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From pedestrian area to urban project: assets and challenges for the centre of Brussels

BSI synopsis

Du « grand piétonnier » au projet urbain : atouts et défis pour le centre-ville de Bruxelles

Van “grote voetgangerszone” tot stadsproject: troeven en uitdagingen voor het Brusselse stadscentrum

Michel Hubert, Eric Corijn, Julie Neuwels, Margaux Hardy, Sofie Vermeulen and Joost Vaesen

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AUTHOR'S NOTE

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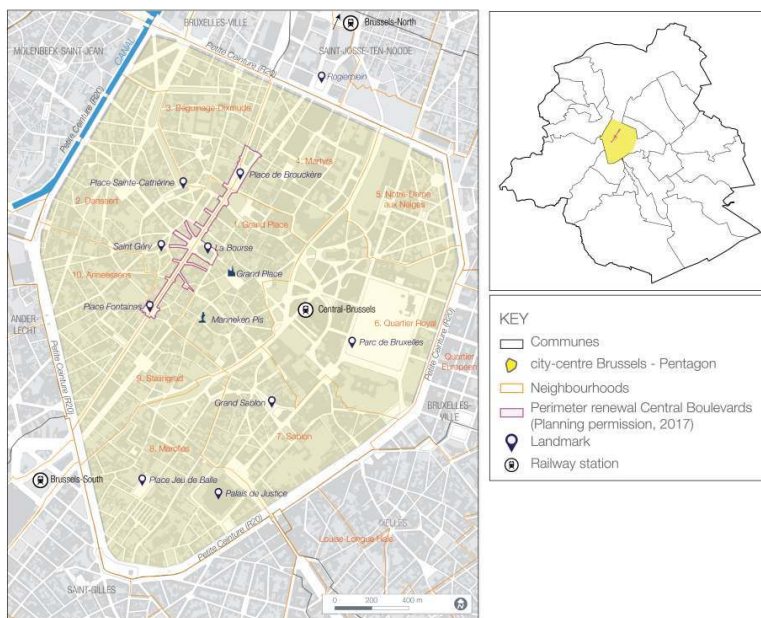
Introduction

- 1 Planned since the end of the 1990s, announced in 2012 and effective since 29 June 2015, the pedestrianisation of the central boulevards from Place De Brouckère to Place

Fontainas is unquestionably the most significant urban project of the last decade for the centre of Brussels. More than just the development of public space, the “pedestrian area” concerns many dimensions and levels in the making of the city. It provides major opportunities for the city centre as well as for the Brussels-Capital Region (BCR) and the Brussels metropolis. The feedback from other cities in Belgium and abroad illustrates that pedestrianisation may transform the urban space fundamentally and positively by having an impact on its social, environmental, economic and cultural dimensions, but at the same time, its success is not a given [Gehl, 2011; Ferial, 2013; Boussauw, 2016].

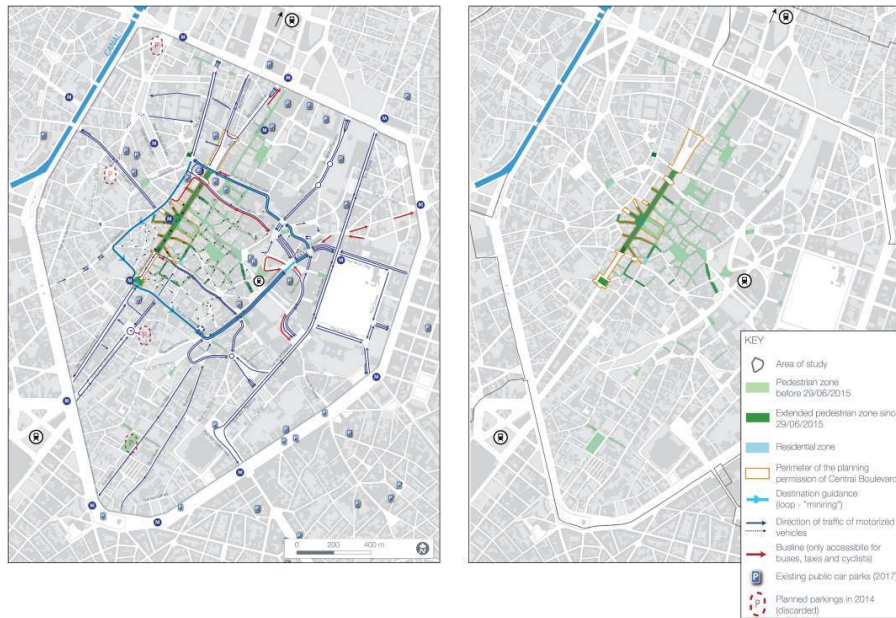
- 2 The present synopsis is based on the first Portfolio of scientific contributions produced in the framework of the BSI Brussels Centre Observatory¹ (BSI-BCO), i.e. the knowledge available when the Portfolio was written as well as the various reactions to it. Of course, many questions remain unanswered and many aspects must still be explored in the continued work of the Observatory.
- 3 Firstly, we shall briefly describe the general framework of pedestrianisation: the international trends, the expectations of the Brussels project, its challenges and the main factual data concerning it. Secondly, based on the literature regarding other cities and the contextual analysis of the centre of Brussels, we shall present four main challenges and debates which the project has had to face, along with a series of suggestions for public action: (1) clarify and achieve the objectives of the development of public space through action which also involves intangible aspects, (2) reinforce the ties between the project and the other dynamics at work at regional and metropolitan level, (3) work together on the urban project (4) and carry out the paradigm shift.

Figure 1. Area of pedestrianisation of central boulevards, Brussels centre



Data: City of Brussels, 2017; SumProject & B-Group-Greisch, 2015. UrbIS Release 2016Q2. CC-BY 2.0. CIRB-CIBG-BRIC. Update: Sofie Vermeulen.

Figure 2. Circulation plan (left) and pedestrian areas (right), Brussels centre – June 2016



It should be noted that the implementation of the circulation plan has undergone various improvements (notably rue Van Artevelde and rue du Midi), but that these have not (yet) been arrested in police orders.

Data: City of Brussels, 2014 and 2017; SumProject and B-Group-Greisch, 2015. UrbIS Release 2016Q2. CC-BY 2.0. CIRB-CIBG-BRIC. Update: Sofie Vermeulen.

Figure 3. View of boulevards before pedestrianisation (2013), after pedestrianisation (2016) and after development works



Sources: respectively, from left to right, 罗布泊 (author); BSI-BCO, 2017; SumProject 2015

1. Framework

1.1. Pedestrianisation: an urban development instrument

1.1.1. From urbanism project to urban project

- 4 The transformation of the streets of many European cities into spaces dedicated almost exclusively to traffic (to the detriment of non-motorised functions) and the gradual domination of cars (at the expense of other modes) in these spaces is the fruit of a long transformation process begun at the end of the 18th century [Lair, 2016]. The first pedestrian areas, which appeared in 1959 in Germany (Kettwiger Straße in Essen) and in

the United States (Burdick Street in Kalamazoo), constituted as it were the outcome of this specialisation of the public space. They emerged as the complement to the basic urban configuration which was dominated by cars and rapid modes of transportation. Advocated in particular since the 8th International Congress for Modern Architecture (CIAM) in 1951, the pedestrianisation of certain main roads in city centres was a subject of discussion, publication and study trips, and became widespread in the 1970s [Brandeleer *et al.*, 2016a]. According to a functionalist approach, these first-generation pedestrian areas consisted in a strict separation of modes of travel without calling into question the use of cars in the city, and were usually created in main roads with a high commercial and/or tourist potential. Therefore, as a result of policies in favour of private car use, these pedestrian areas were not able to prevent the car traffic which developed during the post-war years in urban centres. The projects developed at the time in the United States have been cited in particular due to their failures in this respect [Ferial, 2013].

- 5 Since the beginning of the 2000s, pedestrianisation has played a major role once again in the debates and projects related to urban development in Europe. The rationale behind many of these second-generation pedestrianisation plans is not one of separation, but rather of a connection and co-existence between modes of travel [Ferial, 2013]. This involves the combination of pedestrian space and public transport and/or limited car traffic according to the reference of shared space [Brandeleer *et al.*, 2016a; Janssens and Vanderstraeten, 2016]. The idea of public space shared between the different modes of travel and functions – the logic which prevailed to a certain extent until the beginning of the 20th century [Jourdain and Loir, 2016; Loir, 2016] – thus re-emerged. This sharing is usually established via the traffic code and road signs, rather than via the development of the public space as such.

Table 1. Comparison of pedestrian, residential and gathering areas, according to the traffic code

	Pedestrian area	Residential area	Meeting area
Function	mainly commerce/ tourism	housing environment	housing environment, artisans, commerce, tourism, education, recreational activities
Relationships between users	pedestrians have priority in all cases	pedestrians have priority but mix of modes and uses (pedestrians may not hold up traffic unnecessarily)	
Access and car traffic			
Access	forbidden except in specific cases	authorised	
Speed	walking speed for exceptions	20 km/h, speed limited by speed bumps (in the case of residential areas), a non-linear development and a delimiting of start and end of the area (pavement across, etc.)	

Parking	forbidden, authorised stop in certain cases	forbidden except in defined areas, authorised stop	
Deliveries	if authorised, only at specific times	authorised in clearly identified areas with the least possible impact on pedestrians	
Cyclists	forbidden, but where authorised, obligation to get off bicycle when there are too many pedestrians	authorised	
Public transport	authorised	forbidden	authorised
Specific development according to traffic code	no specific development required, apart from signs at start and end of the area	specific development to guarantee the co-existence of modes (urban furniture, plants, etc. positioned in order to limit speed of vehicles and determine their route), development of street level, removal of pavements, delimiting of start and end of the area (signs + difference in level, for example), delimiting of parking spaces	

Source: Brandeleer *et al.*, 2016a, p. 166

- 6 This transition from a rationale of separation to one of connection meant that pedestrianisation would be thought of more in terms of an urban project rather than an urbanism project, in the sense that it “allows developments to be considered for the city as a whole, without limiting interventions to single blocks” [Ferial, 2013: 5]. The reorganisation of the sharing of public space between modes of travel and functions no longer attempts only to organise the functionality of the city, but also to ensure usability, social cohesion, entertainment, tourism, etc. in keeping with the territorialisation of socioeconomic policies and, more recently, environmental policies [Pinson, 2004, 2009; Dessouroux *et al.*, 2009; Genard and Neuwels, 2016].

1.1.2. The positive potential role of pedestrianisation

- 7 Today, pedestrianisation constitutes a fully fledged urban development instrument whose potential role has been discussed in the international literature [Gehl, 2011; Boussauw, 2016; Keseru *et al.*, 2016]. In the cities studied, pedestrianisation has:
- Led to a series of positive effects with respect to mobility choices, by promoting active modes of travel (bicycle, walking, etc.), the adaptation of delivery systems in favour of alternative systems and the improvement of public transport services;
 - Had a positive impact on the accessibility of the city, by decreasing car traffic and improving the performance of public transport in pedestrian areas;
 - Resulted in better sharing between modes of travel and the freeing of spaces which were formerly dedicated to cars, thus allowing an improvement in the sustainability of more and more densely inhabited cities;

- Improved the quality of life and the health of inhabitants and workers by reducing air and noise pollution due to road traffic;
 - Participated in the fight against global warming by reducing carbon emissions due to car traffic;
 - Turned out to be beneficial – after an eventual downturn – for commercial activity and therefore for the creation of jobs, due to an average increase in the number of visitors and in revenue;
 - Established places for sociocultural activities, quality interactions and social cohesion;
 - Led to the development of green spaces and contributed to urban biodiversity and the improvement of the local microclimate;
 - Created an opportunity to promote architectural heritage.
- 8 As underlined in the second part of this synopsis, the literature also shows that the success of pedestrianisation projects is not a given. It may be threatened by the fragmentation of the institutional levels involved (among themselves and within themselves), by power relations which do not allow the project to be brought to a successful conclusion, by failures in the governance tools used (strategic plans, economic incentives, participatory processes, etc.) or by a lack of clarity in the objectives pursued.

1.2. The pedestrianisation of central boulevards in Brussels

1.2.1. From shared space to the urban motorway

- 9 As an extension of the comfort zone around the Grand-Place between Place De Brouckère and Place Fontainas, the pedestrian area in Brussels is presented as an urban development tool by the City of Brussels. More specifically, it is presented as the expression and formalisation of a paradigm shift with respect to post-war urban policies: a means of giving “the necessary impetus to the economic, cultural and social revival”² of the centre of Brussels, which, over time, has become “a grey and increasingly crowded space (...) dominated by cars”. The objective is to make the city centre “more welcoming, greener, more breathable – a guarantee of better health and well-being for everyone”, and for “citizens (local inhabitants, workers, tourists and shopkeepers) to reclaim the public space and enjoy a healthier and more breathable city”.³
- 10 The challenges for the centre of Brussels are indeed great. Beginning in the 1950s, it was considered – by the public authorities in particular – above all as an administrative space and a place of consumption to the benefit of peri-urban residents, as well as “one of the biggest crossroads in the western world” [Ministère des travaux publics et de la reconstruction, 1957: 8]. The Brussels territory was then transformed by a major expansion of the road network for three decades as of the world fair in 1958 [Demey, 1992; Hubert, 2008; Ryckewaert, 2011].
- 11 Built in the 19th century after the covering of the Senne, the central boulevards were connected to this network via the transformation of the inner ring into a main road for heavy traffic (as of 1955) and redeveloped following the creation of the pre-metro (inaugurated in 1976). At the time, these boulevards were designed to be what would be referred to today as a “gathering area” [Jourdain and Loir, 2016], yet over time the room left for pedestrians was severely restricted and was limited to the pavements, which were cluttered with flower boxes, café terraces and access points to the underground stations. Far from being as functional as planned, the central boulevards soon became a congested

urban motorway at the heart of Brussels (also referred to as the Pentagon). At the same time, the surrounding working-class neighbourhoods degraded and became poor areas following the deindustrialisation of the entire canal area (in particular the central part), the urban exodus, the disinterest of the public authorities and the speculative strategies favouring the dilapidation of buildings in order to justify demolition/reconstruction operations [Aron, 1978; Grosjean 2010; Ryckewaert, 2011]. Traffic congestion, air and noise pollution and the development of the service sector therefore created a vicious circle of the deterioration of the living environment: as the city centre decayed, the residential attractiveness and therefore the municipal revenue decreased, thus making the development of urban renewal operations more difficult [Zimmer, 2002].

1.2.2. The restructuring of the city centre

- 12 Beginning in the 1980s, politicians began to worry about the industrial and residential decline of the centre of Brussels [Hubert, 1982]. The public authorities gradually became interested once again in the central neighbourhoods, through *neighbourhood contracts* in particular (beginning in 1993), from a perspective of urban revitalisation and social cohesion [Noël, 2009]. For its part, the City of Brussels created a *Délégation au Développement du Pentagone* (DDP, Pentagon Development Delegation) (1995), and with the help of different instruments in the fight against empty buildings (industrial buildings in particular), it obtained rapid results⁴. The Pentagon thus experienced steady demographic growth as of 1999-2000 (+/- 2,2 % per year between 2000 and 2011), at a rate which was close to twice as high as that for the Region as a whole (+/- 1,1 % per year during the same period). Today, the centre of Brussels is a densely inhabited space, in particular in the western part, where there is an over-representation of people aged 20-34 [Decroly and Wayens, 2016]. In the Pentagon, there are more than 50 000 inhabitants,⁵ which represents just under 5 % of the regional population in 2,5 % of its area.
- 13 This demographic growth is heterogeneous from a socioeconomic point of view. The south and southwest parts of the Pentagon are mainly home to disadvantaged populations, whereas the other parts (northwest, east) are undergoing gentrification, attracting young adults from privileged backgrounds, at least as regards cultural capital [Van Criekingen, 2006, 2013; Bernard, 2008]. This heterogeneity is also seen in the quality of housing. Among other types of rationale, the rise in property prices and the development of the housing demand have favoured “an overcrowding of the existing housing stock whose quality is often poor” [Dessouroux *et al.*, 2016: 18].
- 14 Finally, the centre of Brussels is characterised by significant economic and sociocultural activity [Decroly and Wayens, 2016]. It constitutes a major employment centre, with administrative, financial, commercial (dominated by clothing shops and the restaurant sector, as well as specific businesses with a wide reach), tourist, cultural, health and educational functions. It is characterised by the diversity of its commercial offer and relative specialisation, attracting a wide range of customer profiles and forming a multitude of distinct purchase paths. The city centre also constitutes the main tourist and cultural centre in the Region, concentrated around the *îlot sacré*, the central boulevards and Mont des Arts.

Table 2. The pedestrian area in Brussels includes ten areas in the historic city centre, with the central boulevards Anspach, Adolphe Max and Emile Jacqmain running through them

Area	Surface (km ²)	Total number of inhabitants (2014)	Population density (inh./km ²) (2014)	Total number of private households (2014)
1. Grand-Place*	0,38	3 126	8 206,66	2 132
2. Dansaert	0,52	8 699	16 622,40	4 600
3. Beguinage-Dixmude	0,37	6 475	17 271,27	3 642
4. Martyrs	0,38	2 097	5 519,58	1 262
5. Notre Dame aux Neiges	0,30	2 191	7 358,03	1 374
6. Quartier Royal	0,69	323	467,51	166
7. Sablon	0,46	2 709	5 904,28	1 723
8. Marolles	0,64	12 194	1 9095,19	6 342
9. Stalingrad	0,24	3 277	13 759,08	1 923
10. Anneessens	0,43	10 307	24 016,12	4 500
Pentagon	4,41	51 398	11 648,35**	27 664

These ten areas are located within the "Pentagon".

*The areas in bold are (partly) situated within the perimeter of the redevelopment of the Central Avenues as indicated in Beliris' licence application and the design of SumProject.

**Average

Source: Vanhellemont with Vermeulen, 2016, p. 46. According to: IBSA, *Monitoring des quartiers*, 2016

Table 3. Workforce recorded by the social security organisations (jobs), at place of work, in 2011, according to sector of activity

Sector of activity		North-South line		Pentagon		Municipality of Brussels-City		Brussels-Capital Region	
		Workforce	rs* (%)	Workforce	rs* (%)	Workforce	rs* (%)	Workforce	rs* (%)
K	Financial and insurance activities	13 490	21,1	19 849	31,1	31.293	49,0	63 841	100,0
O	Public administration	13 054	10,6	37 205	30,1	55.571	45,0	123 617	100,0

G	Commerce; car and motorcycle repairs	4 689	6,2	7 516	9,9	20.929	27,5	76 208	100,0
I	Hotels and restaurants	4 348	14,3	6 542	21,5	11.652	38,3	30 392	100,0
N	Administrative and support activities	4 211	7,6	7 436	13,4	21.602	38,8	55 616	100,0
P	Education	2 467	5,0	5 420	11,1	11.024	22,5	48 971	100,0
Q	Health and social action	2 166	3,6	7 599	12,6	14.270	23,6	60 490	100,0
STU	Other	1 984	6,8	4 911	16,9	11.988	41,2	29 101	100,0
M	Specialised, scientific and technical activities	1 427	2,9	4 981	10,0	16.544	33,2	49 759	100,0
R	Arts, performances and leisure activities	1 295	14,4	2 606	29,0	3.832	42,6	9 000	100,0
H	Transport and storage	953	3,0	2 091	6,5	9.359	29,3	31 940	100,0
ABCDEF	Agriculture and industry	691	1,3	4 348	8,3	12.448	23,8	52 194	100,0
J	Information and communication	385	1,0	3 107	8,4	8.873	24,0	36 995	100,0
L	Property activities	153	2,2	436	6,1	1.684	23,7	7 102	100,0
Total		51 313	7,6	114 047	16,9	231 069	34,2	675 226	100,0

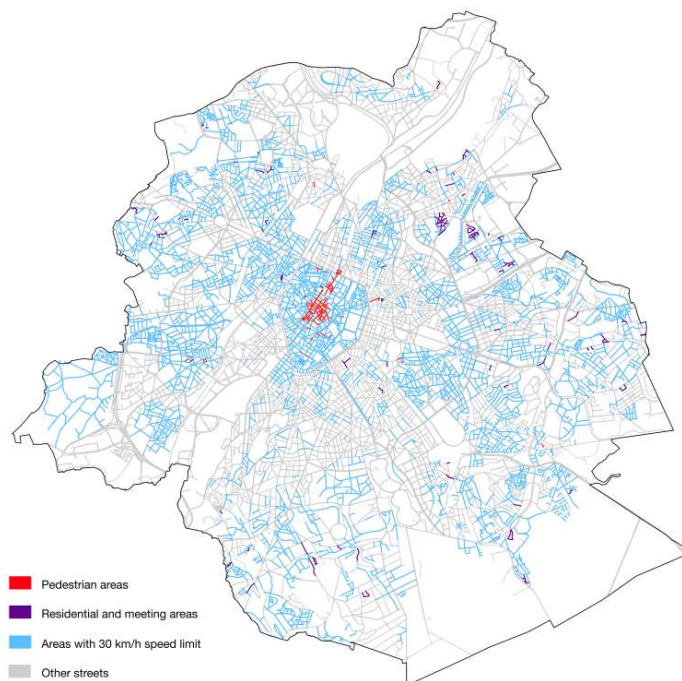
THE JOBS ONLY PARTIALLY INCLUDE WORKERS FROM INTERNATIONAL INSTITUTIONS. THE JOBS WHICH ARE NOT LOCATED IN THE STATISTICAL SECTOR HAVE BEEN INCLUDED AT MUNICIPALITY LEVEL. SELF-EMPLOYMENT IS LOCATED AT THE HEAD OFFICE. THE NORTH-SOUTH LINE IS RECONSTITUTED BY ADDING THE STATISTICAL SECTORS ADJACENT TO THE BOULEVARDS, FROM ROGIER TO MIDI: A001, A002, A01-, A02-, A03-, A20-, A21-, A32-, A34-, A35- AND A83-
*** RS: REGIONAL SHARE**

SOURCE: DECROLY AND WAYENS, 2016, P. 34. DATA: IRIB/IGEAT CALCULATIONS BASED ON STATISTICS BELGIUM, CENSUS 2011.

1.2.3. A high level of road congestion with many consequences

- 15 Road transport is the biggest cause of air pollution in European cities, with a significant impact on health [Keseru *et al.*, 2016]. According to Bruxelles Environnement [2016], in 2012, it was the main sector responsible for the emission of three major air pollutants in BCR: nitrogen oxides (NOx – 67 %), carbon monoxide (CO – 49 %) and fine particles (PM10 – 48 %). It was also responsible for 16 % of lead and non-methane volatile organic compounds (NMVOC) emissions and the second sector responsible for the direct emission of greenhouse gases (26 % in 2013). The noise pollution caused by car traffic also has a negative impact on health by increasing the risk of ischaemic heart disease, high blood pressure, tinnitus and hearing problems [Kesuru *et al.*, 2016].
- 16 Currently in BCR, the sharing of space between the different modes of travel takes place mainly through isolated interventions which restrict the access and the speed of cars, and very rarely through the complete closure to road traffic: areas with 30 km/h speed limit, speed bumps, widening of pavements and parking barriers, dedicated lanes for public transport, etc. [Moritz, 2011; Brandeleer *et al.*, 2016b]. Thus, the proportion of pedestrian, residential and gathering areas in the capital is relatively low with respect to the European pedestrianisation movement, which has grown since the beginning of the 2000s [Brandeleer *et al.*, 2016a].

Figure 4. Pedestrian areas, residential areas and areas with 30 km/h speed limit in BCR in 2014



Source: Brandeleer *et al.*, 2016a, p. 167 (updated). Author: Thomas Ermans. Data: Bruxelles Mobilité, MobiGIS v2.0, August 2017

- 17 While a rapid evolution of travel practices has been observed in the Region in terms of greater multimodality (combination of the use of a car, public transport, walking, bicycle, etc. for a single trip or depending on the trip) and a reduction in the use of the car,⁶ this

evolution scarcely compensates for the increase in the total volume of travel due to the demographic boom and the continued high rate of use of the car for inbound and outbound travel⁷ [Hubert *et al.*, 2013]. Furthermore, the concentration of motorised traffic on regional and metropolitan roads – excluding residential neighbourhoods – has not helped to reduce congestion [Brandeleer *et al.*, 2016c].

1.2.4. The pedestrianisation of central boulevards: a turning point in a long decision process

- 18 It is in this context of demographic growth and reorganisation of the city centre, followed by road congestion and noise and air pollution, and finally, the expectation for inhabited public space and quieter traffic, that we must understand the decision to take strong action, consisting in pedestrianising the central boulevards in Brussels.
- 19 While the first study conducted by the architecture and urbanism firm *Groep Planning* – later to become *SumProject*, or “Simons” – on mobility in the Pentagon dates from 1997/98, the renovation of central boulevards only became part of the political agenda of the City of Brussels in 2003, in the framework of *Fonds Beliris*⁸ [Vanhellemont with Vermeulen, 2016]. A more in-depth study was then assigned to *Groep Planning*, without immediate follow-up. While there was support from civil society for a reduction in road congestion (for example, *Plan NoMo*, 2000), it took several years before the first concrete actions were implemented: the closure to car traffic of approximately ten streets around the Grand-Place (referred to as the comfort zone), whose planning permission was granted at the end of 2009, and the reduction of lanes for car traffic on boulevards Anspach, Lemonier and Adolphe Max to the benefit of the development of bicycle paths in 2012. Finally, following the arrival of Yvan Mayeur as the mayor of the City of Brussels in 2013, the renovation of central boulevards – decided on by the new municipal majority after the 2012 elections – became clearer, with the decision to pedestrianise Boulevard Anspach between Place De Brouckère and Place Fontainas, and thus extend the comfort zone around the Grand-Place. This evolution was justified in particular with regard to citizen movements, which called for the renovation of central boulevards in order to reduce car traffic, without advocating their pedestrianisation (for example, *PicNic the Streets*, May 2012; *ParcAnspachPark* call for ideas organised by BRAL, July 2013) [Tessuto, 2016; Vanhellemont, 2016].

Table 4. Main strategic plans concerning mobility and the renovation of central boulevards in the centre of Brussels before their pedestrianisation

Name of the plan	Actors and status
Tekhné Plan – 1962	<p>“Master plan for the Brussels Pentagon” Urban development master plan for the entire pentagon (long term horizon 1985) Carried out by architects group Groep Tekhné Commissioned by the City of Brussels – Alderman for Urban Development Van den Boeynants (CVP) Partly executed project</p>

<p>Study – Simons 1997/1998 (preliminary studies Municipal Mobility Plan City of Brussels)</p>	<p>Mobility study for the pentagon – 3 scenarios for a car-free city centre Within the framework of the preparation of a Municipal Mobility Plan for the City of Brussels A realization of Groep Planning (now SumProject) Commissioned by the City of Brussels , Alderman for Urbanism H. Simons (Ecolo). The project was never realised, but it gave input for the following plans.</p>
<p>NoMo Plan – 2000</p>	<p>Mobility study by the non-profit organization vzw Nomo (experts and residents) on its own initiative Builds on one of the three scenarios of the study by Simons (1997) Project never performed, but gives input for the Beliris Plan (2003)</p>
<p>Beliris Plan – 2003</p>	<p>Study for the redevelopment of the Central Avenues A realization of Groep Planning (now SumProject) Commissioned by Beliris, for a design competition The budget was assigned, the study conducted but the project was never realised Provides input for the Simons Plan (2007) & the Ceux Plan (2010)</p>
<p>Simons Plan, 2004 (preliminary studies Municipal Mobility Plan City of Brussels)</p>	<p>Mobility study for the City of Brussels focussing on the redevelopment of the Central Avenues Performed by Cooparch-RU (now ERU), directed by AGORA Commissioned by the City of Brussels, Alderman for Urbanism H. Simons (Ecolo, at the time) The study builds on the preliminary studies made in 1998 Approved by the City Council but never realised</p>
<p>Ceux Plan – 2010 (preliminary studies Municipal Mobility Plan City of Brussels)</p>	<p>Mobility study for the City of Brussels (Pentagon part, p. 91) Within the framework of the preparation of a Municipal Mobility Plan for the City of Brussels A realisation of Espaces mobilités and Transitec Commissioned by the City of Brussels, Alderman for Urbanism C. Ceux (cdH) The study takes into account the regional strategic development and mobility plans (PRD II & IRIS II plans), but does not build further on the plans of Simons (1997/1998 & 2004) Never approved by the City Council</p>

SOURCE: VANHELLEMONT WITH VERMEULEN, 2016, P. 48

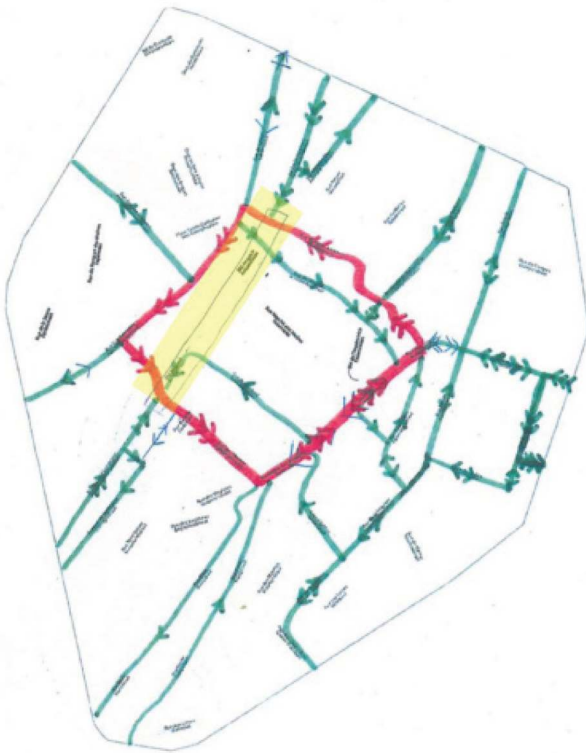
- 20 The renovation of the central boulevards was therefore not included on the political agenda for a long time, which was less due to the need to prepare the project with many technical studies, than to the feebleness of decision-makers and their fear to take on an urban project of such vast scope. Courtois and Dobruszkes [2008] and Brandeleer and Ermans [2016b] have shown that this feebleness is common in Brussels when it comes to reducing the spatial and temporal ascendancy of cars at communal and regional level. This results in an “over-emphasised importance of car users in the development of the

city and mobility management” [Courtois and Dobruszkes, 2008: 19]. At the same time, Brussels is characterised by a network of relatively narrow roads, which makes the balanced coexistence of active modes of travel, public transport and car traffic complex and sometimes even impossible [Brandeleer *et al.*, 2016b].

1.2.5. Controversies and a compromise to “take action”

- 21 Given the above, the implementation of the pedestrian area in Brussels appears to be an eminently political act [Vanhellemont, 2016]. Encouraged by the last citizen mobilisation efforts (*PicNic the Streets*) on the eve of the municipal elections of 2012, this “taking of action” was possible at the time thanks to a great political compromise within the new municipal majority: pedestrianise a section of the central boulevards, provided that four new local car parks would be built, and reorganise the traffic in the adjacent streets.⁹ This involved ensuring accessibility by car for visitors and inhabitants who were used to using or forced to use their cars, while making up for the disappearance of parking spaces in the pedestrian area [Kesuru *et al.*, 2016].
- 22 However, this compromise has blurred the political aim of the project and has generated considerable controversy. The announced development of four new car parks in the immediate surroundings of the pedestrian area was understood to be a strategy to render cars invisible, to the detriment of a policy to reduce road congestion in the city centre [Genard and Neuwels, 2016]. The reorganisation of traffic into a service ring around the pedestrian area was described as a “mini ring road”, testifying to the fear that the traffic and pollution would move to the surrounding neighbourhoods. We shall discuss this shift of pollution to certain streets – in particular the western part of the Pentagon – which continues to stir up opposition with respect to the pedestrianisation of central boulevards.

Figure 5. Pedestrianisation plan, facsimile of the working document used by the City of Brussels in May 2015



THE SERVICE RING WAS SOON DESCRIBED AS A “MINI RING ROAD” BY CRITICS AS WELL AS BY PROJECT PROMOTERS.

SOURCE: CITY OF BRUSSELS, MAY 2015

- 23 The lack of clarity of the political aim was also reinforced by the decision to move the bus last stops from the pedestrian zone and by the removal of certain dedicated lanes, which have harmed the clarity and efficiency of the public transport surface network [Kesuru *et al.*, 2016], as well as by the coexistence of a rationale in support of “a city built for its inhabitants”¹⁰ and statements and actions in keeping with the perspective of economic attractiveness (make De Brouckère a “Times Square”, make the pedestrian area a “Belgian Avenue” then a “Family Pleasure Shopping”, transform the Bourse into a “Beer Temple”, etc.) [Vanhellemont, 2016; Genard *et al.*, 2016].
- 24 Compromises are inevitable in the framework of the implementation of major urban projects [Le Galès, 1995; 2002]. However, in the case of the pedestrian area in Brussels, the resulting lack of transparency means that these compromises may in the end become more divisive than unifying, and more ineffective than effective, if they are not explained and supported. The pedestrian area has indeed been the subject of many controversies and opposition movements. And the context of these controversies is complex, especially as the future of the city centre concerns many stakeholders, levels of authority and urban governance challenges, well beyond the local challenges [Vanhellemont with Vermeulen, 2016; Genard *et al.*, 2016].

2. Observations and challenges

- 25 The second part of this synopsis explains what we feel are the four main challenges faced by the project to renovate the centre of Brussels. Based on a certain number of observations in the international literature and specific knowledge regarding Brussels, it aims to contribute to the objectification of debates on the future of the centre of Brussels, as well as to their evolution.

2.1. Challenge 1: Clarify and reach the objectives of development of public space by taking action on the intangible – “life between buildings”¹¹

- 26 Established by the architecture and urbanism firm *SumProject*, the current development plan for public pedestrian space (2015) proposes a division of the central boulevards into a series of spaces, each with a specific name designating an atmosphere: an “urban garden”, a “green walk”, an “urban scene”, a “home” and an “agora”. Currently, only the spatial aspects of these developments are partially defined (materials, equipment, plants, etc.). While urban development and the organisation of activities in the public space structure in part the behaviour of the different users (inhabitants, workers, visitors, etc.), they may not regulate it completely. There are several different uses, changes of use and conflicting uses which constitute the fundamental unpredictability of the ways in which users appropriate the space, and which are well documented in urban studies [Corijn and Vanderstraeten, 2016; Gehl, 2011; Lofland, 1998; Jacobs, 1993].
- 27 In order to reach the objectives of a pedestrian area, there is a need for action involving more than the development of public space. There must be action involving the intangible aspects as well (uses, symbolism, sociability, etc.). The main challenge in this respect is to know how – with which instruments of governance, public policies and partnerships – to improve and ensure the continued existence of desirable social practices and their diversity in this reorganised public space.

2.1.1. Guarantee the diversity of atmospheres and uses of the public space

- 28 By detailing its development, the pedestrian area of the centre of Brussels differs from the pedestrian areas and shared spaces recently built in the Brussels-Capital Region based on a freeing up of space through minimum use (for example, Place Flagey or Place de la Monnaie). *SumProject's* plan defines a series of sub-spaces, each with a key function (consume, walk, show, rest, gather and play, for the main part) and a specific development (traffic lanes, benches, plant containers, fountains, etc.). These functions and developments aim to create the specific atmospheres mentioned above.
- 29 In particular, the development of successive sections of the boulevard may be understood as a compromise between economic and habitability objectives [Corijn *et al.*, 2016]. On the one hand, the project testifies to the will not to create a simple neighbourhood, and to target inhabitants as well as visitors by defining relatively neutral uses and facilities. On the other hand, the project seeks to restrict commercial activities in the public space in order to avoid an excess.

30 In this respect, the plan seems pertinent. International research shows that in general, pedestrianisation favours an almost exclusive use of the road by certain commercial activities which privatise the public space (terraces, displays, etc.) to the detriment of sociocultural activities and leisurely walks [Mitchell, 2003; Dessouroux, 2006; Hass-Klau, 2015; Boussauw, 2016]. The development plan could limit this phenomenon by ensuring a certain sharing of the public space. At the same time, the detailing of developments raises questions in at least three respects:

- A lot of the research shows that the overdetermination of the functions of public space favours certain practices and, therefore, populations. By overdetermining the development of an area, there is the risk that certain categories of the population in terms of sociocultural status, gender, generation, etc. will take over [Amin, 2008; Gehl, 2011; Wood and Landry, 2008]. The development of the pedestrian area could therefore hamper the mix and diversity of uses seen since 2015, which are due precisely to the low level of organisation of the pedestrian area before the works [Corijn *et al.*, 2016].
- The development of successive sections of the boulevards reproduces a significant north-south linearity. The west-east direction is less pronounced, despite the declared will to reconnect it. Despite the presence of spaces for sitting and gathering and street-level development, it is possible that users may reproduce their usual travel patterns, favouring window-shopping activities (along the façades) and transit traffic (in the central strip) [Brandeleer *et al.*, 2016a]. Conversely, the low organisational level of the pedestrian area before the works opens the door to many types of appropriation, “favouring the unexpected as well as the improvised”. It thus allows “popular and informal creative resources” to be taken advantage of instead of “the risk of a public space which would slowly be devoted only to consumerism” [Genard *et al.*, 2016: 69].
- It is more difficult to ensure the quality of a public space when there are several different developments, stakeholders and instruments involved. For example, all of the material, plants and equipment used must meet technical constraints in terms of maintenance and use, durability, installation, etc. Equipment or materials which deteriorate rapidly, are not adapted to uses or do not match the environment in aesthetic terms, detract from the quality of the public space as a whole. In order to ensure the quality of this complex whole, it is not enough to follow construction standards. It requires continuous, coordinated and cross-cutting management.

31 In keeping with the multifunctionality which characterises the centre of Brussels [Decroly and Wayens, 2016], it therefore seems necessary to ensure the plurality of atmospheres and uses of the public space since it was closed to car traffic, in order to increase quality throughout its transformation. This involves spatial development (facilities, type of urban furniture, etc.), activities and the management of public space (commercial/tourist, sociocultural, artistic, sports activities, etc.) which we shall discuss in the following section.

2.1.2. Support and define activities in the public space

32 The *atmospheres* in the pedestrian area refer to intangible activities in the public space, which have become a true tool for urban policy [Bianchini and Parkinson, 1993; Pradel, 2007; Amin, 2008]. Genard *et al.* [2016] have highlighted the fact that activities in the pedestrian area constitute a central issue in the controversies, showing at least three

major “visions” or “ideas” of the city centre and the public space: *commercial* public space, *political or symbolic* public space and *aesthetic or cultural* public space:

- For the defenders of *commercial* public space, the quality of the project for a pedestrian area is measured by its potential to be an economic impetus for the city centre, and even for the Brussels Region. This impetus is dependent on a series of guarantees, such as the security of the neighbourhood and ongoing activities in the public space.
 - For the defenders of *political or symbolic* public space, the first challenge involves the possibility for the population to appropriate the public space through participation in its design, co-production and co-management. The success of the pedestrian area is therefore partly due to its ability to symbolise the political and to be a welcoming place for events, activities, moments of celebration as a group, etc.
 - For the defenders of *aesthetic or cultural* public space, it is thought of above all in terms of culture and experience. A vast space such as the pedestrian area must allow relationships of co-presence and co-visibility between strangers and produce an aesthetics of gatherings, stakeholders and spectators, following the example of the uses made of central boulevards in the 19th century [Jourdain and Loir, 2016]. It is therefore necessary for people to be able to experience this and not to be too distracted by consumer activities, for example.
- 33 As regards the pedestrian area, these three visions of the public space are potentially complementary, as long as they are all applied and managed in a cross-cutting approach. The activities in a pedestrian area are nevertheless not very well defined in this perspective. They involve the accumulation of specific actions initiated by the public authorities or by private stakeholders. But they do not seem to be considered or taken advantage of as an integral part of the creation of atmospheres and the urban project based on the development of the pedestrian area.
- 34 The literature shows that the activity in the public space is generally in keeping with a perspective of privatisation (economic or other), to the detriment of the value in use of the public space [Lefebvre, 1968; Decroly *et al.*, 2003]. The main roads with shops, restaurants and cafés are particularly prone to this mono-functional appropriation of the public space to the benefit of commercial activities, and to the detriment of sociocultural activities [Gravari-Barbas, 2001]. The pedestrianisation of these main roads reinforces this phenomenon [Boussauw, 2016].
- 35 Public intervention is therefore necessary in order to ensure a certain balance which allows a coexistence of the three visions of the public space (commercial, political and aesthetic) with respect to the pedestrian area. This involves establishing a calendar of activities with the stakeholders concerned, while ensuring “idle time” in order to avoid a saturation of events and activities, to let the pedestrian area have a life of its own and limit the feeling of constant encroachment experienced by the inhabitants. This also involves facilitating and developing expressive and artistic activities in order to prevent the predominance of the commercial space.

2.2. Challenge 2: Reinforce the project's ties with the other dynamics at work at regional and metropolitan level

- 36 The pedestrianisation of central boulevards mobilises many stakeholders and institutions in the political arena, (semi-)public administrations, consultancy firms, economic stakeholders and citizens' associations, which perceive the project as well as its challenges and potential consequences differently [Vanhellemont, 2016]. The multitude

of stakeholders and visions constitutes one of the indicators of the impact of the pedestrian area at three levels: local, regional and metropolitan [Genard *et al.*, 2016].

- 37 For strategic and institutional reasons, the local challenges have prevailed until now. By emphasising realistic short-term objectives, the predominance given to local challenges allows action to be taken and a process of transformation to begin [De Visscher *et al.*, 2016]. But it may, however, cause the regional and metropolitan challenges to be neglected, without lessening the impact of the paradigm shift attached to the pedestrian area.
- 38 At municipal level, the action taken is limited essentially to the perimeter of the pedestrian area, through the addition of a series of instruments and strategic development plans. Apart from the east-west reconnection of the urban fabric at the level of the boulevard and the squares concerned, the connections with the other elements which structure the city centre are not explained.
- 39 Good coordination between stakeholders, levels and targets for action is necessary in order to ensure the success of complex urban projects [Le Galès, 1995, 2002; Pinson, 2004, 2009]. Furthermore, the presence of a multitude of ideas, interests, competences and motivations often requires the development of innovative instruments for public action in order to ensure the networking of projects [Boudry *et al.*, 2003; Van den Broeck, 2010; Moulaert *et al.* 2013; Segers *et al.*, 2013].

2.2.1. Outside the perimeter: positioning the pedestrian area in a wider spatial framework

- 40 By removing the barrier formed by the urban motorway which the central boulevards had become, and by recreating the squares which existed along the original Boulevard Anspach, the pedestrian area aims to reconnect the east and the west (in the lower part) of the city centre: the reconnection of the Grand-Place neighbourhood and the Saint-Géry, Sainte-Catherine and Dansaert neighbourhoods via the Bourse, and beyond the canal towards Molenbeek; the reconnection of the Anneessens and Jardin aux Fleurs neighbourhoods and the Saint-Jacques and Marolles neighbourhoods via Parc Fontainas; and the reconnection of the Rue Neuve neighbourhood and the Quais neighbourhood via Place De Brouckère.¹²
- 41 While the project reconnects the east-west premodern fabric [De Visscher *et al.*, 2016] – which is a very important positive point – it does not define the desired impact of the pedestrianisation of boulevards on the connections between the city centre, the Region and the metropolis. What are the recommended relations with the other major projects and/or vectors of urban centrality, at the level of the Pentagon (Sablon, Marolles, redevelopment of the North-South junction, canal, inner ring, etc.), the neighbouring municipalities (Molenbeek in particular) and the Region (Areas of Regional Interest, Canal Plan, etc.)? The version of the Regional Sustainable Development Plan (PRDD)¹³ which was open to public inquiry at the beginning 2017, refers only briefly to the pedestrian area without including it in a global vision of the city. Likewise, the connections and the status of the pedestrian area with respect to the metropolitan area are not explained. Does it involve reinforcing the Pentagon's status as city centre by emphasising its usefulness and attractiveness? Or does it involve participating in the development of a more isotropic and multipolar model of regional distribution, by emphasising the inhabited dimension of the city centre? Is there a vision of polycentric development, a hierarchy or a

thematisation of centralities and, if such is the case, what would be the desired status and characteristics of the centre of Brussels?

- 42 The lack of a connection between projects as well as the lack of a wider strategic and spatialised vision present two major difficulties:
- The *city project* underpinned by the pedestrian area does not appear clearly in the communications of the City and BCR, which strongly discourages the acceptance of the project by society [Vermeulen and Hardy, 2016; Vanhellemont with Vermeulen, 2016]. Vanhellemont has shown that this has stirred up controversies and has led to a loss of support from stakeholders who are in favour of the project [2016].
 - In the end, the pedestrian area could turn out to be more of an urbanism project than an urban project. Considered in a self-sustained manner without being part of a city project, the pedestrian area therefore appears to be “floating” or “above ground”. By focusing on the very local scale of the central boulevards and neighbouring streets, the project would not be able to achieve the desired paradigm shift, or just barely.
- 43 It is therefore necessary to strengthen the possible relationships between the city centre and the other strategic projects in Brussels (for example, the Canal Plan and the development of Place Rogier, Place Saintelette, Mont des Arts, Avenue de Stalingrad and the South Station, etc.). This also involves a better definition of the role and status of the pedestrian area with regard to the networks which (potentially) structure the city-region (for example, the West Station and Chaussée de Gand / Luxembourg Station and Cinquantenaire, the redevelopment of the inner ring, the railway network (underground, tram, train), etc.). Although there is a difference in spatial scale, the project promoters – in particular the City of Brussels – could draw inspiration from the *International Bauausstellung*¹⁴ (IBA), an instrument for urban planning and renewal developed in Germany. IBAs are flexible structures which unite – in a predetermined direction – a group of projects supported by different stakeholders in order to ensure overall coherence, while preserving independent project management. Usually ensured by a chamber of quality – a multidisciplinary follow-up committee which makes sure that the desired objectives are met, formulating practical recommendations and coordinated by a steward – their effectiveness is based on the fact that they are light and flexible governance structures which are established for the length of the project. These structures ensure the overall coherence of urban transformation, which is formalised via a multitude of projects, by combining efforts and facilitating collaboration between the various public institutions involved [APUR, 2009; Pinch and Adams, 2013; Shay, 2012].

2.2.2. Making the pedestrian area one of the milestones of an ambitious mobility policy at regional and metropolitan level

- 44 Contrary to the (semi-)pedestrianisation projects which are often cited as examples (Copenhagen, Bordeaux, Barcelona, Lyon, Ghent, etc.), the pedestrian area in Brussels is struggling to become part of a mobility policy at regional and metropolitan level [Brandeleer *et al.*, 2016a; Boussauw, 2016; Kesuru *et al.*, 2016]:
- The pedestrian area is not – or scarcely – connected to the other spaces which have been made into pedestrian, gathering, etc. areas, or which are being developed for these purposes in Brussels-Capital Region [Brandeleer *et al.*, 2016a].
 - The pedestrian area has increased the use of active means of travel (bicycle, walking, etc.) only marginally. The coherence of infrastructures and the connectivity of journeys have a

deciding influence in this respect [Gehl, 2011; Saelens, 2003; Craig *et al.*, 2002; Handy *et al.*, 2002].

- The extension of the pedestrian area has not led to a review of the accessibility of the city centre by public transport and/or an increase in the frequency of service [Kesuru *et al.*, 2016], while 27 % of the inhabitants of Brussels do not have easy access to the centre via public transport, given their distance from it [Lebrun, 2016].¹⁵ On the contrary, the modification of the STIB/MIVB bus network which accompanied the pedestrianisation of the central boulevards was not totally beneficial as regards service to and from the centre (reduction in the clarity of the last stops, more complex connections, etc.), while the international literature shows that easy access by public transport is essential for the success – in particular, the economic success – of pedestrian areas [Sandahl and Lindh, 1995; Boussauw, 2016].
- As regards motorised travel [Kesuru *et al.*, 2016], the view that the city centre has become inaccessible (also due to the “tunnel crisis”) has not been thwarted by a *park & ride* policy reinforced at regional and metropolitan level, while signage and electronic signs for public car parks were implemented late.
- The systems for the delivery of goods are having trouble adapting to the pedestrian area due to a regional policy which is still in its infancy [Verlinde *et al.*, 2016].

45 As presented above, this situation is common in Brussels. The institutional context, the multitude of stakeholders involved and the diverging opinions prevent the development of a coherent and ambitious mobility policy [Courtois and Dobruszkes, 2008], to the benefit of scattered actions, which are developed on a “case by case” basis [Moritz, 2011: 12]. Analyses of pedestrianisation projects carried out in the 1960s and 1970s have highlighted the fact that isolated solutions have not allowed the problem of car traffic and the co-existence of various modes of travel to be solved [Fériel, 2013]. At the same time, we must not disregard the potential “mass effect” which could result from the multiplication of qualitative projects in favour of active forms of mobility.

2.2.3. Connect the public space development plan to commercial, economic and heritage promotion development plans

46 The implementation of the pedestrian area is aimed in particular at revitalising economic activities in the city centre. The pursuit of this objective has essentially opened the door to development studies on its commercial future conducted by GeoConsulting (commercial development perspective for the city centre) and Citytools/Devimo (management of commercial property belonging to the property management service and located in the pedestrian area).¹⁶ While the economic impact of pedestrianisation has received little attention, Boussauw [2016] presents a review of the literature which identifies useful information with respect to the case of Brussels:

- As it cannot be ensured by the resident population alone, the economic success of pedestrian areas is related in particular to the presence of commercial as well as cultural, administrative, educational, etc. hubs which allow them to differentiate themselves from shopping centres, for example [Bromley *et al.*, 2003].
- Whitehead *et al.* [2006] have shown that overall – following a downturn of about two years – pedestrianisation has led to an average increase in visitors, sales revenue and rental prices for commercial space. But this increase is asymmetrical, benefitting large distribution chains mainly in the areas of clothing, restaurants/cafés and specialised shops [Mérenne-Schoumaker, 1981, 1983]. Conversely, the improvement in economic attractiveness thanks

to pedestrianisation may lead to the disappearance of other business typologies, mainly in the sectors which do not benefit from higher profits related to a proportional rent increase [Wong, 2014]. A commercial turnover therefore tends to establish itself at the expense of a diversity of supply in the city centre, which constitutes an advantage with respect to shopping centres in outlying areas [Grimmeau *et al.*, 2004]. This also takes place to the detriment of the neighbourhood city, i.e. economic supply addressed above all to the inhabitants (thus having an impact on the profiles of users of the public space).

- The economic success of a pedestrian area also depends in part on the density of the resident population and its purchasing power [Boussauw, 2016]. Since the beginning of the 2000s, the centre of Brussels has experienced significant demographic growth which involves an increase *and* a diversification of needs for services and local businesses (schools, nurseries, sports activities, daily shopping, etc.) [Van Crieelingen, 2006, 2013; Decroly and Wayens, 2016]. The importance of local (and regional) aspects in ensuring the economic success of the pedestrian area in Brussels seems all the more important considering the decline in pedestrian areas in North American city centres since they first appeared in the 1980s, which is partly explained by the fact that mobility culture is focused traditionally on accessibility by car [Faulk, 2006], as it is in Belgium.
 - Finally, the economic success of pedestrian areas is also linked to a certain flexibility of uses in time, on a daily basis as well as over the years, according to urbanistic and economic reorganisation. Among others, the quality and flexibility of developments must be ensured with regard to the many worksites which exist throughout the life of a commercial area during reorganisation/renovations, which are much more frequent than for other functions.
- 47 In terms of activities, a balance must therefore be established between the city of leisure and the neighbourhood city, similar to the Local Urbanism Plan for Paris, which was adopted in 2006 [ARAU, 2014]. In this respect, the economic dimension of the pedestrian area must not be considered only in commercial terms, and must integrate the cultural, administrative, health, educational, etc. aspects which characterise the centre of Brussels [Decroly and Wayens, 2016].
- 48 It is also necessary to connect the economic development plans to the development of public space. Among others, the pedestrianisation of Boulevard Anspach represents an occasion to promote its heritage, which has been altered over time (loss of homogeneity, transparency and identity), with the presence of equipment (benches, lighting, etc.) and a plan for façades/signs [Jourdain and Loir, 2016], bearing in mind that heritage quality is a source of attractiveness [Grimmeau and Wayens, 2003].

2.3. Challenge 3: Working together on an urban project

- 49 The debate regarding the pedestrianisation of the central boulevards is heated, taking place in the political arena and in society, with the involvement of the media. The context of the controversies regarding the requests for planning permission is complex [Vanhellemont with Vermeulen, 2016; Vanhellemont, 2016] and involves many aspects of urban reality and different ideas of Brussels, its public spaces, mobility, inequalities, economy, etc. [Genard *et al.*, 2016]. The controversies are not limited to an opposition between authorities and citizens, shopkeepers and inhabitants or motorists and cyclists. On the contrary, potential and expected supporters of the project have opposed each

other and still do to this day [Vanhellemont, 2016]. There are many reasons for this complexity:

- Due to the diversity of functions and uses, the Pentagon's status as the city centre emphasises the diverging points of view in terms of needs, expectations, challenges, risks, etc. In this respect, even if it is not always explained clearly by the stakeholders, the question as to the level (local, regional, metropolitan) at which the city should be considered is at the heart of the debates [Tessuto, 2016; Genard *et al.*, 2016].
 - As in many major urban projects [De Rynck and Dezeure, 2009] and as presented above, the compromises made in the political and administrative arena have interfered with the favourable reception of the political aim of the project [Vanhellemont, 2016].
 - Conversely, by exacerbating the terms of the debate, many stakeholders (project promoters as well as their “opponents”) have played a part in spreading a simplistic vision of the project throughout society [Vanhellemont with Vermeulen, 2016].
- 50 There are many controversies regarding the implementation of major urban projects [De Rynck and Dezeure, 2009], and the projects involving (semi-)pedestrianisation are no exception [Boussauw, 2016; Vermeulen and Hardy, 2016]. At the same time, the analysis of examples in other countries shows that the authorities should build on the conflicts (at least in part) in order to carry out complex large-scale urban projects [Pinson, 2009; Castillo-Manzano, 2014], win the support of civil society, private, semi-public and public stakeholders and thus ensure the realisation of the project and its *effective* appropriation. It is also an occasion to take advantage of *common knowledge*, i.e. the knowledge of stakeholders in the field which decision-makers and consultancy firms do not have, and which may add substantial fuel to the project by ensuring that it is in line with reality [Callon *et al.*, 2001].

2.3.1. Develop a communication policy which is equal to the project

- 51 Until now, the City of Brussels has been responsible for organising official communication regarding the pedestrian area. Different services share the task according to their competences. They coordinate their work but are relatively autonomous. The communication department for the City manages the production of various tools to promote the pedestrian area (banners set up on site, flyers, a brochure, a video, etc.). The public peace department manages a contact point via email and on several occasions (between the end of 2015 and 2016) has worked with the public stakeholders involved in order to establish joint answers to the questions received. *Brussels Major Events* (BME) set up an information kiosk at Place de la Bourse. At the same time, many public stakeholders have communicated about the project, in particular via the media. But, unlike what is seen in other cities, an *ad hoc* department has not been created to develop and carry out a global communication strategy for this major urban project. A series of elements compromise the transparency of the project for the public [Vermeulen and Hardy, 2016]:
- Communication generally concerns a specific aspect of the project, whereas people from the public make a connection between several elements of the project and do not see the administrative divisions which may exist and which organise/constrain its governance [Flyvbjerg, 1988].
 - The project involves a number of cabinets, administrations and semi-public bodies (STIB, Atrium, etc.), as well as different levels of authority (municipal, regional, federal), which do not necessarily share the same vision and whose messages are sometimes (felt to be) contradictory with respect to the project and the city centre.

- In addition, there is a large amount of communication from the media, the voluntary sector, shopkeepers, etc. which also differs, thus complicating the favourable reception of project.
- The uncertainty related to the timing of project implementation implies that there is a significant lack of communication.

52 In order to better understand the challenge regarding the future of the city centre, it is therefore necessary to adopt a cross-cutting communication strategy, bringing together everything involved in the project, while ensuring a certain transparency. The website dedicated to the project could be revised in this sense by integrating the latest data and approaches, and by offering more specific information (for example, commercial orientations, planned building projects, studies under way, agenda of events in the public space, etc.), much like the website dedicated to the renovation of Ile de Nantes.¹⁷ By continuing to develop adapted support (for example, flyers, informative signs, social networks, mobile applications, etc.), a proactive approach must also be adopted, taking into consideration more than just those who seek information. Finally, communication during the works requires special attention in order to minimise the inevitable frustrations, worries and inconveniences (phasing and timing of works, what is built, expected disturbances and measures taken in order to minimise them, etc.), as well as to celebrate the progress of the project.

2.3.2. Organise co-production

53 Participation constitutes one of the key aspects of the controversies, or at the very least, insufficient participation represents one of the arguments put forward by certain critics of the pedestrian area. Participation is subject to power relations, and in essence does not ensure the democratic nature of a project [Le Naour and Massardier, 2013]. One may also consider that, given the scope of the challenges, the limitation of the participatory process has allowed the “taking of action” and the implementation of a project which could never reach a consensus. However, the literature highlights a series of elements which show the importance of establishing room for participation, i.e. co-production:

- The implementation of participatory processes could favour the acceptance of a project and bring all of the stakeholders together in the same approach [Pinson, 2004; Vermeulen and Hardy, 2016].
- These processes also provide an opportunity to take advantage of the common knowledge of stakeholders in the field. This common knowledge, which experts and politicians do not necessarily have, constitutes a basis in order to ensure that the project is in keeping with the reality in the field [Callon *et al.*, 2001]. In this sense, participation allows the needs and expectations of inhabitants, users, shopkeepers, etc. to be met, the problems encountered to be highlighted, and the efficient means of action to be defined [Lascoumes and Le Bourhis, 1998].
- The co-production and co-management of a project favours the development of a feeling of belonging to a place and, therefore, respect towards it [Vermeulen and Hardy, 2016].

54 The opening of project implementation to different fields of co-production would thus allow an improvement of its quality. There are at least three pertinent levels of co-production: *economic* co-production through dialogue on the economic and commercial development of the city centre; *intangible* co-production concerning activities in the public space, in particular the worksite – in order to define the events during the “idle time” of the works – and the *material* co-production of the public space.

2.4. Challenge 4: Confirm the paradigm shift

- 55 The pedestrian area is presented by project promoters as the formalisation of a paradigm shift with respect to post-war urban policies. The implementation of this paradigm shift is, however, faced with three major difficulties.
- 56 Firstly, the project is not located in an ordinary neighbourhood, but rather in a multifunctional city centre with many different users (underprivileged and privileged inhabitants, workers, tourists, customers, etc.) who have different relationships with the city centre, which are sometimes difficult to reconcile [Decroly and Wayens, 2016; Genard *et al.*, 2016; Van Criekingem, 2006, 2013; Van Hamme *et al.*, 2016].
- 57 Secondly, the project is torn between the usual feebleness of Brussels decision-makers with respect to reducing the influence of car traffic [Courtois and Dobruszkes, 2008] and the increasing rejection of cars to the benefit of non-motorised mobility [Genard *et al.*, 2016; Genard and Neuwels, 2016].
- 58 Finally, for a multitude of institutional levels and public stakeholders, the pedestrian area is based on a diversity of visions of the city, its centre, motivations and objectives [Vanhellemont, 2016]. The challenge in this respect is to ensure that the necessary compromises do not reduce the impact of the project.

2.4.1. Taking action on and via housing

- 59 On the part of the public authorities, the pedestrianisation of central boulevards is justified in particular with regard to two major joint objectives: “to go from being a utilitarian city designed for car transit, to a city designed for its inhabitants and where it is nice to live”; and “to revitalise economic activity in the centre” by targeting visitors for the most part (workers, tourists, consumers, culture enthusiasts, etc.).¹⁸ On the contrary, the analysis of debates highlights the role of the opposition between “inhabitants” and “visitors” in the controversies [Vanhellemont, 2016; Tessuto, 2016; Genard *et al.*, 2016], implying that the two objectives revealed by the public authorities would be difficult to reconcile. The pedestrian area would prejudice certain categories of stakeholders, namely the inhabitants and/or shopkeepers in the city centre, depending on the point of view.
- 60 Many international projects testify to the fact that the improvement in habitability and economic revitalisation are not antagonistic, but that precautions must be taken in order to ensure a balance. The literature shows that the economic success of pedestrian areas depends in particular on residential density [Boussauw, 2016]. At the same time, it highlights four possible harmful effects of pedestrianisation on the residential sector, which are visible when there is too much of a focus on commercial attractiveness:
- The creation of a pedestrian area generally results in an increase in rental prices for commercial space [Sandahl and Lindh, 1995; Boussauw, 2016], which favours the mono-functionality of the area. It sometimes becomes more worthwhile economically to make an entire commercial space profitable and not to use the upper floors for residential purposes, not to mention the fact that it often becomes difficult to access these floors [Dessouroux, 2006].
 - The predominance of the commercial function also hinders residential attractiveness, as disturbances due to activities in pedestrianised public spaces cause the middle and well-to-do classes to leave [Wackermann, 1982].

- The transformation of the boulevards into a pedestrian area could favour the development of the residential offer for tourists, such as rooms or flats available on the booking platform Airbnb [Corijn *et al.*, 2016], which already represents 6 to 7 % of the total number of private dwellings in certain parts of the Pentagon [Decroly and Wayens, 2016]. This phenomenon could thus favour an increase in residential property prices.
- The Pentagon has experienced strong demographic growth which is heterogeneous from a socioeconomic point of view. This leads to an increase in *and* a diversification of housing needs.

61 It is therefore essential to take action on and via housing. This involves ensuring residential attractiveness while maintaining a balance at two levels: on the one hand, between the necessity to revitalise the city centre and the risk of gentrification and, on the other hand, between the increase in temporary housing (Airbnb, hotels, bed and breakfasts, etc.) and the need for permanent inhabitants. The question therefore arises as to the strategies to adopt with respect to the technical and legal levers which favour or require the maintenance of residential functions in commercial and tourist areas [in particular ERU 2001-2012; 2012-2014], and the future of buildings which belong to the city and the Brussels CPAS located in the pedestrian area and its surroundings.

2.4.2. Preventing the transfer of pollution

62 The car-free areas and the areas with low emissions may improve the quality of life of inhabitants and workers in three ways: (1) by improving air quality through a decrease in the emission of air pollutants [Genc *et al.*, 2012; Lim *et al.*, 2012; IBSA, 2016], (2) by reducing the noise caused by road traffic, and (3) by favouring the use of active modes of travel [Gehl, 2011; Kesuru *et al.*, 2016]. In order to achieve the desired paradigm shift, the challenge is to allow these improvements to benefit the entire city and not only the pedestrian area:

- The feedback from North American projects from the 1960s and 1970s shows that the pedestrian areas themselves do not allow a decrease in the use of cars and therefore do not regulate the pollution they cause [Ferié, 2013]. They may lead to a shift of traffic and pollution to the surrounding streets. In order to have a positive impact beyond the area of intervention, pedestrianisation must be integrated into an ambitious mobility plan which ensures a modal shift.
- The extent, content (air, noise, etc.) and scope of the impact of the pedestrian area in Brussels have not been the object of an exhaustive and continuous evaluation. Measures have been established but they have been carried out in an isolated manner by different sources (Bruxelles Mobilité, Atrium, ProVélo, City of Brussels), according to different methodologies and timescales [Bruxelles Mobilité, 2016]. Due to a lack of a systematic collection of data, it is very difficult to evaluate the quality of results. At the same time, the data gathered concern volumes of traffic and do not provide a detailed interpretation of the situation (for example, modal shares, effects due to car traffic, etc.).
- Although it is quantitatively minimal, the shifting of car traffic to certain neighbouring streets may increase the deterioration in air quality tenfold, as it depends in particular on urban morphology [Kesuru *et al.*, 2016] (for example, around the Central Station and Boulevard de l'Empereur, an increase of 270 vehicles/hour [Bruxelles Mobilité, 2016], Quai du Commerce or Rue des Six Jetons). Air pollution is evacuated less easily in narrow streets.
- Although the volume of traffic stagnates or decreases, it is possible that car traffic might increase in certain streets, thus increasing noise pollution and air pollutants.

- The shifting of traffic to the neighbouring streets could discourage the use of active modes of travel and have a negative impact on the commercial speed of public transport [Kesuru *et al.*, 2016].
- The excessive development of activities in the pedestrian area could hinder the suppression of noise caused by road traffic.
- The shift of pollution and the creation of new types of pollution ignite controversies [Vanhellemont, 2016; Genard *et al.*, 2016].

63 In order to ensure the sustainability of the city centre, the pedestrianisation of central boulevards is insufficient in itself. At the same time, there is a very real risk of a shift of pollution to the streets surrounding the pedestrian area. Various monitoring efforts under way will allow an objective look at the situation and could constitute the basis for the revision of traffic and mobility plans.¹⁹

2.4.3. Integrate the existing car parks into the long-term perspective for the pedestrian area

64 As a consequence of post-war urban policies, the centre of Brussels is characterised by the presence of a very high number of private and public car parks [Hubert *et al.*, 2013: 10]. As far as we know, the gradual reduction in the number of existing car parks when environmental permits are renewed is not on the agenda of the City of Brussels and Bruxelles Environnement (which issues these permits). The presence of these car parks has a direct impact on the configuration, organisation and perimeter of the current and future pedestrian area, as well as on the air quality in the city [Brandeleer *et al.*, 2016a; Kesuru *et al.*, 2016]:

- The existing car parks in the Pentagon provide approximately 25 000 parking spaces (i.e. much more than in other city centres with a comparable surface area), and play a “role as an ‘attractor’ of cars” in the heart of the pedestrian area or in its immediate surroundings [Hubert *et al.*, 2013].
- These car parks, whose access must be legally guaranteed, have determined the perimeter of the pedestrian area (for example, Rue de l'Ecuyer and Rue Fossé-aux-loups).
- These car parks limit the possible future widening of the pedestrian area (as the City of Ghent is attempting to do today).
- Their number and scattered location make it difficult to design *P-routes*²⁰ allowing a means to enter and exit car parks.

65 An action which suggests that cars are no longer welcome in the city leads to heated debates in the public sphere as well as in the political arena [Courtois and Dobruszkes, 2008]. In the framework of the pedestrian area, these debates were stirred up by the lockdown following the Paris attacks, the effects of the Brussels attacks and the closing of the tunnels, which gave the impression that the city centre was no longer accessible by car [Vanhellemont with Vermeulen, 2016; Genard *et al.*, 2016].

66 Brandeleer *et al.* [2016a] thus feel that, to a great extent, the pedestrianisation of the centre is restricted by the presence of car parks and not the reverse. If their pertinence is not called into question, the power relations will always be established in favour of parking infrastructures. The ability for the pedestrianisation of the city centre to create a paradigm shift may be limited.

Conclusion

- 67 The success of pedestrianisation is not a given. As seen in the literature, various precautions must be taken and many aspects must be dealt with. The realisation of a complex urban project is an art in itself requiring the collaboration of stakeholders and services which are not necessarily in the habit of doing so, the combination of different and even competing levels of governance, the creation of positive political and civic dynamics regarding the project, and taking advantage of and developing the levers for action which allow the long-term goals of the project to be reached.
- 68 This synopsis is based on preliminary research, experiences abroad and scientific literature. In order to carry out a complete diagnosis, we require more detailed empirical data on the uses and social practices in the area and timeframe under study, on air quality, on mobility and accessibility, on the economic and commercial dynamics, on the effects on a wider scale, etc. Additional research is under way concerning some of these aspects.
- 69 In the present state, the pedestrianisation of central boulevards in Brussels could be improved in at least four areas. This would involve (1) adding a true city project to the spatial planning by taking action on the intangible aspects, and through better planning of the different atmospheres and social, commercial and artistic activities in the city centre; (2) including the project in a multi-scale vision of territorial development and associating it with different mobility, environmental, business and housing plans, among others; (3) increasing the support for the project by improving information and communication from a qualitative point of view, as well as participation and coproduction, (4) and increasing the paradigm shift by clarifying the anticipated city project.
- 70 The project for the redevelopment of the centre of Brussels is still far from over and there is still a lot of room for manoeuvre. Given the extent and the range of challenges, stakeholders, instruments and levels of action, there is an urgent need for the implementation of a cross-cutting operational structure within the city, coordinated by a steward whose legitimacy and authority are recognised by all, the organisation of structured meetings with stakeholders in the field, and the creation of a “chamber of quality” composed of recognised experts and representatives of the different levels of authority involved (City, Region, Beliris, etc.), which would ensure that the defined objectives are met and ensure the quality of project implementation. This solution has been successful for more than ten years in many European cities, such as Amsterdam, Antwerp and Zurich [Moulaert *et al.*, 2013; Segers *et al.*, 2013].
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NOTES

1. The Brussels Centre Observatory (BCO) is an initiative of the Brussels Studies Institute (BSI), the platform for research on Brussels. Available at: <http://bco.bsi-brussels.be>
2. CITY OF BRUSSELS. Un nouveau centre-ville ambitieux et dynamique, In: *Ensemble, faisons battre le cœur de Bruxelles (Centre-ville Bruxelles)* [online]. Retrieved on 23 February 2017. Available at: <http://centre-ville.bruxelles.be/fr/le-projet/objectifs>
3. *Ibid*
4. Online: <http://www.eru-urbanisme.be/fr/print/project/57/>. Retrieved on 8 July 2017.
5. Online: <https://monitoringdesquartiers.brussels/>
6. Today, walking constitutes the primary mode of travel in Brussels (37 % of all travel) and the use of bicycles has trebled in a decade, whereas the modal share of the car has decreased (from 50 % to 32 % of all travel) and the motorisation rate of the residents of Brussels has declined.
7. Travel by non-residents of Brussels represents 40 % of car traffic in BCR, which has a significant impact [Hubert *et al.*, 2013]. It is concentrated mainly during workdays at peak times, and is, on average, longer than car travel by the residents of Brussels.
8. Following the Cooperation Agreement of 15 September 1993, the federal government committed itself to carrying out and financing a series of interventions in the Brussels

territory in the areas of mobility, green spaces, culture, heritage, social housing, etc. These interventions are ensured by Beliris, which is part of *SPF Mobilité et Transport*.

9. These car park projects have been abandoned gradually. But various property projects have announced the development of new parking spaces in close proximity to the pedestrian area.

10. CITY OF BRUSSELS, 2015. *Ensemble, faisons battre le cœur de Bruxelles*, p. 3

11. According to the title of the work by Jan Gehl [2011]

12. CITY OF BRUSSELS, 2015. *Ensemble, faisons battre le cœur de Bruxelles*, p. 11

13. <http://www.prdd.brussels>

14. <https://www.open-iba.de/en/>

15. Mainly, the inhabitants of Brussels who live to the east of the municipalities of Uccle, Watermael-Boitfort and Ixelles.

16. Studies financed respectively by the City of Brussels (2015) and *Régie Foncière de la Ville de Bruxelles* (2016).

17. <http://www.iledenantes.com/fr/>

18. CITY OF BRUSSELS, 2015. *Ensemble, faisons battre le cœur de Bruxelles*, p. 3

19. In particular the BSI-MOBI project “Monitoring the impact of travel behaviour, accessibility & satisfaction with regards to the city centre”, supported by Bruxelles Mobilité.

20. A *Parking route* or *P-route* is a marked circuit, generally in a loop, which leads motorists from outside the area concerned towards one or more car parks, and which allows them to leave the area easily.

ABSTRACTS

The new pedestrian area in the centre of Brussels is one of the most important urban projects of the last decades. In 2015, the central traffic artery, Boulevard Anspach, was pedestrianised. The public space and the biggest metro stations must still be renovated. The implementation of this project and the challenges it faces are inherently complex. Experiences in Belgium and abroad show that the impact on the city centre of Brussels will be significant at different levels: the quality of public space; housing and public services; local economy and employment; mobility, logistics and accessibility; and social and cultural activities. However, recent data and analyses are fragmented, non-existent or inaccessible for all stakeholders involved. Nevertheless, an urban project may only succeed when knowledge and expertise are gathered and shared, and used to support decision-making. Therefore, BSI - Brussels Centre Observatory (BSI-BCO) is monitoring this project closely. Previously published research is further developed in this synopsis [Portfolio#1]. Part 1 discusses the context of the project. Part 2 details the four main challenges based on our first observations. The synopsis concludes with concrete scenarios to improve the overall quality and management of the project.

Le nouveau piétonnier est l'un des principaux projets urbains conçus pour le centre de Bruxelles au cours des dernières décennies. En 2015, la voie de transit du Centre – le boulevard Anspach – a été déclarée interdite à la circulation automobile. Le réaménagement de l'espace public et la rénovation des principales stations de métro n'ont pas encore commencé. La réalisation et les défis de ce projet urbain sont, par définition, complexes. Des expériences menées dans le pays et à l'étranger montrent qu'il aura un impact important à différents niveaux : qualité de l'espace public, logement et équipements, économie locale et emploi, mobilité, accessibilité et logistique,

activités sociales et culturelles, etc. Cependant, les données et analyses récentes sont souvent fragmentées, inexistantes ou insuffisamment disponibles pour tous les acteurs concernés. Pourtant, un projet urbain de qualité ne peut aboutir que lorsque ces informations sont rassemblées et partagées, mais aussi lorsqu'il porte une prise de décision. C'est pourquoi le *BSI - Brussels Centre Observatory* (BSI-BCO) suit ce projet de près. La présente note de synthèse s'appuie sur un travail publié précédemment [le Portfolio#1]. La partie 1 expose le contexte général du projet et la partie 2 développe l'aspect concret de quatre grands défis, sur la base de nos premières constatations. En conclusion, la note propose quelques pistes concrètes d'amélioration de la qualité et de la gestion du projet.

De *nieuwe voetgangerszone* is één van de belangrijkste stadsprojecten in het Brusselse stadscentrum van de afgelopen decennia. In 2015 werd de centrale doorgangsweg -Anspachlaan-autovrij gemaakt. De heraanleg van de publieke ruimte en vernieuwing van de belangrijkste metrostations moet nog starten. De realisatie en uitdagingen van dit stadsproject zijn per definitie complex. Ervaringen uit binnen- en buitenland tonen dat de impact groot zal zijn op verschillende niveaus: de kwaliteit van de publieke ruimte, huisvesting en voorzieningen, de lokale economie en tewerkstelling, mobiliteit, bereikbaarheid en logistiek, de sociale en culturele activiteiten, enz. Recente gegevens en analyses zijn echter vaak gefragmenteerd, onbestaande, of onvoldoende toegankelijk voor alle betrokken actoren. Toch slaagt een kwaliteitsvol stadsproject pas wanneer deze kennis wordt gebundeld en gedeeld, maar ook besluitvorming ondersteunt. Daarom volgt het *BSI - Brussels Centre Observatory* (BSI-BCO) dit project van nabij op. Deze synthesenota bouwt verder op eerder gepubliceerd werk [het Portfolio#1]. Deel 1 belicht het project in haar ruimere context en deel 2 concretiseert vier grote uitdagingen op basis van onze eerste vaststellingen. De nota besluit met concrete pistes om de kwaliteit en het beheer van het project te verhogen.

INDEX

Keywords: public action, economic development, public space, mobility, urban planning, quality of life, urban renewal

Trefwoorden overheidsoptreden, economische ontwikkeling, openbare ruimte, mobiliteit, stadsplanning, levenskwaliteit, stadsvernieuwing

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