

REGIONAL PLANNING CHOICES: COMPARING THE RER IN BRUSSELS (BE) AND THE *STEDENBAAN* IN SOUTH-HOLLAND (NL)

N. Casabella* & P. Frenay**

*Cosmopolis, VUB – EhB, 1050 Brussels, Belgium, Email: Nadia.Casabella@vub.ac.be

**ULB – FSA – BATir – IUAT, 1050 Brussels, Belgium, Email: Patrick.Frenay@ulb.ac.be

ABSTRACT: The purpose of this paper is to make explicit the regional planning choices that sustain two important rail transport infrastructure projects, the Dutch *Stedenbaan* (extending between Leiden and Dordrecht) and the Belgian RER (centered in Brussels and spanning over a 30 Km radius area). Even if the two projects have so far gathered sufficient institutional support and there seems to be enough agreement on the general objectives to pursue by the multifarious actors therein involved, our study intends to show the apparent ambiguities or contradictions surrounding the planning choices made and to which extent they influence implementation at different scales and in differing contexts.

KEYWORDS: planning models, sustainable development, regional collaboration

1 INTRODUCTION

As cities tend to decentralize and consolidate into lower density urban regions, the need for an integrated approach to transport and land use becomes visible and gains momentum, further supported by the contention that the socio-economic development of those urban regions depends on good accessibility and regional coherence. To bolster and tie up all transport networks in a polycentric region of sorts, helping to functionally integrate the diverse urban settlements, has become as a result the new policy goal for urban transport in Europe [20]. A changed governance framework is usually introduced next to it, for only tight collaboration between all parties involved on a regional scale can deliver the promised socio-economic benefits. Here we discuss two important regional rail infrastructure projects, the Dutch *Stedenbaan* (or City Line, extending between Leiden and Dordrecht) and the Belgian RER (centered in Brussels and spanning over a 30 Km radius area)¹.

Both projects are conceptually ‘touched’ by the new conventional wisdom that aims to integrate transport and land use at railway stations, generally referred to as TOD². It does so either by realizing transit systems that connect urban developments or steer growth along planned growth axes [9] or vice versa, by concentrating urban development around stations in order to support transit use. The arguments buttressing this planning model are multifarious: from improving accessibility and facilitating modal choice [10], to providing answers for a sustainable approach to urban transport by substantially lowering car-dependence [4], to even increasing the degree of ‘livability’, as expressed in “walkable, diverse, and active” urban places [7]. In spite of the initial similarity between the two projects, their implementation is rife with differences, partly due to socio-technical choices and partly to the institutional context within which they evolve.

The RER project in and around Brussels can be best considered an improved service for commuting, a ‘suburban’ train so to speak, running mostly over existing tracks and displaying distinct and sometimes conflicting solutions to the integration of transport and land use in the proximity of railway stations. Fairly due to the fact of Belgian regionalized spatial planning competences since the late 80s, its implementation does not follow a strategic policy framework shared by all parties. Instead, separate regional objectives are carried forward sometimes strongly compromising the coherence of the project as a whole. Our analysis focuses on Brussels, where the clash between all parties’ claims seems most apparent.

On the other hand, *Stedenbaan* demonstrates, at least theoretically, all the characteristics of a full

¹ RER or “Regional Express Railway”, which in the case of Brussels is complemented by bus express lines.

² TOD stands for ‘transit oriented development’. See for a comprehensive overview the webpage of the Victoria Transport Policy Institute, <http://www.vtpi.org/tod/tod45.htm>.

fledged TOD, joining in one planning solution: a high-quality transit system, fast, riding frequently and accessible on ground level; a comprehensive approach to mobility, trying to integrate door-to-door trips (before and after reaching the railway station); and diverse and high-density urban developments around railway stations. Of course, the implementation time is always destabilized with disputes. Yet the creation of a *Stedenbaan* workgroup to care for monitoring and coordination is proving successful.

At the end, some conclusions will be advanced (i) on the extent to which ambiguous regional planning choices might lead to inconsistency between the original stated goals and the final realization and (ii) on the relevance to gather support for the implementation of regional projects at the local level, looking for complementarities and coordination among the local partners instead of falling into a dynamics of conflict or concurrence compromising the financial and spatial sustainability of such projects.

2 THE RER IN BRUSSELS

Brussels is a federated region on its own within the federal configuration of Belgium, formally named 'Brussels-Capital Region' (RBC) –the other two regions are Walloon and Flanders. Spatial planning, housing, transport, the environment and regional aspects of economic policy are now the exclusive responsibility of the three regions. The RBC extends over a surface of 160 Km² around the city of Brussels. It has recently reached the historical figure of 1 million inhabitants, after successive suburbanization waves 'emptied out'³ the city, only since recently compensated by international immigration. The inhabitants of its metropolitan area though amount to 2.5 million, and the calculated population living within a travel to work area reach the 10.5 millions, including substantial cities such as Leuven, Antwerp, Gent and Charleroi⁴. Furthermore, 55% of the employment in Brussels is filled with commuters (400,000), who make use of one of the densest rail networks existing in Europe [2] and profit from the fact that office space is mostly bundled around the main railway stations placed inside the city: North, Central and South stations –joined since 1952 by a partly underground tunnel, the North-South corridor (JNM), through which nearly all trains in the national network pass.

The concentration of office space around railway stations happened in relatively short time from the late 50s on, as consequence of heavy urban renewal operations which transformed previously mixed neighborhoods into mono-functional areas –an aspect that was heavily opposed by citizens' forums and subsequently addressed in the first regional plan (1995) that followed the formation of the RBC in 1989. The urban transformation around existing railway stations has made a come back in the Brussels policy arena as a consequence of the RER, a rapid-transit rail system serving an area of 30 Km radius around the city and running on existing tracks. Initially conceived as a 'suburban' train intended to alleviate car-related congestion problems, having so few stations within the RBC as possible, it is slowly becoming a regional train with an urban vocation. In fact, the last government agreement of the RBC (2009) aims at changing the position of the more than 40 railway stations existing within its boundaries by revamping them into development poles.

However, this new ambition does not receive the same support from all the parties involved, who still see the RER as a means to smoothly bring in and out commuters and prefer to ignore the impact that this project would have on the evolution of Brussels' suburbanization. We will here review some of the socio-technical constraints likely to influence the development of the Brussels RER into an urban asset, as well as look at the complex institutional context within which such an ambition is to be shaped in preparing its future arrival, planned for 2016.

2.1 Brussels' transport network and spatial planning ambitions

The recent completion of the plans of metro, tram and bus of the local transport company (STIB), conducing to the construction of a circle metro line around the old center, has lead to a reinforced position of the South and West railway stations inside the urban transit network⁵. In a way, it has contributed to

³ In the period 1994-1997, the city lost 28,850 residents to its periphery [12].

⁴ For a discussion on the definition of functional boundaries around Brussels, and also on the clash between functional and political boundaries, see the chapters devoted to Central Brussels in the POLYNET research, <http://www.polynet.org.uk/>.

⁵ Plan of the transit network available at <http://www.stib.be/netplan-plan-reseau.html?l=fr>.

strengthen the accessibility within Brussels on its east-west axis, while the RER could adequately complete it on a north-south direction. However, the Brussels regional authorities did not seem to fully realize up to now the potentials of the RER for city transport and planning, serving as an advantageous supplement to the public transport network, thus offering a comparative advantage to the Brussels inhabitants in their choice of residence [17]. Instead, the national railways company (SNCB) and the Brussels regional authorities seem entrenched in their differences.

On the side of the SNCB, an increase of the number of trains crossing the JNM appears as not viable –otherwise the frequency of inter-city and inter-regional lines (IC/IR), the most profitable lines, would become seriously threatened. The strategy followed by the SNCB in order to realize the RER is rather to multiply the tracks crossing Brussels: first, by doubling the ones through Brussels, from two to four. Second, by realizing two new corridors: the Schuman-Josaphat (JSJ), along the European quarter on the eastern part of the city; and the line 28, traversing West station. Nevertheless, the future of Brussels' railway stations will not be determined by the junctions alone but first and foremost by the style of exploitation chosen, since the IC/IR trains will mainly stop at the three major stations in Brussels, only tangentially affecting the two other stations located in the European Quarter –i.e. Schuman and Luxembourg. The last known SNCB scheme⁶ opts for shifting the RER lines towards the two mentioned junctions, avoiding as far as possible to let the RER lines circulate through the central junction (JNM). An immediate conclusion of this would be an overloading of the metro service since most commuters have as end destination the city centre and the European Quarter. The metro line linking West and Schuman stations, already congested in the portion between Schuman and Central stations would be by far the most affected. Secondly, the proposed solution, by refusing to deal with the issue of correspondences between the RER and other SNCB lines (one of the success factors of the RER in Paris) and by leaving the European Quarter behind, fails even to release some potentials exclusively associated to the RER line exploitation [16].

On the side of the Brussels government, the basic concerns of the last Regional Development Plan (PRD, 2002) can be summarized as preventing the region from losing middle-class wealthy inhabitants, and controlling, as much as possible, deconcentration of economic activities to the benefit of the periphery, especially those in high added-value service sectors. As regards the aspects likely to have a direct bearing on the RER, the PRD privileges residential to office development within its territory –yet does not exclude new office development around major stations, arguing that this will favor the use of public transport. It aspires to balance the unequal position between the western and eastern parts of the city. And it wants to increase the mix of urban functions in the zones designated as of regional interest (ZIR), located in the immediacy of North and South stations, and in abandoned railway yards –e.g. the brownfield sites of West, Delta and Josaphat. None of these ambitions seem to properly envisage an urban development strategy along the TOD lines. Moreover, the Brussels government has not as of yet wrested many guarantees from the SNCB, whose main objective is the reduction of costs in the whole operation. In a Brussels perspective, it ought to be unacceptable to see its future development compromised again by the SNCB pragmatism and greediness, as it happened in other major rail infrastructural projects, like the South station [1]. At that moment, the combined effect of South station being the easiest option, technically and cost-wise, and the approval of “a law under which NMBS was permitted to make profits from alternative sources, including real estate transactions” [ibid., p. 221], presented a quick fix to the financial difficulties of the SNCB and paved the way for a speculative real-estate operation in the surroundings of South station.

2.2 Institutional aspects and their impact on the RER project

The RER project shares with many other big European infrastructural realizations the same degree of institutional and political complexity. On a practical level, it needs the concurrence and assistance of at least twenty-three governmental instances and four public companies: the federal government, only shareholder of the national railway company; the three regional governments (Walloon, Flanders and RBC), granting planning permits; the Brussels local government (amounting to nineteen communes), conceding building permits; the railway company itself, the ultimate responsible of exploitation, infrastructure and rolling stock of the rail service; and the regional public transport bodies (De Lijn, TEC and STIB), in charge of public transport before and after RER–i.e. the transport mobility chain, from door to door. On a political level,

⁶ It was published in the popular press (March 2009, “Le Vif” and “Knack”) before the RBC had official access to it.

while Brussels is often mentioned in the regional planning memoranda of the two other regions⁷ –the RSV (1997) and the SDER (1999), the BCR planning strategies deal almost exclusively with the internal organization of the city, “without much attention to trans-regional issues” [22] In this fragmented political context, which lacks any political or administrative structure at federal level designed for supra-regional coordination, the RER has been the first occasion [23] the three regions, since their formation in the late 80s, have been sitting together, joined by the federal authorities, and have reached a cooperation agreement on the financing of the RER project around Brussels⁸.

Obviously, every party understands the beneficial impacts that might accompany the realization of the RER, despite its reduced frequency of service: one train every fifteen minutes in peak hours⁹. The actual gains though differ from party to party, and so do the narratives accompanying them. The Walloon region wants to be brought as fast as possible in the Brussels core, building nothing than P+Rail next to the stations that encourage long distance commuting and further suburbanization. Flanders, on the other hand, puts infrastructure forward as motor of spatial development, proposing in the RSV a more centralized clustering of activities around the stations, which will accentuate the polycentric functioning of the Flemish urban system and eventually contribute to improve its development prospects and functional rank overall. The SNCB focus, as already mentioned, is double: reducing the amount of railway stations served, in order to maximize exploitation profits, and allowing smooth operation of its IC/IR and HST lines –fully facilitated by some recent RER works, like the doubling of some rail tracks crossing Brussels, and the Diabolo project, connecting the new Leuven – Liege line to the airport, thus allowing to connect Charleroi and Namur to Antwerp via the airport and the corridor JSJ.

Most importantly, as we already mentioned, the RBC did not seem to have a clear purpose other than to take advantage of a disused fine-meshed rail network to complement a clearly insufficient public transport network [14]. Indeed, the RBC will see the quality of its public transport network definitely improved, while not having to pay directly for it. Indirectly though, it could happen that its already frail tax base¹⁰ would shrink because of further suburbanization¹¹. Conversely, the other two regions, Flanders and Walloon, apart from continuing to attract the middle classes which flee from Brussels, show a real interest on pulling towards their territories the economic and financial returns linked to the agglomeration economies produced in and around Brussels [21]. Overall, besides the conflicting interests of the SNCB in relation to those of BCR, the actors involved fail to deliver the full urban development potential the RER could usher in, exacerbated by inter-regional conflicts.

2.3 Towards a RER-based regional development project for Brussels

Concurring with what has been stated before by other authors [12, 17], we too see in the RER an immense potential for a sustainable development of the Brussels region. Not only the extent to which the new strategic position of Brussels within the public transport network at urban and regional scale could influence urban development around these stations, particularly by bringing the IR in some of the peripheral railway stations (e.g. Uccle-Calevoet, Boitsfort, Etterbeek, Schaerbeek, Bordet and Jette). Most of all in the sense of the conversion of Brussels from a monocentric into a polycentric city, guiding certain urban developments to local centers in Brussels (e.g. Josaphat, Delta, Boitsfort, Moensberg, Calevoet, St. Job/Vivier d’Oie, Cureghem, West, Bockstael...). An objective that, if only rhetorically, already appears in planning documents (IRIS2, PDI) and, most recently, figures prominently in the new governing agreement (2009).

Nevertheless, the threat remains as to whether the development of the RER will effectively generate new urban development at the expense of Brussels, exposed to further decentralization of some core economic activities and urban functions to its outskirts and beyond, especially in absence of accompanying

⁷ Brussels is amply portrayed as the core of their respective polycentric urban regions: the Flemish Diamond and the Walloon Triangle.

⁸ As of yet pending, the decision on who is to pay for the RER exploitation deficit and for the rolling stock.

⁹ Two trains an hour in every RER station the rest of the time.

¹⁰ The RBC receives through direct taxes only 8.5% of national wealth, while representing 10% of the total population and producing 19% of the GDP.

¹¹ Directly, by reducing personal tax contributions, and indirectly because of a real risk of real estate and land values plummeting [15].

measures being simultaneously implemented to the RER. True, both BCR neighboring regions state in their planning memoranda their will to contain urban development, yet in their local plans appear plenty of urban development projects planned in the Brussels outskirts [22] –to start with, the 32,000 dwellings between Halle, Asse and Vilvoorde, in the Flemish region. Additionally, it could mean increasing budget problems in the Brussels-Capital region, overcrowding existing amenities and public services, eventually leading to greater social unrest [23], as the problems of the central communes in the city could aggravate (i.e. high unemployment rate, particularly elevated among youngsters and low-skilled people). Notwithstanding this likely evolution, some stakeholders believe¹² that the RER could increase the labor market efficiency, contributing to partly solve the employment mismatch, as it would bring the low-skilled jobs located in the periphery to the low-skilled employees living in the centre of Brussels. Of course, the threat also exists that the jobs currently vacant in the periphery would be filled by other means than those sketched.

The important case to be made then is that, beyond regional disputes, the RER will surely bolster agglomeration economies at regional and local scale. The realization of the RER could therefore be seen as a means to improve regional economic performance by modifying the spatial structure of the region and not just as a way to solve existing problems within it (e.g. congestion, employment mismatch, etc.). The presence of adequate infrastructure availability in specific urban centers could eventually provide sufficient agglomeration economies which might help to sustain indigenous development and/or encourage inward investment into the region (e.g. Aalst, Dendermonde). In the particular case of Brussels, the present absence of a good functioning mobility system (both at the local scale and at the scale of the entire city-region) lowers the quality of life in the area, discourages households and firms to settle down here and reduces generally the attractiveness of the region –hence the chances for regional prosperity. In this sense, the RER represents a chance of improving the mobility system, by strengthening the railway network and increasing service and number of stations, as well as a real urban planning opportunity, if combined with TOD –i.e. increasing the mix and density of land uses in the proximity of public transport stations and hubs. Altogether this could indeed contribute to alleviate traffic congestion thus improving regional and local efficiency. Besides, it is far from obvious that the RER will lower commuting volumes by bringing jobs closer to the commuters' places of residence, with difficult to predict consequences for the overall commuting pattern. Confronted to this major challenge, and in these circumstances of regional complexity, one has to wonder why there is no authority in charge of organizing or administering the different and often conflicting claims attached to the RER.

3 THE *STEDENBAAN* IN SOUTH-HOLLAND

The South Wing of the *Randstad* extends over a surface of about 240 Km². Its 3.5 million inhabitants and 1.5 employments make it one of the densest regions in Europe, yet spread out in multiple centers that lay never far away from each other. The South Wing is not a region geographically bounded; it can be rather defined as an administrative coalition, the South Wing Platform (BPZ), among the Province South Holland, the city-regions, and the municipalities within the South Wing –extending from Leiden to Dordrecht, and from Westland to Gouda. This denomination is relatively recently¹³; born as an attempt by the central government to make the *Randstad* more manageable, by splitting it into three zones: North Wing, South Wing and Utrecht.

This informal governance structure, established as a voluntary co-operation platform in 2000 with no legal status, signed a collaboration agreement aimed at reinforcing the competitive position of the South Wing in 2003. Crucial building blocks therein were to improve the (inter)national and regional accessibility¹⁴, to diversify the housing market and to strengthen the 'urban culture' offer [5]. The overall aim was defined as the achievement of a cohesive urban system, referred to in policy documents as the South Wing network city,

¹² Namely the Chamber of Commerce of Brussels and the (Walloon, Flanders, and federal) employers' associations, having published recently a vision for the Brussels metropolitan area titled "Business Route 2018"; see more in <http://www.metropolitanbrussels2018.eu>.

¹³ Formally it only exists since the approval of the last national planning memorandum in 2003, the sixth in order (aka *Nota Ruimte*). Informally it already appeared in the 4th memorandum (1988).

¹⁴ Regional distances correspond to 10-40 Km, and imply more than 70% of daily displacements in the South Wing.

by realizing a sort of integrated transport and land use backbone that would reinforce the polycentric urban structure already in place. Complementarily, this project was thought as contribution to the sustainable development of the region, chiefly by helping to reduce private car displacements –now representing 60-70% of total travelers, against 10-20% by train.

First step on this direction consisted on improving public transport on the regional scale. At present, metro and tram networks do not usually reach out into surrounding municipalities, impeding traveling by public transport within the city-region. Moreover, train connections happen only between city centers, and rail capacity is one of the most underdeveloped of all the metropolitan areas in Western Europe [20]. *RandstadRail* (a light rail connection operative since 2007 between The Hague and Rotterdam) worked as first showcase for this ambition. Next step will be *Stedenbaan*, a project starting in 2010 (with 2020 as its time horizon) and with a clear TOD bias –i.e. a comprehensive approach to mobility, trying to integrate a high-quality transit system at the scale of the South Wing of the *Randstad* (with 6 trains every hour in the corridor Leiden-Dordrecht and 4 in the other two corridors leading to Gouda) together with diverse and high-density urban developments around the 36 railway stations it will be serving¹⁵. *Stedenbaan* (the City Line) will not put up new rail connections but use the free capacity of the existing railway between Schiphol and Rotterdam –created by moving the HST line between Amsterdam and Paris to its own track.

All the public authorities territorially attached to the South Wing, reunited in the BPZ, are parties both involved in and leading this project: a coalition of over 20 local authorities, 5 city-regions, one provincial council as well as the central government [10]. Likewise, the likely real estate impulse the areas neighboring the railway stations will experience, along the 150 Km of existing railway line, has been included in the project, engaging private developers from its early stages on¹⁶.

3.1 A conceptual break

The South Wing ambitions for a regional rail network are not recent, and their origins can be traced back to 1994. The South-Holland Province (PZH) published then its first strategic vision [27], shifting away the responsibility of drafting separate regional plans, in which national planning goals were translated, and proposing instead a more envisaging role for itself. The document points at a fundamental dilemma: a spatial policy exclusively based on urban containment and expansion of existing settlements is at odds with the exploitation of regional potentials, essential for the future development of the South-Wing of the *Randstad*, clearly weakened after a long process of de-industrialization.

The document follows along the lines of the 4th National Spatial Planning Memorandum, which confirmed the role of cities as motors of growth in a context of internationalized economy, but points to the need to see them within their agglomeration, as daily activity patterns go beyond strict city boundaries. On this regard, it fully supports the national planning policies around ‘urban knots’, intended to keep up their physical expansion. However, the paper stresses, urban regions are by far not confined but entertain functional interdependencies at the scale of the entire *Randstad*, and within each of its wings, an aspect that calls for increased policy attention: (i) on a programmatic level, seeking complementarity and diversification between urban functions; (ii) on an infrastructural level, improving the public transport service at this level, mainly by exploring the possibilities of a regional network made out of pieces of the NS and the intra-urban networks; and (iii) on a morphological level, questioning the emphasis on the compact city, proposing instead new urbanization knots around rail stations. Therefore, the document concludes, a policy only articulated around ‘urban knots’ has important shortcomings as it fails to recognize the need to provide suitable locations to economic activities outside the urban nodes due to their heavy space requirements (e.g. heavy industry and distribution parks) or representational needs. To summarize, national policy needs a shift of focus, from the city to the urban region.

Something that needs to be stressed is the fact that the dominant function spatial planning was occupied with was housing, indeed the construction of new housing units and neighborhoods, and geared very little towards economic claims. The functional cohesion on a regional scale was no important topic for the Ministry in charge of spatial planning [26]. The 4th Memorandum (1988), by placing spatial development in an international context, in which cities and metropolitan regions were forced to compete against each other,

¹⁵ More information on the *Stedenbaan* project is available at <http://www.stedenbaan.nl>.

¹⁶ Dissimilarly to Belgium, the national railway company is not allowed to have other gains than those obtained from the exploitation of the rail service.

opened up the way for planning policies and concepts to focus on a broader scale than that of the city [8]. Such a perspective could only lead to give a renewed importance to the way cities interact functionally as well as to the networks that this interaction creates, simultaneously sustaining it. The logic step for the PZH was therefore to lobby for the betterment of all networks that were structuring and articulating its territory, for a regional rail network that could cohesion all urbanized areas existing and planned in the region, inasmuch as it was logic to claim for a renewed approach to urbanization, from the compact city to the compact urban region [27, p. 8].

In fact, the province of South-Holland, being one of the declining provinces, was particularly sensitive to interpretations bringing together spatial planning and economic prosperity, as they were put forward by the Ministry of Economic Affairs [24] or the Ministry of Transport, who saw in the increased road traffic congestion a burden for economic growth [25]. In fact, the need to explore the relationship between urbanization and mobility was strongly encouraged by this Ministry, who in 1995 advanced the need for a new planning principle to be found in order to take advantage of the bundles of rail infrastructure for the linear planning of residential areas in the *Randstad*. Actually, the 4th National Spatial Memorandum Extra (VINEX, 1990) had already worked out two scenarios for the construction of new residential areas: one based on building around existing settlements, but sacrificing on the quality of public transport; the other on building around train stations, even if not strictly located around the existing settlements [24, p. 180]. The choice was quickly made: the first option would compete less with the cities, would consume less open space, bikes could alternatively used to private cars due to reduced distance to the cities, and could be later upgraded in terms of public transport service. Nevertheless, the second scenario, called the ‘rail track model’, made a life in other official documents as alternative to the excessive focus on propinquity inferred by the first –e.g. the successive spatial strategies the PZH issued.

Basically, *Stedenbaan* has materialized a shift of focus, from the city to the region, and from urban containment to networked urbanization, which took some fifteen years to process inside the Dutch planning doctrine, all the way from the VINEX ‘rail track model’ (1990) to the national government financial backup of *Stedenbaan*, signed in 2007.

3.2 Planning context and the process from potential to concrete ambitions

In terms of public transport, this networkization of the urban region poses numerous challenges, as it demands a higher interurban coherence and increased functional interaction in terms of housing and employment opportunities, and culture and recreation facilities¹⁷. The existence of a project group specifically appointed by the city-regions and independent from the South-Holland provincial government [25], charged with the coordination of the *Stedenbaan* project, is proving successful in keeping regional ambitions intact: mutually adjusting local and regional development potentials while avoiding inter-urban competition. *Stedenbaan* requires coordination at other levels as well. At a central level, the Ministry of Spatial Planning needs to remove specific policies that restrict or even ban urban development around railway stations and at the same time stimulate urban development in them. The Ministry of Transport needs to accommodate the national concession for the use of railways to regional ambitions. At local level, municipalities need to create incentives for development carried by private parties to happen in the sphere of influence of railway stations –defined within a 1200-metre radius around the *Stedenbaan* railway stations¹⁸. At the level of the agglomeration, complementary public transport services need to be introduced in order to smooth door-to-door mobility, connecting straightforwardly all displacements before and after the train.

And above all practicalities, funding for the project needs to follow the nationally established protocol, known as MI(R)T. For that sake a survey needed to be completed in order to assess the costs and benefits of such project, and to satisfactorily answer (i) if *Stedenbaan* could be joined together to the *Randstad* mobility network; (ii) to which extent would it contribute to solve the housing problem in the South Wing; and (iii) how to incorporate the new urban developments around the railway stations to the existing urban settlements. In the period 2010-2020 the Province of South-Holland will build one third of the new houses and more than

¹⁷ Important to note, while the job and recreational markets largely overlap each other, the housing market is for a large part restricted to the territory of the city regions, the scale at which housing corporations used to work [19].

¹⁸ This radius corresponds to the primary sphere of influence, and is larger than the usual 1000 or 800 meters used in similar international planning analyses, due to the large number of cyclists in the Netherlands [3].

two thirds of the new office space in the surroundings of *Stedenbaan* railway stations. This amounts to 40,000 houses and about 1.2 million m² of offices, that is respectively one third and two thirds of the total urbanization target set by the BPZ up to 2020 and agreed by the central government. Within the housing program, 20% will be built in the biggest city centers, 22% in other urban centers, 27% in housing states areas, 13% in suburban areas and 17% in green, low density areas –hence contributing to consolidate the residential diversity partly in place in the South-Wing [6].

3.3 A spatial survey for the reinvention of the South Wing

The spatial survey was realized by Atelier South Wing¹⁹, and closely followed by the BPZ and the ministries of Transport and Spatial Planning. The National Water Board, the National railway company (NS) and *ProRail* were also involved as stakeholders of the project. Next to the spatial survey, a network survey was also conducted. The survey was realized in an informal setting, in close cooperation with both public and private parties, and its main purpose was “to give an idea of how the development of each station area can contribute to the spatial development of the South Wing as a whole” [3, p. 258]. The survey was carried out in three stages; (a) what was feasible in terms of quantity²⁰; (b) what developments were most promising and (c) what local developments were desirable in terms to their contribution to openly stated goals of the South Wing region. Major conclusions included, first: of the 18,000 hectares within the sphere of influence of *Stedenbaan* stations, approximately 80% is located around existing stations. Many of these areas are not being intensively used at present but are mostly built-up areas devoted to housing, employment or mixed uses. Approximately 20% of this area will be redeveloped in the period 2010-2020. Altogether this represents a big challenge, as there is no certainty on the way existing urban areas will be attached to the new railway developments, or to the extent to which urban dynamics will increase in certain areas to the detriment of other areas.

Second, the influence zone of *Stedenbaan* covers 25% of the urbanized area in the South Wing, stretching over a huge variation of station areas (that range from high-density city centers to stops in the middle of the green spaces between conurbations) in which a great variation of relations between space and network exists [10]; an attempt to inventory all stations and thus grab the diverse developments potentials of each station was made, attending to network characteristics (the degree of access by public transport and by car), and spatial features (local housing and employment densities and the degree of mixed use). Nine distinct potentials were unveiled²¹. Because normally not every station corresponds to a single development potential, what this inventory made manifest was the need for coordination between developments along the line, mainly to avoid inefficient inter-station concurrence.

Third and last, three models were used to assess how the potentials at the level of each station can help achieve the goals of the project at regional level. The models were outlined along stated policy objectives, consisting of: ‘densification’, ‘networkization’ and ‘sustainability’. ‘Densification’ derives from the account that the more users there are around stations the better it is –i.e. the more feasible (from an exploitation perspective) and lively (from an urban perspective) stations become. ‘Networkization’ springs from the belief that the combined effect of diversity (of transport routes and of programs) and complementarity brings in urban cohesion. ‘Sustainability’ rates urban containment and mixed use developments highly, in the conviction that urban densification will reduce a great deal the use of private car in the South Wing. The models showed how local choices can support objectives at a higher level –and vice versa, how the ambitions of *Stedenbaan* could help to guide decision-making at the local level. This is nothing uncontroversial though, as the translation from the concept to concrete realizations happens via voluntary agreements which are afterwards implemented in the spatial policy of the 5 city-regions. The *Stedenbaan* work group has played a very relevant role in here, remarkably so in charting the spatial ambitions on regional level, signed by all *Stedenbaan* partners, the NS, and *ProRail* in 2005 and 2007.

¹⁹ An independent think tank instigated by the provincial government to research the possibilities of a network city regional project for the South Wing. The Atelier was operative between June 2005 and December 2007. More information is available at <http://www.atelierzuidvleugel.nl>.

²⁰ This was done on the basis of current average densities –i.e. 52 dwelling/ha in housing areas, 180 employees/ha in working areas, next to 50 dwellings/ha and 90 employees/ha in mixed-use areas [3, p.262]

²¹ Check references [3] and [10] for an elaborate explanation on the urban potentials of each station and the survey more generally.

Weak points in the *Stedenbaan* spatial survey is its adherence to traditional types of urbanization (residential or working; low or high density; etc.) when considering urban development, rarely tackled from a functional perspective that would equally encompass questions of economic differentiation (e.g. how a diverse degree of accessibility could influence the urbanization program in terms of specialization and differentiation of the various locations within the network). If anything, this adherence can be considered a demonstration of Dutch planning doctrine resilience. Only recently, the *Stedenbaan* monitor has introduced an innovative reflection on what type of city and urban interactions could be derived from linear mobility infrastructures, encompassing questions of economic differentiation, accessibility levels, and quality and proportion of amenities.

Stedenbaan, the City Line, promises a new type of city and not just a new physical configuration. None of the partners involved though seem to be aware of the extent to which this project will change the regional network and the metropolitan economy, and whether this should be encouraged or not. Indeed, transport and spatial developments influence each other, but many factors will affect the integrated development of the space and the network. To start with, the size of cities and towns, the intensity of functions, the degree of mixed use in the areas concerned, decentralization of activities, proximity of other networks and parking facilities [4].

4 CONCLUSIONS

Although important investments in transport infrastructure are normally backed up by considerations linked to the improvement of the competitive position of a specific region and eventually its sustainable development, very little has been said about the sometimes contradictory planning choices that are applied in order to buttress those very aims. The purpose of this paper has been to make explicit the planning choices that sustain two important rail transport infrastructure projects, the Dutch *Stedenbaan* and the Belgian RER.

On one hand, the Brussels' RER, initially conceived as 'voorstadstrein', as a means of transport from the suburbs to the capital city, easing commuting within its functional region, is splitting gradually into a metro-like system within Brussels capital region, and into an example of transit oriented development in the neighboring Flemish and Walloon regions. While in the Flanders region the policy aim seems to be articulated by a polycentric understanding of its territory, and concretely aiming at developing around main middle-size railway stations, in the Walloon region the goal seems to be that of reaching Brussels the fastest as possible, indirectly reinforcing suburbanization of jobs and residences by realizing large P+Rail facilities even around the smallest railway stations. These two very different planning choices translate an equally different understanding of the relations the two regions aim at entertaining with the Brussels' capital region, of complementarity and dependence respectively, and it is itself translated into different projects for the (re)urbanization of the railway stations and their surroundings, based on densification, urban mixing and specialization in the Flemish case, and on multimodality and lack of urban diversity in the Walloon case.

On the other hand, *Stedenbaan*, originally conceived only as a possibility to intensify land uses around railway stations in order to dissuade of the use of private car in the region, taking this value as a proxy for sustainable development, has evolved into a more comprehensive project, thanks mainly to the continuous coordination and monitoring of the *Stedenbaan* workgroup. Namely, it has shifted densification for diversity –since new regional functions might materialize only in specific places and not across all railway stations, thus generating not only new transit passengers but contributing too to increase vehicular traffic in them. Most importantly, it has moved the discussion from traditional morphological issues into an innovative reflection on what type of city and urban interactions could be derived from linear mobility infrastructures.

The first conclusions point that an ambiguous choice of planning goals at regional scale can indeed lead to perverse effects during their final implementation. A way to straighten it, as shown in the *Stedenbaan* case, can be the active participation of all stakeholders from early stages –i.e. the co-production of policy choices. Nevertheless, this does not necessarily prevent the implementation phase from being threaten all along. Also the *Stedenbaan* case provides a good example of how relevant monitoring is, as a reminder of the agreed goals among all partners but also as a legitimizing framework [26] towards the outside.

All in all, the ambition to achieve functional integration of transit and surrounding development can be considered essential in the changed configuration of both metropolitan regions – the South Wing and Brussels; and by extension of all European metropolitan regions. This goal however goes beyond a particular physical form, encompassing a different kind of development that ought to keep track of contextual

diversities and complexities if it is to succeed.

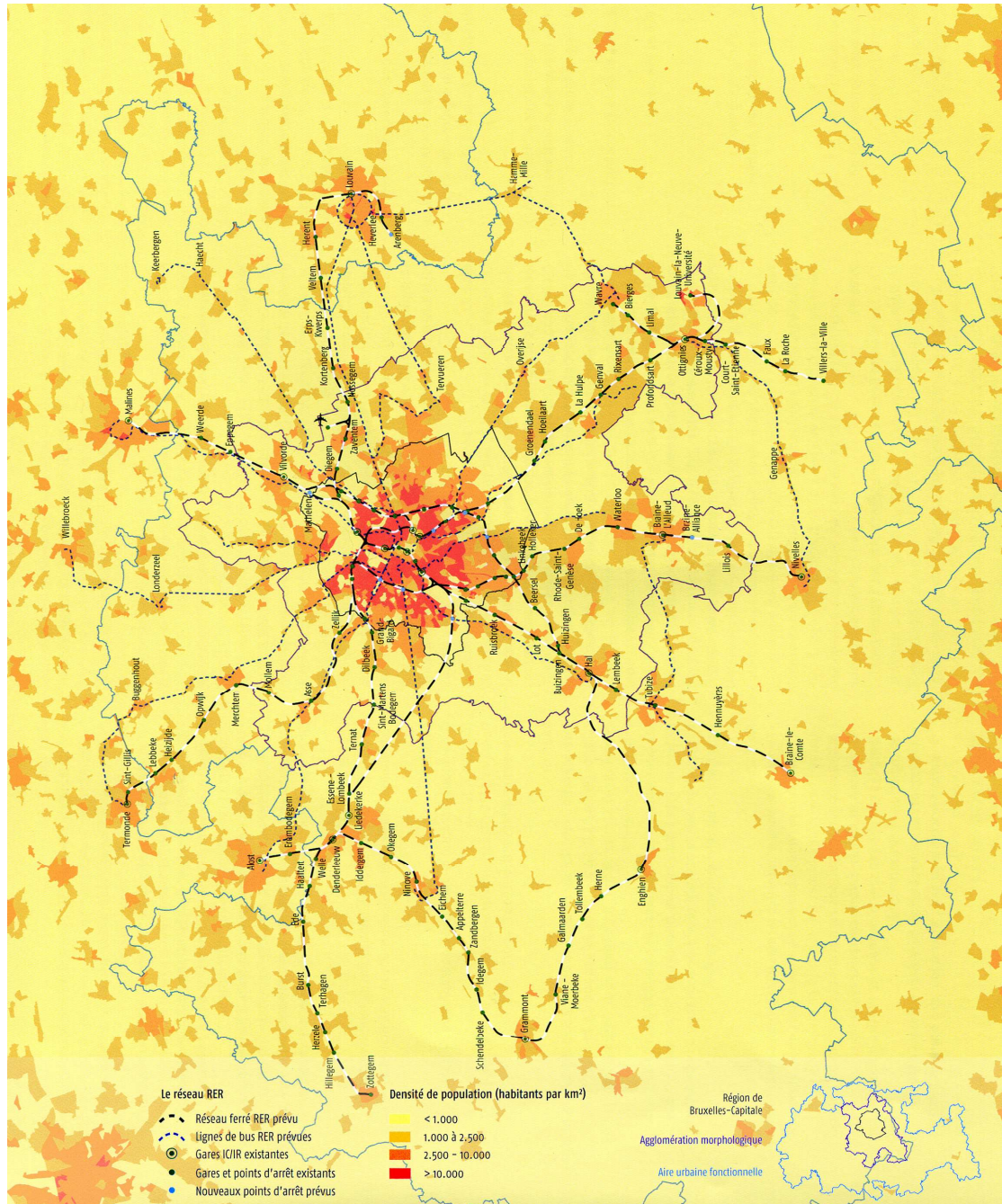


Figure 1 RER network placed over the Brussels functional urban region²² [11, p.149]

²² Legend translation, from top to bottom, and left to right: RER network (planned RER network; planned bus-RER lines; IC/IR existing stations; other existing railway stations; planned new railway stations); population density (inhabitants/Km²); boundaries of Brussels-Capital Region (RBC), the morphologic urban agglomeration and the functional urban area (FUR).

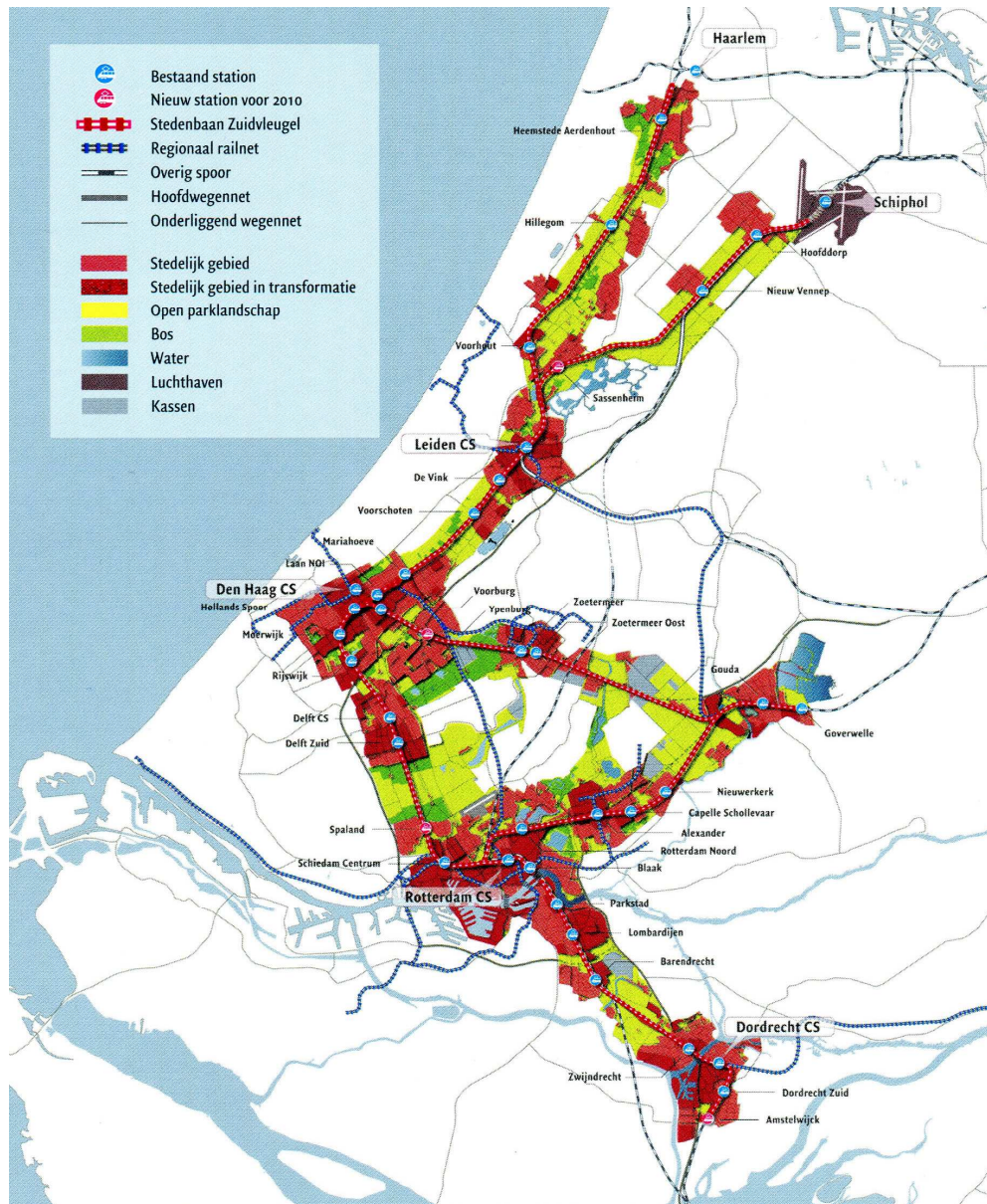


Figure 2 Stedenbaan railway line with indication of the urban typologies that exist along it²³ [6, p. 8]

REFERENCES

- [1] Albrechts, L., Coppens, T., "Megacorridors: striking a balance between the space of flows and the space of places", *Journal of Transport Geography*, Vol. 11 (2003), p. 215-224.
- [2] Allaert, G., "Polycentric development in Europe. Some reflections on the ESPON-study reports", in "Van Christaller tot Wallerstein. Liber Amicorum Prof. Dr. Pieter Saey", edited by Natalie Van Nuffel, Zelzate, Nautilus Academic Books, 2007.
- [3] Atelier Zuidvleugel, "Ruimte en Lijn. Ruimtelijke Verkenning Stedenbaan 2010-2020", South-Holland Province, The Hague, 2006.

²³ Legend translation, from top to bottom: existing station; new station (<2010); South Wing Stedenbaan; regional railway network; other railways; main road network; secondary road network; urban area; planned redevelopment of urban area; open green area; forest; water; airport; glass houses.

-
- [4] Banister, D., "Unsustainable Transport: City Transport in the New Century", Routledge, Oxfordshire, 2005.
- [5] Bestuurlijk Platform Zuidvleugel (BPZ), "De Zuidvleugel van de Randstad. Netwerkstad van bestuur & recht, kennis en logistiek", The Hague, 2004.
- [6] Bestuurlijk Platform Zuidvleugel (BPZ), "Regionale verkenning Stedenbaan", The Hague, 2006.
- [7] Calthorpe, P., "New Urbanism: Principles or Style?", p. 36, in "New Urbanism: Peter Calthorpe vs. Lars Lerup", edited by Robert Fishman, Michigan, The University of Michigan, 2004.
- [8] Casabella, N., "Netherlands Inc.", unpublished MSc thesis, LSE, 2005.
- [9] Cervero, R., "Sustainable new towns: Stockholm's rail-served satellites", *Cities*, Vol. 12, No. 1 (1995), pp. 41-51.
- [10] Curtis, C., Renne, J.L., Bertolini, L., "Transit Oriented Development. Making it Happen", Surrey & Burlington, Ashgate, 2009.
- [11] Dessouroux, Ch., "Espaces partagés, Espaces disputés. Bruxelles, une capitale et ses habitants", Bruxelles, MRBC, 2008.
- [12] Dobruszkes, F., Mwanza Wa Mwanza, H., "Les enjeux posés par le futur RER bruxellois", pp. 83-92, in the proceedings of the colloquium "Stratégie pour une métropolisation globale et aménagement du territoire", Bruxelles, ed. Du Céfal – Francisco Ferrer, 2003.
- [13] Dobruszkes, F., "Le positionnement de la jonction Nord-Midi face à l'évolution régionale bruxelloise", *Mech. Eng.*, Vol.109, No. 3 (2005), pp.42-45.
- [14] Dobruszkes, F., "Un cadre peu propice à l'utilisation des transports collectifs", *Transports Urbains*, No. 114 (2008), pp. 8-15.
- [15] Frenay, P., "Entre craintes et espoirs: le projet RER et quelques enjeux de développement autour des gares bruxelloises", *Transports Urbains*, No. 114 (2008), pp. 20-27.
- [16] Frenay, P., "Pour un projet de développement territorial associé au RER bruxellois. Essai de mise en évidence des facteurs déterminants fondamentaux", *Brussels Studies*, forthcoming.
- [17] Hubert, M., Dobruszkes, F., Macharis, C., "Mobility to and from, around and about Brussels", Synopsis n. 1 prepared for the Citizens' Forum, available online at <http://www.brusselsstudies.be>
- [18] Jacobs, P., Dieu, B., Vanderhaeghen, J.-L., "La Jonction Nord-Midi 1952-2002", Bruxelles, Editions PFT, 2002.
- [19] Molenaar, J., "The Stedenbaan Programme: Randstad South. Integrating sustainable mobility and urban development at regional level", pp. 100-110 in "Synergy in Urban Network", edited by Willem Salet, The Hague, Sdu publishers, 2006.
- [20] OECD, "OECD Territorial Reviews: *Randstad* Holland", OECD Publishing, Netherlands, 2007.
- [21] Parr, J.B., "The Polycentric Urban Region: A Closer Inspection", *Regional Studies*, Vol. 38, No. 3 (2004), pp. 231-240.
- [22] Van Crielingen, M., Cornut, P., Luyten, S., "Brussels: Polycentricity as 'images on the map', not in reality", pp. 105-111, in "Cities and networks in Europe. A critical approach of polycentrism", edited by Nadine Cattani, Montrouge, John Libbey Eurotext, 2007.
- [23] Vandermotten, Ch., Roelands, M., Aujean, L., Castiau, E., "Central Belgium: Polycentrism in a Federal Context", pp. 146-153, in "The Polycentric Metropolis: learning from mega-city regions in Europe", edited and written by Peter Hall, Pain, K., London, Earthscan, 2006.
- [24] Van Duinen, L., "Planning Imagery: The Emergence and Development of New Planning Concepts in Dutch National Spatial Policy", PhD dissertation published by author, University of Amsterdam, 2004.
- [25] Zonneveld, W., "De conceptualisering van ruimte in de Nederlandse planning", The Hague, Nai – RPB, 2005.
- [26] Zonneveld, W., Waterhout, B., Trip, J.J., "Van projectologie naar planologie en vice versa", pp. 259-268, in the PlanDag conference proceedings, Brussels, 2009.
- [27] Zuid-Holland, Gedeputeerde Staten, "Discussienota Ruimtelijke Toekomst", The Hague, PZH, 1994.