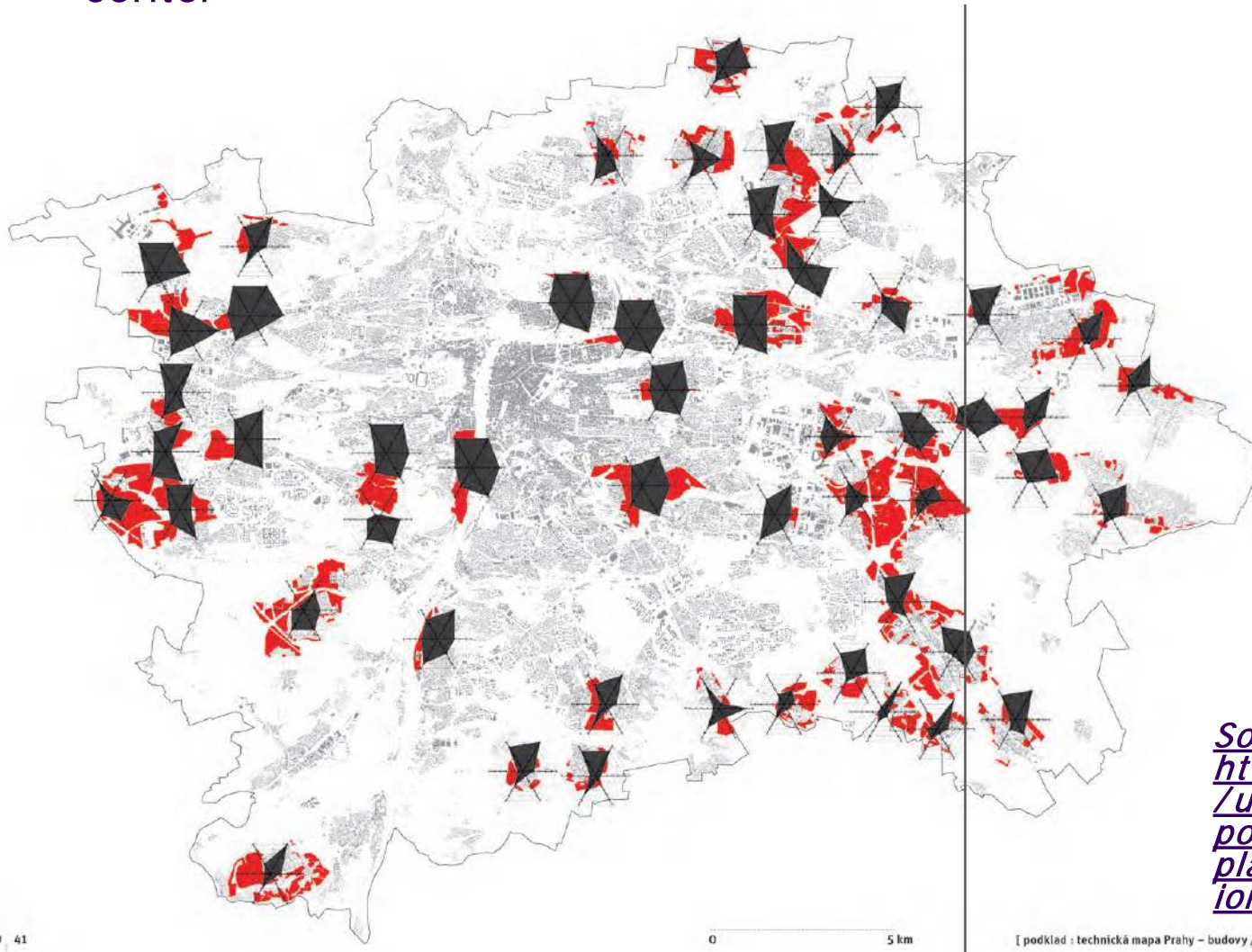
Potential is presented in form of diagrams for concrete areas



Source:
http://plan.iprpraha.cz/uploads/assets/metro-politni-plan/400_Potencial_priority_a_flexibilita.pdf

I. Introduction – different approaches

- Or in form of map – the highest potential areas in proximity of city center



Source:
http://plan.iprpraha.cz/uploads/assets/metro-politni-plan/400_Potencial_priority_a_flexibilita.pdf

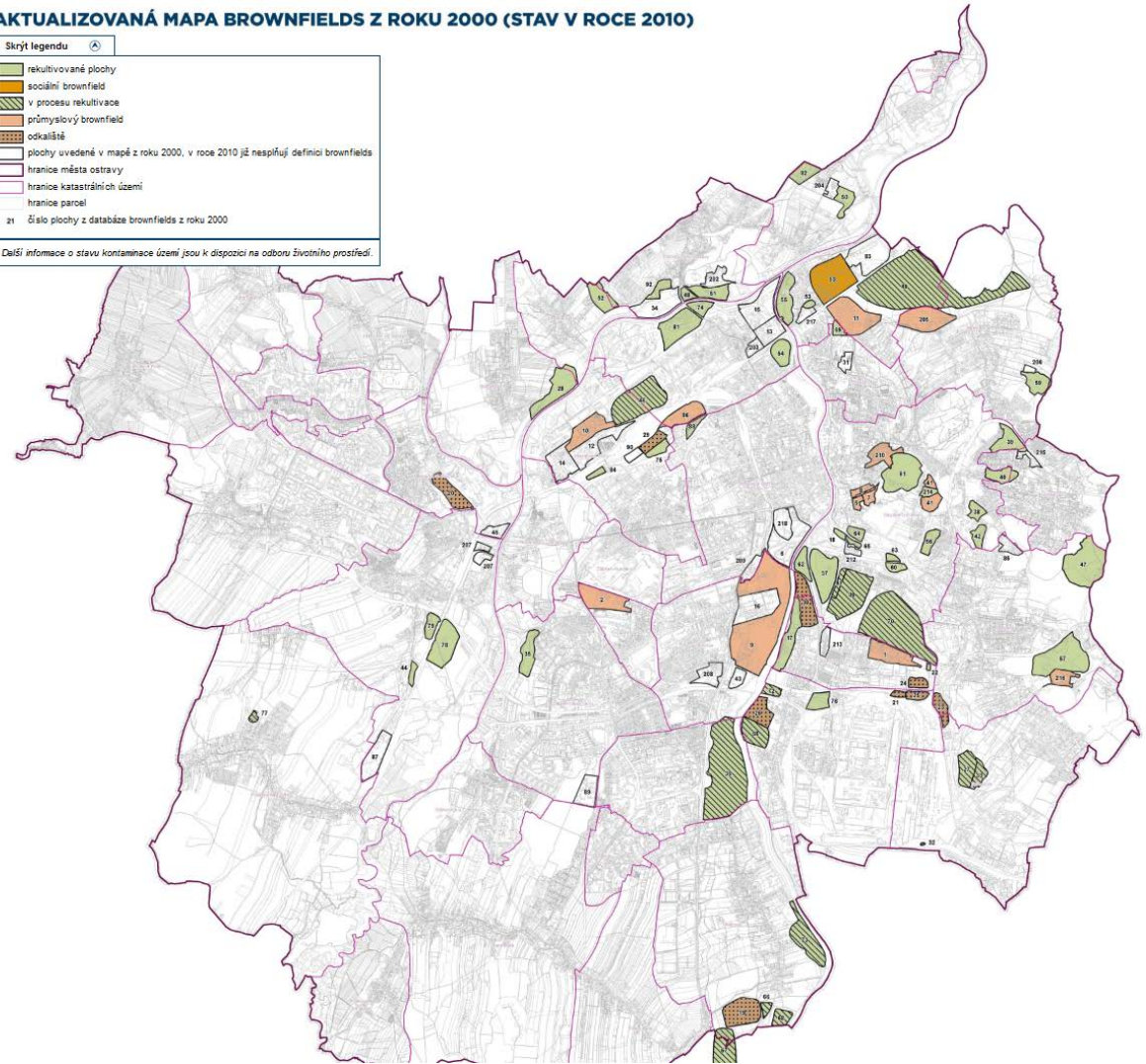
I. Introduction – different approaches

- Other large cities (with minimal population size = 90.000 and more inhabitants)

- Attention of huge intensity – declining or „shrinking“ cities with problems with deindustrialization (e.g. Ostrava, Ústí nad Labem),

- Attention of lower intensity – successfully developing cities (e. g. Plzen, Liberec) – problem is solved by private developers

AKTUALIZOVANÁ MAPA BROWNFIELDS Z ROKU 2000 (STAV V ROCE 2010)



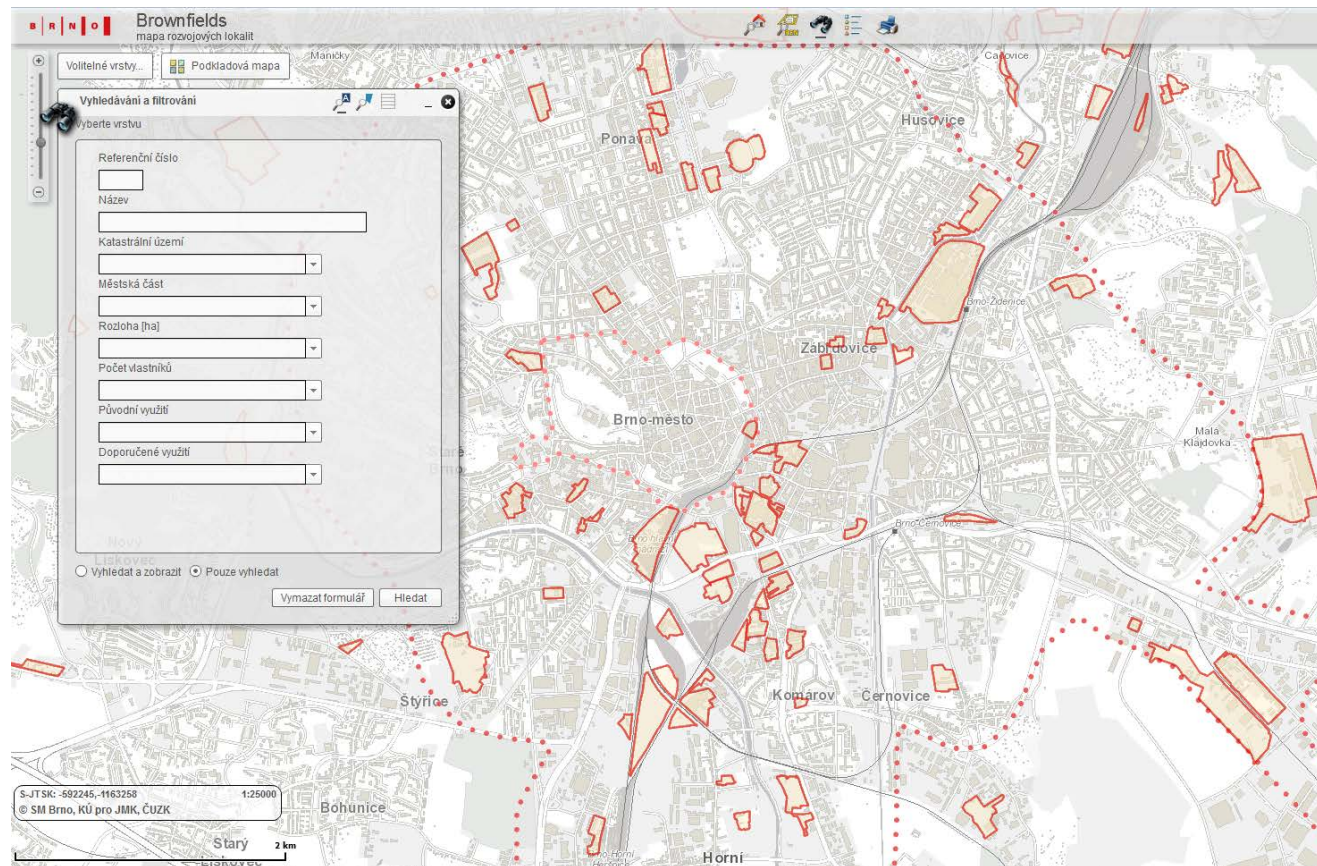
Source:
<https://dycham.ostrava.cz/brownfields/brownfields.html>

II. Situation in Brno case study area

- Brno - the second largest city in the Czech Republic with approximately 380 thousands inhabitants

- Long industrial tradition

- Huge attention to the issue of brownfields – database of non-regenerated brownfields with minimal size 0,5 ha



Source:

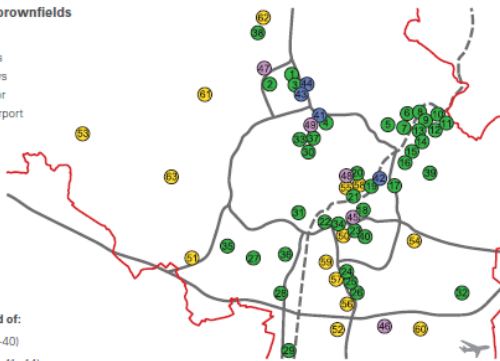
http://gis.brno.cz/flex/flexviewer/index.php?project=gismb_brownfields_public

II. Situation in Brno case study area

Brno also published list of revitalized brownfields on its territory

Fig. Former revitalised brownfields

— City Boundaries
— Major Roadways
- - - Railway Corridor
 International Airport



Revitalisation in the period of:

- from 90's - 3/2006 (No. 1-40)
- from 4/2006 - 9/2007 (No. 41-44)
- from 10/2007 - 3/2009 (No. 45-49)
- from 4/2009 - autumn 2012 (No. 50-63)

Tab. Recorded former revitalised brownfields

NUMBER	NAME OF SITE	CADASTRE
REVITALISED BY 3/2006		
1	ZPA BRNO, spol. s r.o., Palackého tř. 160	Královo Pole
2	TESLA ELMi, a.s. – Technical museum, Purkyňova 99 street	Královo Pole
3	KC SEMILASSO, Palackého třída 126	Královo Pole
4	Former brickworks Červený mlýn – OD Tesco, VAKABRNOČZ s.r.o., Cimburkova 4	Ponava
5	DYHA furniture-making cooperative, Franzosa 63	Maloměřice
6	Revitalised Maloměřice cement works site, Obfanská street	Maloměřice
7	Revitalised production premises, FEROMAT, Hádecká street	Maloměřice
8	Ceskomoravský cement, Brněnské vodárny a kanalizace, Podzemní	Maloměřice
9	MEDJURI, Hády 1a	Maloměřice
10	Ceskomoravský cement, a.s., removed former storage tanks, Hády	Maloměřice
11	Former building of Ceskomoravský cement – KROMA Jaroslav Králík, Hády	Maloměřice
12	Former JME site, administration building of SEKV s.r.o., Hády 2	Maloměřice
13	Plast Brno, spol. s r.o., Jamí 42	Maloměřice
14	AZD Praha, Kulkova 1	Maloměřice
15	Technologické centrum, a.s., Kulkova 14	Maloměřice
16	OD LERK, Rokytova 1	Zidenice
17	Former AESKULAP – polyfunctional building and Municipal District Office- Brno-Zidenice, Gajdošova 7	Zidenice
18	Former 1. brněnská strojírna – ALSTOM POWER, s.r.o., Olomoucká 7/9	Zidenice
19	MORAVAN site, presently a multifunctional building (business and housing), Zábřdovická 16a	Zábřdovice
20	Former Viněna – presently shopping centre INTERSPAR, Tkalcovská 1	Zábřdovice
21	JMP Jihomoravská plynárenská, a.s. Plynárenská 1; Městská elektrárna, Plynárenská	Zábřdovice
22	Vaňkova site – Galerie Vaňkova, Vaňkova steel foundry, Wannick Gallery, JIŽNÍ CENTRUM BRNO, a.s. Dornych street	Tmitá
23	Brněnské komunikace, a.s. – Masné site, operation site, Masná 7	Tmitá

24	LIDL shopping centre, Hněvkovského street	Komárov
25	RENAULT CR, a.s., Hněvkovského 65	Komárov
26	SYKORA, spol. s r.o., Hněvkovského 67	Komárov
27	Former panel works –presently shopping centre KAUFAND, Kamenice	Bohunice
28	SKANSKA DS, a.s., Bohunická 133	Horní Heršpice
29	BIBUS, s.r.o., Videňská 125	Přizřenice
30	Brewery MORAVIA, Kotlářská	Veveří
31	Former MEOPTA – dental clinic, Hybešova street	Staré Brno
32	Part of the foundry - ROUČKA Slatina a.s., Tufanka street	Slatina
33	ZBROJOVKA Brno –presently Sekyra Group Morava s.r.o., Šumavská 15	Ponava
34	Production site ABB – presently LIDL store, Dornych	Tmitá
35	Former VU CHIRANA Brno – presently University Campus MU Bohunice, Kamenice	Bohunice
36	Former AVIA – OC INTERSPAR, Videňská and Strážní streets	Štýřice
37	Former Jaselská barracks – presently a head office of companies, Staňkova street	Ponava
38	Former granary – presently a cultural centre, Kytnerova street	Medlánky
39	Shopping centre under construction – multifunctional building, Pálevské nám.	Zidenice
40	Transformer station – presently Archives of the City of Brno, Přední street	Cernovice

REVITALISED – 4/2006 – 9/2007		
41	Former site of JMP Brno – present business premises of JMP Net. s.r.o.	Ponava
42	Former site of Lakrumka – presently shopping centre Kaufland	Zidenice
43	Brno University of Technology, Božetěchova street	Královo Pole
44	Brno University of Technology, Roman Catholic parish at the Holy Trinity Church, Božetěchova street	Královo Pole

REVITALISED – 10/2007 – 3/2009		
45	Part of the site of Masná – Křenová street – present housing development	Tmitá
46	Part of the premises of the former Teslamp – presently the head office of firms, Kaštanová street	Brněnské Ivanovice
47	Former Meopta – currently BUT Brno – Faculty of Chemical Engineering, Purkyňova	Medlánky
48	Administration-training centre of the South Moravian region – formerly used by the Ministry of Interior, Cejl street	Zábřdovice
49	Part of the former production site ÚP Rousnov – presently shopping centre Kaufland, Sportovní	Ponava

REVITALISED – 4/2009 – autumn/2012		
50	Former Skrobárny Brno – CTZone, Skrobárenská street	Tmitá
51	Former Delvita – Tabák plus, Jihlavská street	Starý Lískovec
52	Part of former Autodas – residential park CUBBE, Vomáčkova street	Dolní Heršpice
53	Block of flats Pohoda, Pod kopcem street	Žebětín
54	Part of former Aeroklub – production plants - Ivar, Ergozet, Těžební street	Cernovice
55	Part of former correctional institution in Cejl – presently a lodging house	Zábřdovice
56	Part of former Florimex site – present business premises, Sokolova street	Horní Heršpice
57	Part of former garden centre in Hněvkovského street – sports facility	Komárov
58	Part of the site between Cejl street and the Svitava river, business premises, MOZARTKA residential building	Zábřdovice
59	Part of the site in Vodafská street, TERRABAU, s.r.o.	Horní Heršpice
60	Part of the former building premises of Inženýrské stavby – present business premises	Brněnské Ivanovice, Tuřany
61	Former nursery – presently DPS Vavřinecká 13	Komín
62	Incomplete self-service market – presently a residential building, Renčova street	Rečkovice
63	Former children's home Juventus – presently a residential building	Kohoutovice

II. Situation in Brno case study area

- Importance of issue in Brno influence by effect of southern center – concentration of underdeveloped underused and neglected sites (about 50 ha) southern from main railway station

- Very controversial political issue – traditional development (offices, shops) supported by traditional political parties (social and civil democrats) versus alternatives (recreational zone) supported by new initiatives (Green party, Zit Brno) – in detail described in article Anna Durnova

Journal of Environmental Policy & Planning, 2013
<http://dx.doi.org/10.1080/1523908X.2013.829749>



A Tale of 'Fat Cats' and 'Stupid Activists': Contested Values, Governance and Reflexivity in the Brno Railway Station Controversy

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ABSTRACT *The article explores one of the biggest controversies over sustainability in modern Czech history, a protracted conflict over whether the Brno railway station should be re-built in a new location. By examining the language of the interaction between a 'modernizing discourse' and a 'sustainability discourse', the article highlights reflexivity as analytic enterprise that bares the governance dimension of policy conflicts. The reflexive analysis focuses on how actors justify their positions, how they distinguish themselves from their opponents and how they express trust in their own group. It reveals that both discourses are not only related to the re-location issue per se, but that they entail contested notions of legitimate knowledge and modes of governance. Since such power contest is common in sustainability controversies, the reflexive analysis suggests a novel analytical agenda for addressing policy conflicts in sustainability issues.*

KEY WORDS: Brno railway station, Czech Republic, discourse, French discourse linguistics, participation, reflexivity

Source:

<http://www.tandfonline.com/doi/pdf/10.1080/1523908X.2013.829749#preview>

III. Use of Brno – TIMBRE prioritization tool

The data from Brno were used for testing of TIMBRE prioritization tool – available at <http://www.timbre-project.eu/>

3 pre-set dimensions:

- (1) LOCAL DEVELOPMENT POTENTIAL – based on available data and information related to the municipalities (or other administrative/statistical units), depending on where the brownfields are located (perspective of surrounding conditions)
 - (2) SITE ATTRACTIVENESS AND MARKETABILITY – based on available data and information related to brownfield sites (commercial potential perspective)
 - (3) ENVIRONMENTAL RISKS - based on available data and information related to brownfields sites (environmental perspective)
- GLOBAL SCORE – calculates score for all three dimensions

Dimension	Factor
LOCAL REDEVELOPMENT POTENTIAL	LAND VALUE
	POPULATION DENSITY
	EDUCATION INDEX
	ENTREPRENEURIAL ACTIVITY
	PERIPHERALITY
	TRANSPORT LINKS
	Total
SITE ATTRACTIVENESS AND MARKETABILITY	SPECIFIC LOCALIZATION
	PREVIOUS USE
	INFRASTRUCTURE
	REGENERATION COSTS
	OWNERSHIP
	Total
ENVIRONMENTAL RISKS	CONTAMINATION
	AREA SIZE
	ZONING
	LANDSCAPE PROTECTION LIMITS
	Total

III. Use of Brno – TIMBRE prioritization tool

- Example of results – 1st dimension – Local development potential – (based on data for aggregated basic settlements units)

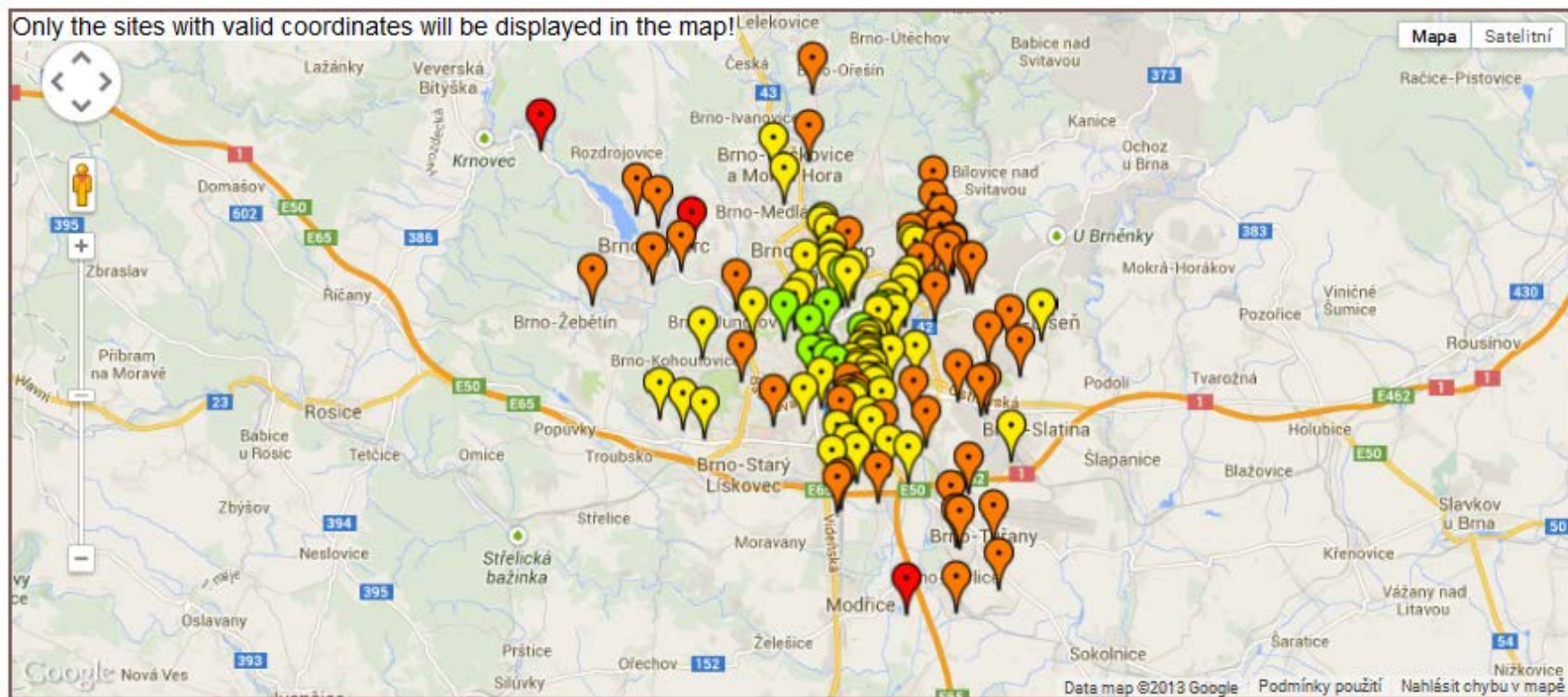


RESULTS

Table

Map

[Export Results](#)



III. Use of Brno – TIMBRE prioritization tool

Example of results – 2nd dimension – Site attractiveness and marketability

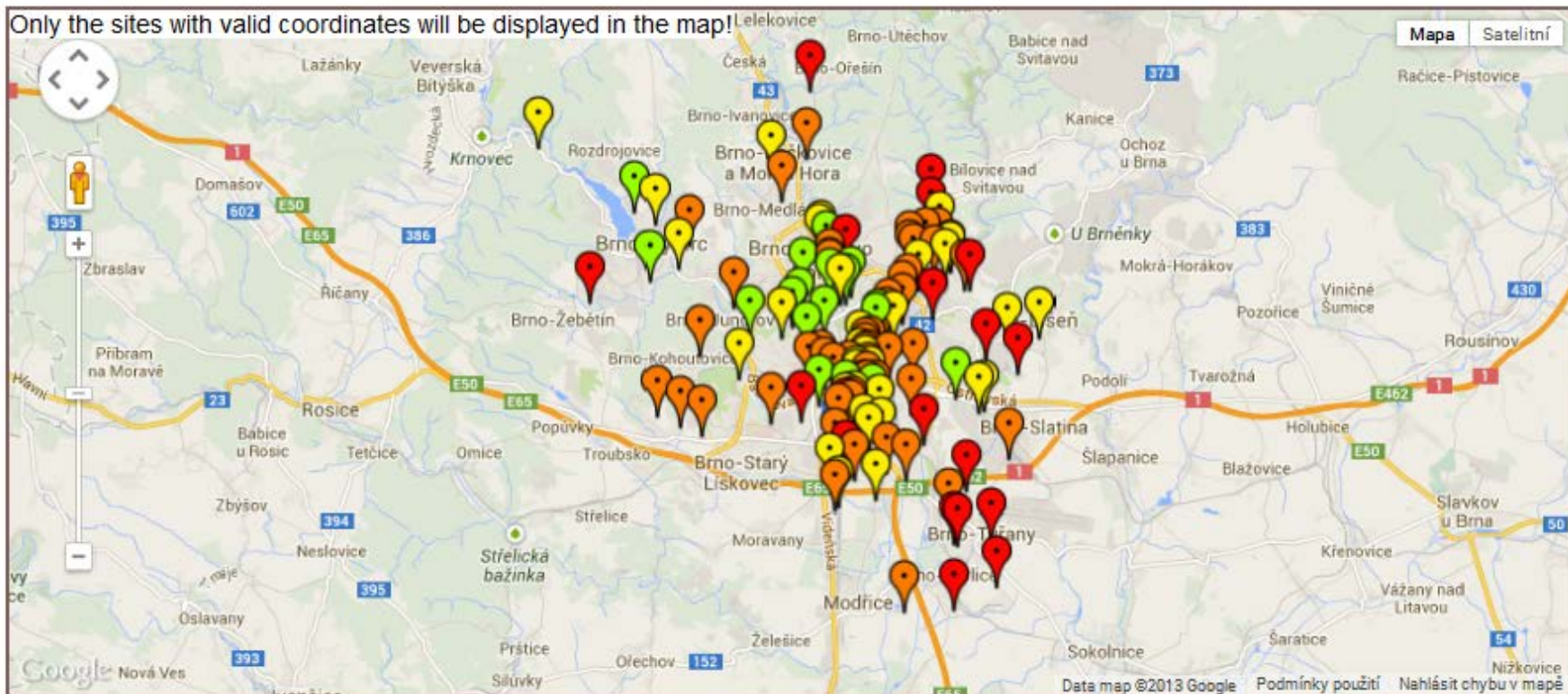


RESULTS

Table

Map

[Export Results](#)



III. Use of Brno – TIMBRE prioritization tool

Example of results – 3rd dimension – Environmental risks

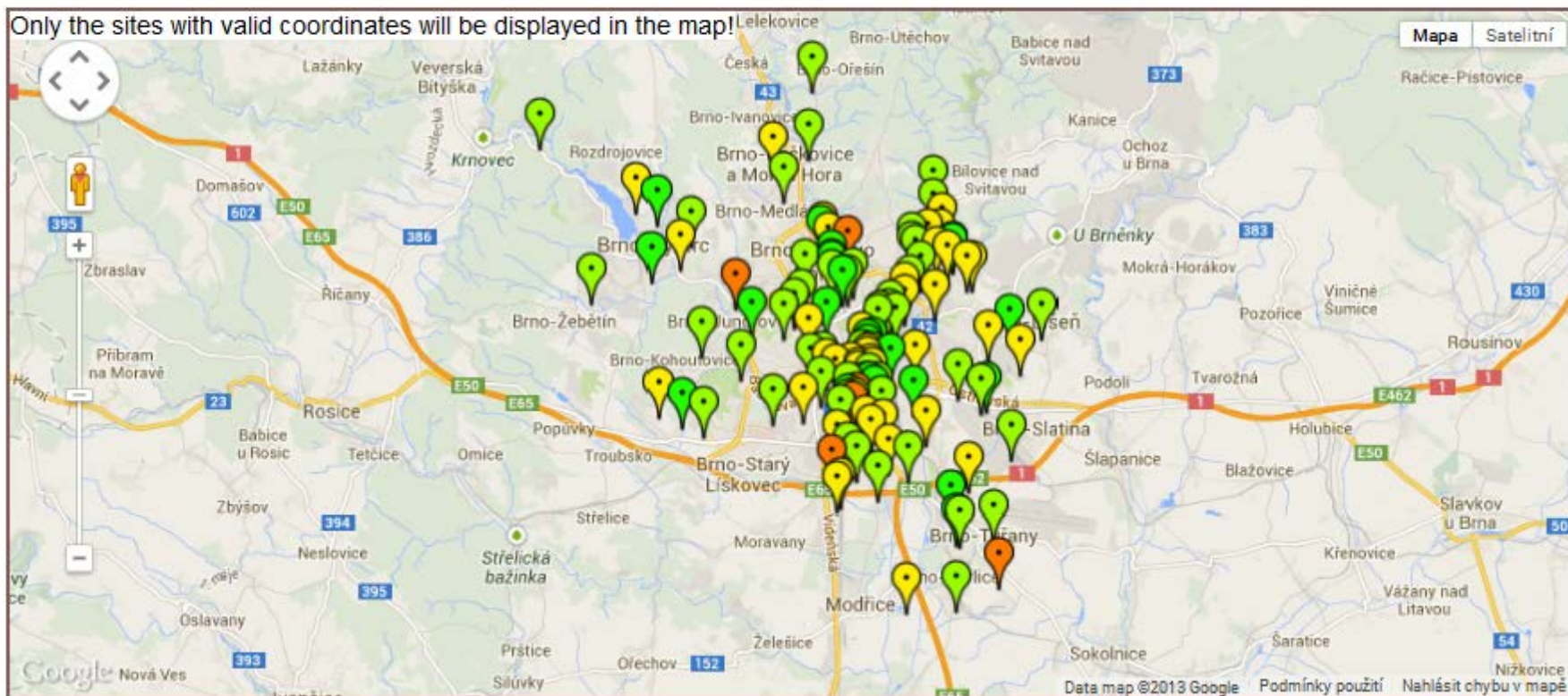


RESULTS

Table

Map

[Export Results](#)



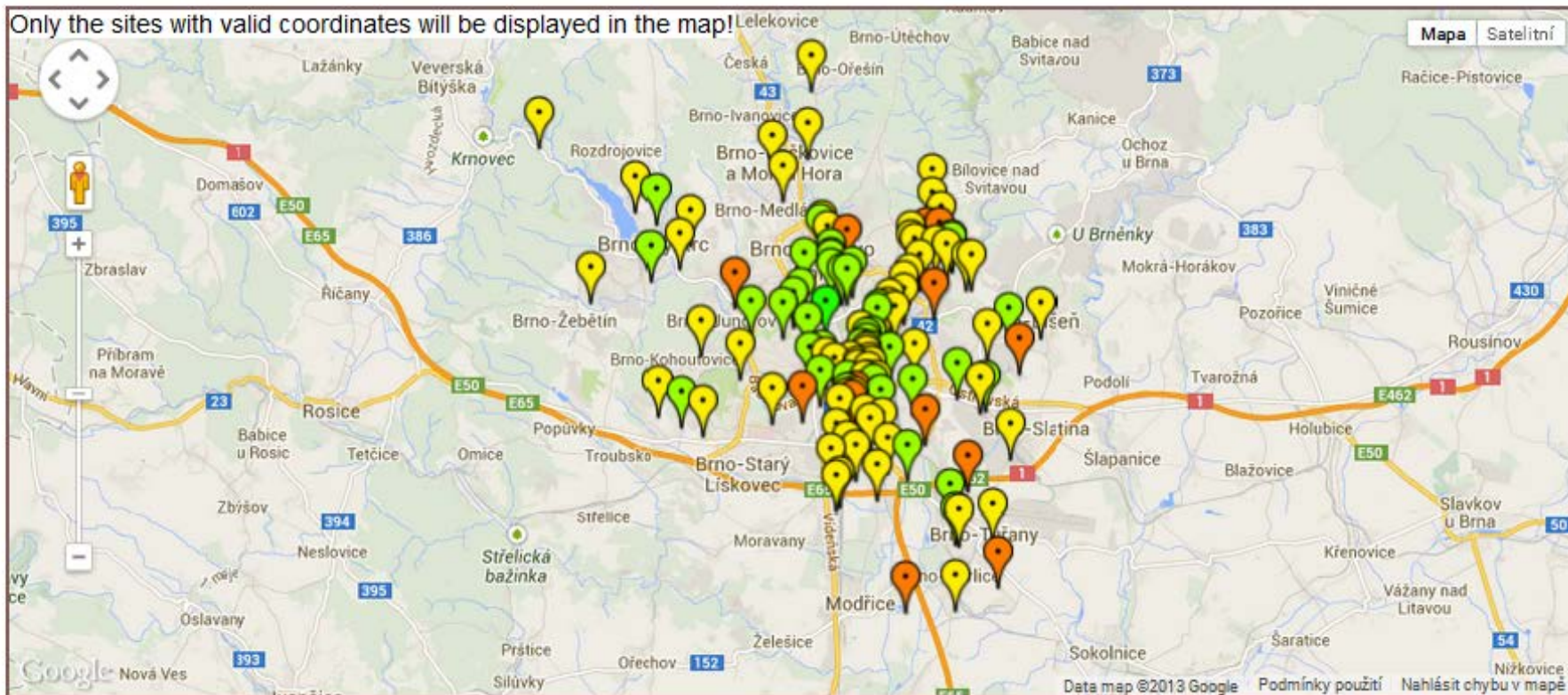
III. Use of Brno – TIMBRE prioritization tool

Example of results – Global score for three dimensions



RESULTS

- Table
- Map
- [Export Results](#)



IV. Following research activities

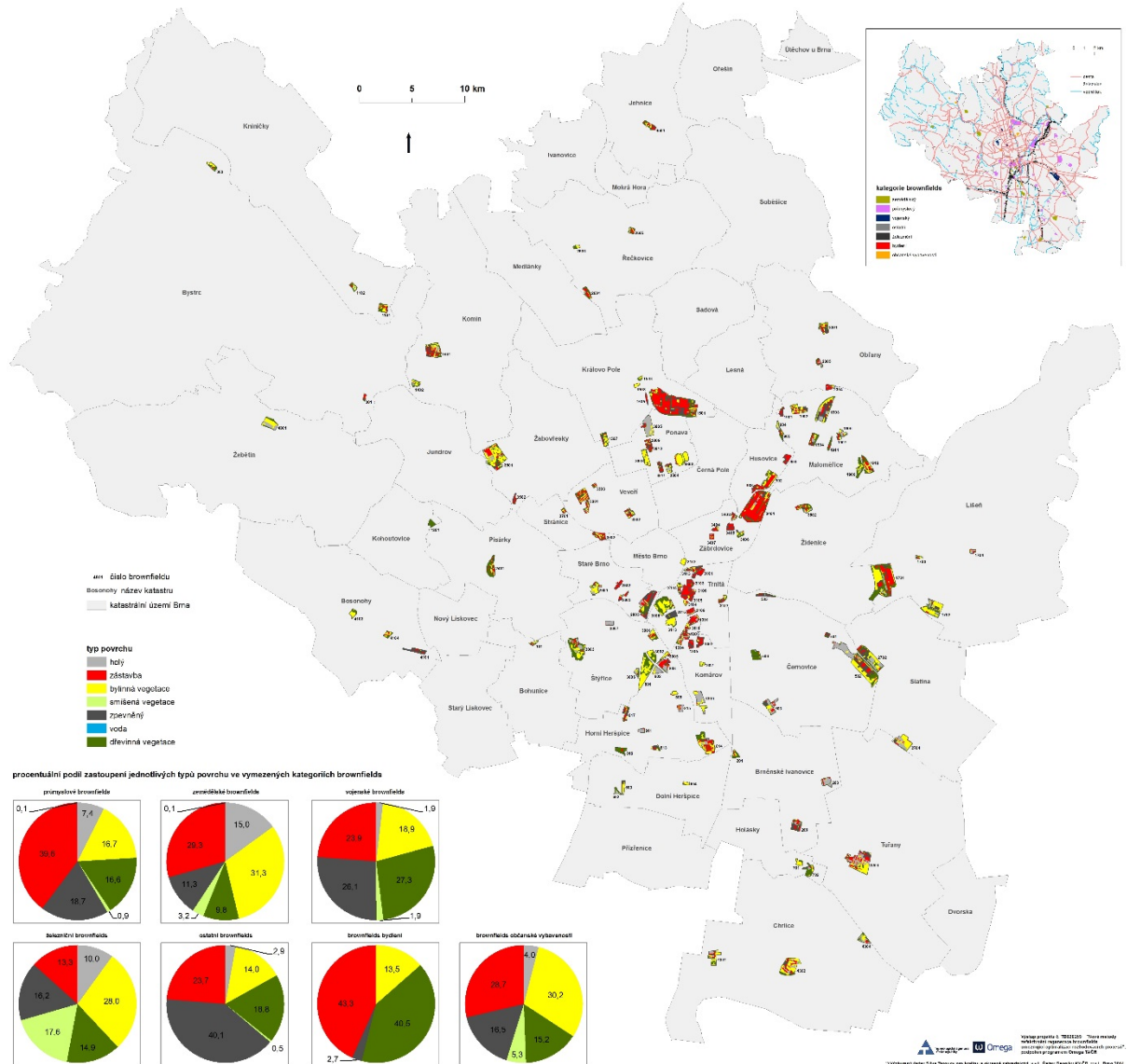
We cooperate with Brno on preparation of the more detail prioritization based on the detail GIS analysis – it is work in progress

For example Prioritization from perspective of urban greenery based on analysis of vegetation development on brownfields

The detail analysis is based on aerial images from 1996, 2003 and 2012

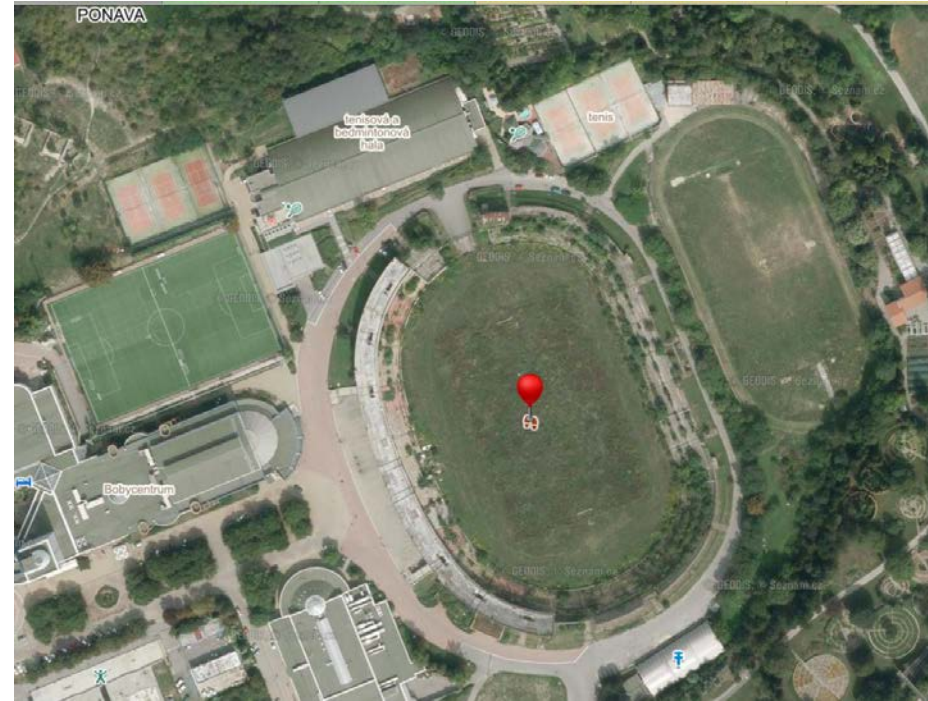
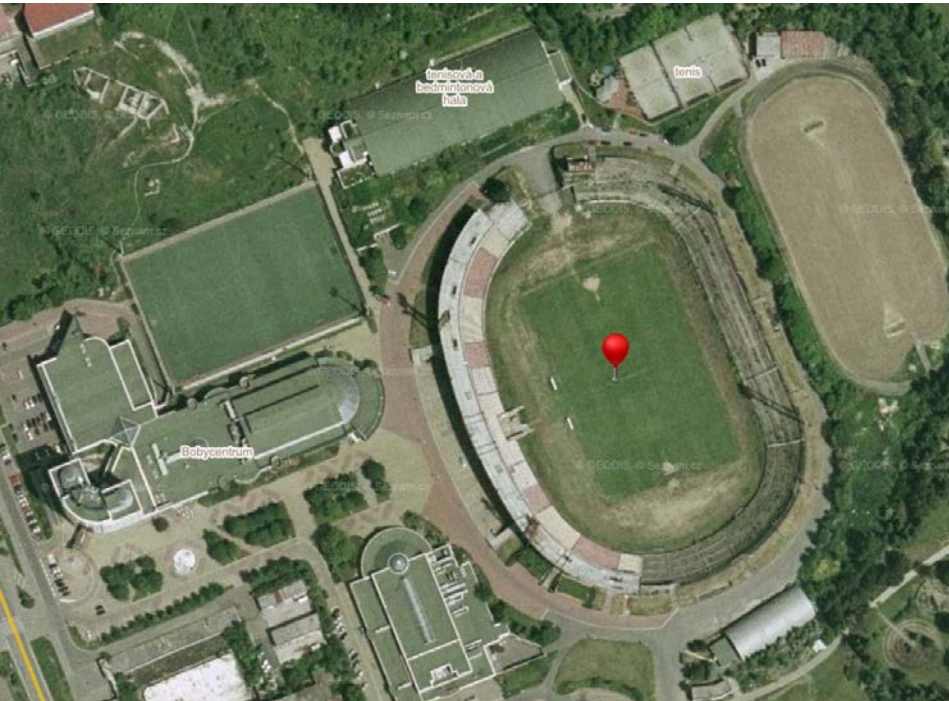
BROWNFIELDS MĚSTA BRNO - typ povrchu areálů v roce 1996

Hana Skokanová, Marek Haviřík, Petr Klusáček, Petr Dvořák, Bohumil Frantál, Tomáš Krejčí, Josef Kunc, Stanislav Martinát



IV. Following research activities

- vegetation development – for example former football stadium Za Luzankami 2003 (left) and 2012 (right)
- Place in past for 40.000 football fans



IV. Following research activities

And current state of brownfield

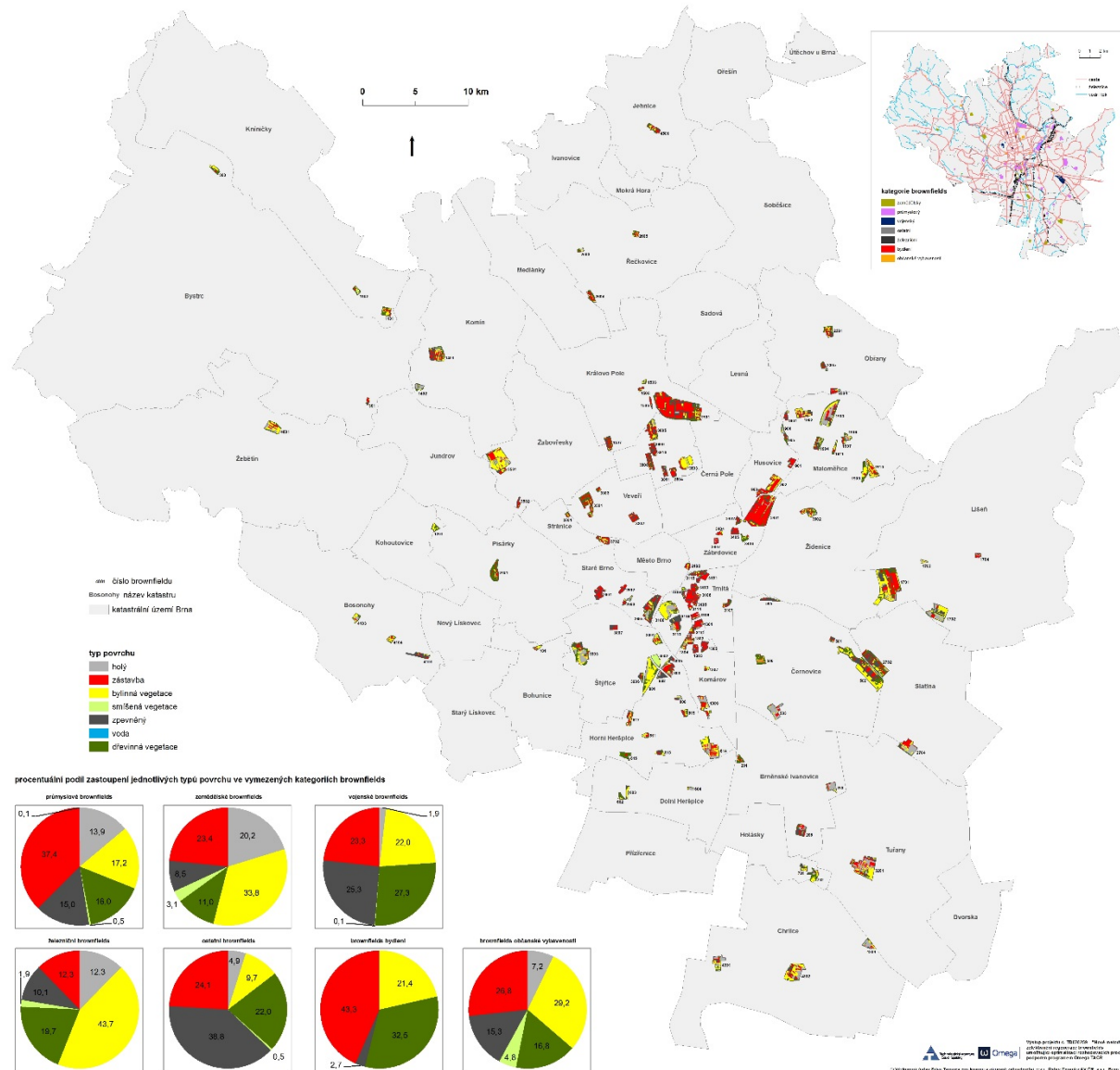


IV. Following research activities

State of land-use
in 2003

BROWNFIELDS MĚSTA BRNA - typ povrchu areálů v roce 2003

Hana Škokanová, Marek Havlíček, Petr Klusáček, Petr Dvořák, Bohumil Frontál, Tomáš Krájčí, Josef Kunc, Stanislav Marínát

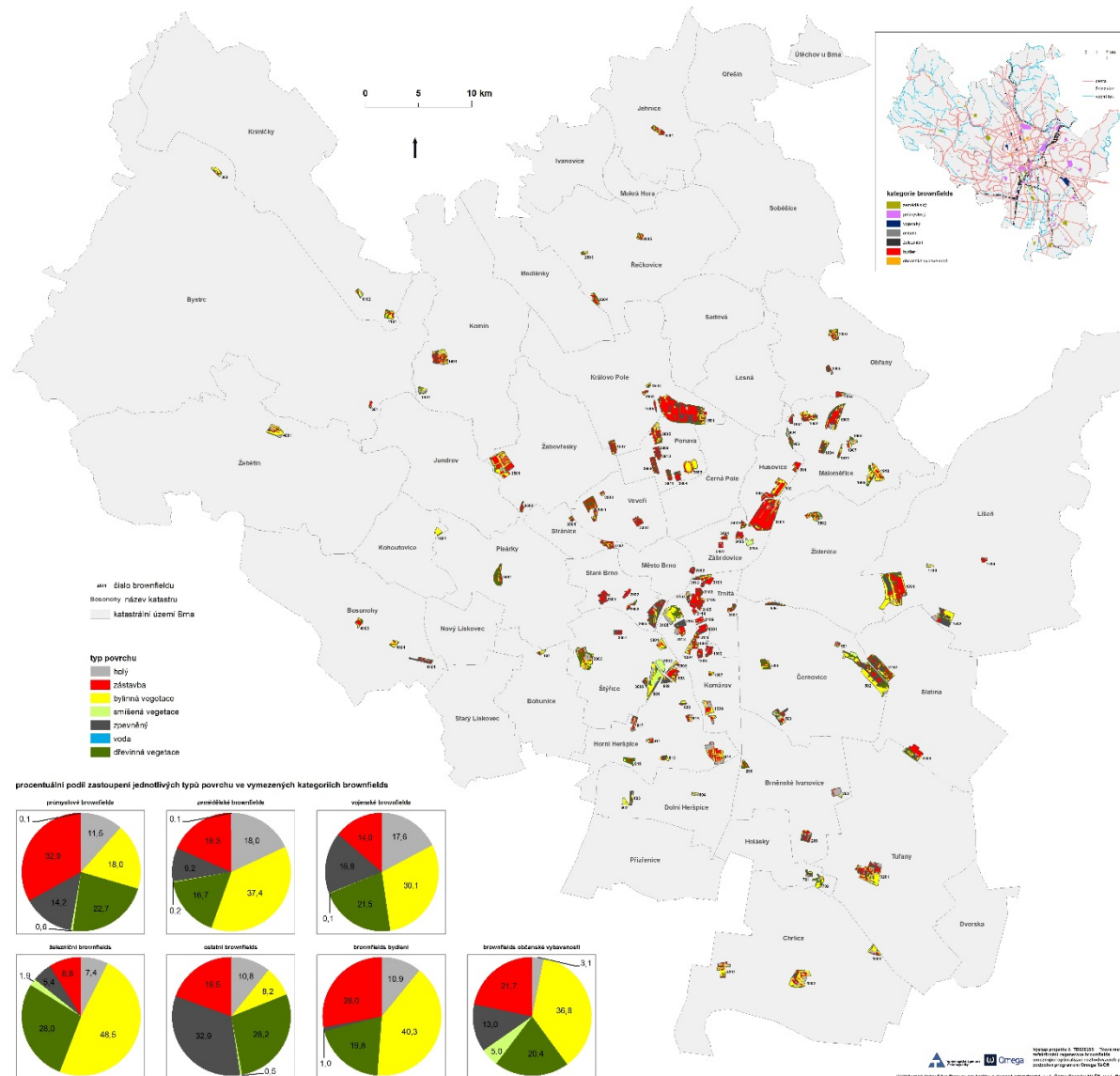


IV. Following research activities

State of land-use in 2012

BROWNFIELDS MĚSTA BRNA - typ povrchu areálů v roce 2012

Hana Škokanová, Marek Havlíček, Petr Klusáček, Petr Dvořák, Bohumil Frantál, Tomáš Krejčí, Josef Kunc, Stanislav Martinát



V. Conclusion

- The cooperation with person in charge of Brno brownfields showed that TIMBRE prioritization tool can be useful instrument even at the level of the large municipalities,
- During dissemination activities there were contacted all large cities in the Czech Republic and they were usually interested in information related to TIMBRE prioritization tool
- The experiences with preparation of Brno case study showed that the main obstacle is that if the prioritization should bring useful results at the urban level, than it is necessary to prepare many indicators by means of GIS analysis, what could be problem for many potential end-users

Thank you for your attention! Any questions? Discussion.....



Abstract

Specifics of brownfields prioritization in large municipalities (case study area Brno)

Contributors: Petr Klusáček, Stanislav Martinát and Hana Skokanová

Abstract

The contribution, which is focused on specific of brownfields prioritization in large municipalities, is based on prioritization, which was conducted for case study area of Brno City (the second largest city in the Czech Republic with approximately 380 thousands inhabitants). The contribution describes how the data was selected and prepared for the TIMBRE web-based prioritization tool and how the first results of the prioritization process were discussed in detail with local stakeholders (experts, who are responsible for brownfields databases in Brno). The final version of prioritization was tailored and modified according feedbacks received from responsible stakeholders. The contribution concludes with some general recommendations how to prepare the prioritization for large municipal brownfields databases.