Logistics and spatial planning; lessons from European old industrial regions

Mathieu Strale

Université Libre de Bruxelles

Email for correspondence: mstrale@ulb.ac.be

Introduction

In the current economy, lead by the rapid growth of flow of goods and information, logistics is becoming increasingly important. This activity coordinates the exchange of goods and related information between the various economic actors, at all stages of the chain of production and distribution (Vallin, 1999). In consequence, logistics activities need locations close to major consumption centers and enjoying good accessibility. Logistics providers tend to choose areas specially designed to accommodate their needs, i.e. the logistics platforms. The establishment of such structures, multimodal or not, offering efficient services, seems becoming an advantage for the development of logistics activities.

Private real estate developers specialized in logistics have appeared and they have created many new logistics platforms. The European public bodies are also interested in this craze (Hesse, 2008). In the context of an entrepreneurial approach of the public governance, which seeks to promote economic growth by attracting enterprise and private capital, the implementation of logistics platforms seems to be an interesting element. Consequently many regions, especially those experiencing socio-economic difficulties, rely on such infrastructure as a tool for economic development.

The aim of this article is to examine the territorial development issues related to the development logistics activities in a land use, socio-economic and environmental point of view. To address the question, a sample of old industrial regions of northwest Europe is analyzed. The study is organized in three steps. First, the reasons for the development of logistics platforms in Europe are highlighted and the role of different public or private actors involved in these processes is identified in the literature review. Then, the policies of the regions included in the analysis (Limburg, Wallonia, Nord-Pas-de-Calais, East Midlands and North Rhine-Westphalia) and their results are analyzed. Finally the territorial impacts of these policies are discussed. In this context, the policies lead in logistics matters are analyzed in the light of Harvey, Swingedouw or Weiss studies on the evolution of public policies toward an entrepreneurial and neoliberal approach.

1. The development of logistics platforms in Europe; a review of the literature

Logistics activities and the implementation of logistics platforms are the subject of growing number of publications.

The current role of logistics is the result of the evolution of the economy during the second half of the twentieth century. During this period, there was a shift toward a liberal and globalized economy, spatially and functionally fragmented (Carroué, 2002). The complexity of inventory management and of exchange of goods and production coordination in a post fordist economy resulted in the birth of an economically and geographically autonomous logistics sector (Rodrigue et al. 2009). It is composed of actors who perform the tasks entrusted by their customers, i.e. freight transport, storage and handling or flow management

(Carbone, 2004). Its development has accompanied and facilitated the creation of a flexible economy, based on reduced inventories and growing exchanges.

Logistics requires locations that allow, on one hand, accessibility and proximity to customers, and secondly, low installation costs (Hesse & Rodrigue, 2004). As a result, logistics buildings are typically large single storey warehouses, with docks for trucks, for ensuring a fast processing of goods (Savy, 2006). These locations require large flat areas, easily accessible by road and away from the neighbors for not hampering activities. Therefore, logistics companies tend to settle on the outskirts of cities, in suburban areas, in port hinterlands, and in specially designed spaces, like logistics platforms, in particular (Hesse & Rodrigue, 2004). These particular industrial parks offer different advantages: availability of land, possibility of expanding activities, easy access, closeness to the market, and presence of specialized services. Therefore, the creation of logistics platforms experiences a growing enthusiasm in Europe (Hesse, 2008).

Consequently, a particular real estate market has emerged. It is composed by operators specialized in the construction of logistics buildings (Hesse, 2004). These providers may, on the one hand, construct buildings of platforms tailored to a customer's request or, on the other hand, develop distribution centers in speculating on the arrival of new occupants. In this context, they acquire large cheap areas, close to major roads and they build complete warehouses parks, without necessarily having clients for each building. Logistics real estate developers can market and manage these platforms themselves, join forces with other real estate professionals or resell the platform after construction. This is a growing market because it provides a very high yield, around 8% per year, which attracts capital of institutional investors such as insurance companies, real estate branches of large banks etc (Mérenne Schoumaker, 2003; Hesse, 2008).

Public authorities may also promote the implementation of logistics platforms or develop it themselves. Logistics has long been seen as a secondary activity, creating nuisance and therefore little promoted by the government. The situation has gradually changed and the industry is now valued by both European and regional authorities (Joignaux, 2008). The establishment of a platform can support the arrival of new companies, thus creating jobs and income, or strengthen existing activities (Merenne-Schoumaker, 2007). In addition, the creation of such infrastructure can participate in achieving land planning objectives, avoiding the dispersion of settlements, or reorganizing the flow of goods and developing multimodal transport (Savy, 2006). Some public-private partnerships can be set up. Public authorities provide land while the private developer is responsible for building and marketing of the platform.

Consequently there is a conjunction of interests for these logistics platforms, which is summarized in Figure 1.

The consequences of the creation of these logistics platforms are the subject of a growing debate in the scientific literature. Mckinnon (2009) and Savy (2006) defend the fact that by creating logistics platforms, public authorities may control and regulate the use of land by logistics activities and guide their implantation to the most suitable spaces, limiting the use of land. These could be multimodal spaces at the edge of cities, brownfields etc. (Le blanc et coll., 2002). This concentration of logistics activities on a small number of places of the territory could also be favourable to modal shift (Rodrigue et al., 2009; Kapros, 1994). Indeed, rail and inland waterway transport need a big amount of goods, carried over long distances for being profitable (Rodrigue et al., 2009; Notteboom, 2008). Finally, by attracting new activities, logistics platforms could be efficient economic (re-)development tools (Mérenne-Schoumaker, 2007; Wemelbeke et al., 2007). These multimodal logistics platforms should be the ideal organisation of seaport hinterlands (Notteboom, 2008; Rodrigue et al., 2009; Notteboom et al., 2009). Thus, the creation of multimodal logistics platforms of national or European level is the flagship initiative of public bodies in Europe (Mérenne-Schoumaker, 2007; Houé, 2010; Hesse, 2008). However, several publications point out the problem of the

regulation of these infrastructures, which is poorly understood by public authorities (Hesse, 2008; Flämig et al., 2011; Houe, 2010). Moreover, real estate actors are regularly acting in a speculative way, developing new logistics sites without having clients, in the same logic as in the office market (Hesse, 2008; Mérenne-Schoumaker, 2003). Thus they are looking for partnerships with public bodies since the latter can provide cheap lands. Real estate actors can use the argument of the job and activity creation to convince public authorities. This could lead to an uncontrolled multiplication of logistics platforms and on an unprofitable competition between European territories (Flämig et al., 2011). Also, all locations are not suitable for logistics activities, so initial reflexions on the real need of the local or regional economy, on the situation of the planned site are needed (Hesse, 2008; Joignaux, 2008).

Based on this unfinished debate, this article tries to give some concrete elements about the consequences of European public action in logistics matters, by analyzing the policy of the EU and of some old industrial regions and their results. In a second stage, these results are crossed with the current reflexion on the evolution of public action in Europe made by Swyngedouw (2000), Weiss (1997) or Harvey (2005).

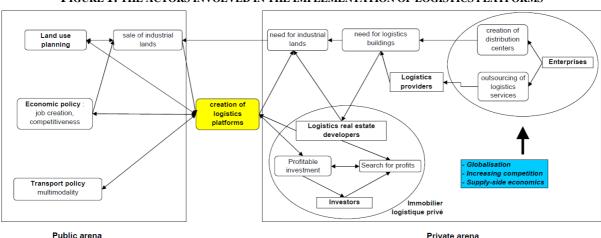


FIGURE 1: THE ACTORS INVOLVED IN THE IMPLEMENTATION OF LOGISTICS PLATFORMS

Sources: Savy, 2006; Hesse, 2004.

2 The situation of old industrial regions

Logistics is often identified by the authorities as a vector of economic development, job creation and resolution of some mobility issues. Therefore, it seems particularly interesting to analyze the policies of the old industrial regions. Indeed, these areas have an unfavorable economic structure, as a result of the crisis of heavy industry in Western Europe during the second half of the twentieth century (Vandermotten et al., 2004). These territories and their authorities had to identify growth areas and activities for which they would be more attractive than their neighbors, and that would attract investors. Logistics activities should be part of these key sectors (Hesse, 2002a), especially since it can participate in the response to the lack of business services, which is pointed as a deficit prejudicial to their socio-economic situation (Gallouj et al., 2006).

The regions included in the study are North Rhine-Westphalia, Nord-Pas-de-Calais, Wallonia, East Midlands and Limburg (NL) (figure 2). These are part of the so called territories of ancient industry (Vandermotten et al., 2004). They have a history of heavy industry, made of steel or coal, a socio-economic situation placing them under the average for the rest of Western Europe and many former industrial areas.

To determine the territorial impacts of this policy and its results, it is necessary to understand how they are acting, what are the impacts of the policy framework and how this governance

interacts with the expectations and actions of the private sphere. In this context, in addition to an analysis of policies implemented, a comparative study of symbolic achievements of each of these regions is conducted, i.e. logistics platforms Trilogiport Logport, Dirft, Dourges Delta 3 and Venlo Tradeport.

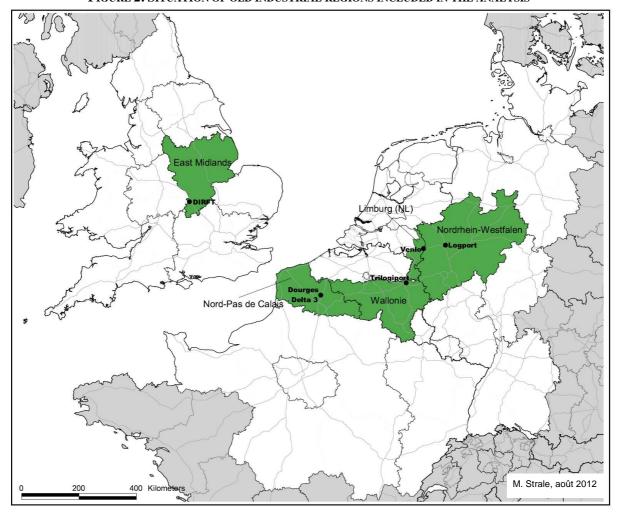


FIGURE 2: SITUATION OF OLD INDUSTRIAL REGIONS INCLUDED IN THE ANALYSIS

a. A comparison of policies

The North Rhine-Westphalia has been faced with a restriction of its heavy industry, particularly in the Ruhr (Danielzyk et al., 2004). In this context, logistics was considered as one of the priority sectors for economic reconversion (Boldt et al., 2010). This led to various initiatives (Danielzyk et al., 2004). First, two cities were identified as logistics nodes which should focus initiatives. Dortmund has become a center of excellence and innovation in logistics, research and training, through the involvement of universities and public or private research centers. University research units were established at the initiative of the Region, the city of Dortmund or the University of Dortmund. The second pole is Duisburg, where industry initiatives related to logistics should be concentrated. The aim is to foster the development of storage and distribution activities at the regional, national and European level, taking advantage of the existence of the port of Duisburg, the largest inland port in Europe, and the location in the hinterland of the North Sea (Boldt et al., 2010). This policy should result in provision of suitable multimodal land, in supporting the implementation of logistics activities and in prospecting investors. As a result, a new multimodal logistics

platform, called *Logport*, was created in 1998. Moreover, Duisburg is one of the multimodal logistics nodes identified at national level, making it eligible to receive federal funds.

Duisburg and Dortmund, must be the backbone of the secondary nodes, i.e. Cologne and Neuss-Düsseldorf. These latter also host intermodal terminals associated with logistics parks activity. In addition, to coordinate and publicize this policy, a cluster for logistics in the Ruhr was established (LogistikRuhr, 2010).

The Nord-Pas-de-Calais has an economic situation similar to other areas of ancient industry. In consequence, logistics and transportation were identified as strengths of the region, to promote and develop in the future (Liefooghe, 2005; Nord-Pas de Calais, 2006). Nord-Pas-de-Calais Policy aims at making the region a "hub" for European transport and logistics activities, taking advantage of the hinterland situation (Region Nord-Pas de Calais, 2006). From the early '90s, studies were conducted to develop logistics activities in the region. The emphasis was on the need to gather these investments in a major center connected to multimodal transport networks. Dourges was chosen in 1993 to host this large platform and project funding was included in the Plan Contract State / Region (CPER) 1994-98 (Delta 3, 2011). In addition, the region relies on innovation. When defining the six clusters for regional economic development (Region Nord-Pas-de-Calais, 2008), one of them was focused on innovation in logistics. Finally, a public marketing structure, called North Logistics, was created to praise the strengths of the region to investors.

Wallonia was faced with a double challenge: conversion of the economy marked by a legacy of heavy industry and a federalization of the Belgian national structure. The regional desire to develop logistics as a tool for reconverting the regional economy was affirmed in the SDER in 1999. This paper highlights the importance of promoting logistics activities and the need to develop logistics platforms, by promoting the situation as a hinterland of the North Sea. Then, the SDER says Wallonia must have an integrated strategy to prevent the scattering of investment policy and coordinating this with the strengthening of the urban network (Region wallonne, 1999). There is also a social aim, since this sector is seen as a creator of unskilled jobs. The importance of the logistics sector for the economic development of Wallonia was confirmed in 2005 (Region wallonne, 2005). Five clusters were defined, including the transport and logistics. Budgets and public initiatives economy must focus on these clusters. These clusters bring together businesses, universities and research centers in a given field in order to develop joint projects. So, a structure called Logistics in Wallonia was created to bring together the different stakeholders, coordinate their initiatives and promote innovation. Development plans for logistics and multimodal platforms were also adopted. The most advanced is the "Scheme for an integrated development of freight terminals in the Walloon Region," in 2004 (Stratec, 2004) at the request of the Ministry of Equipment and Transport of the Walloon Region. Its aim is developing multimodal platforms to reach a traffic of 600,000 containers per year by 2020 and to attract European distribution centers in the region. This paper proposes the creation of a multimodal platform of European importance near Liège, along the Albert Canal. This would be the interface between the ports of the North Sea, and especially Antwerp, and the rest of Northwest Europe. There is a desire to implement this platform downstream of Liège, it is Trilogiport project, which brings together several public and private actors.

East Midlands are special because its regional authorities have lost all their authority in term of territorial development (Baudelle et al., 2011). However, this regional level influenced these matters until his closure in 2011. The regional policy of the East Midlands identified the freight and logistics as drivers of growth, positioning itself as a prime location for distribution activities at the national level (East Midlands Regional Assembly, 2009; East Midlands Development Agency, 2006). This sector was promoted as a creator of unskilled jobs, replacing industry (East Midlands Regional Assembly, 2006). The aim of the authorities was to concentrate logistics activities on a few poles connected to the motorway and rail networks. In particular Dirft Daventry, Corby and Castle Donington should be developed (East Midlands Regional Assembly, 2006). The aim was to bring critical mass of companies

on each site in order to create sufficient demand to ensure an efficient use of rail (East Midlands Development Agency, 2006). The disappearance of regional level rendered obsolete these strategic initiatives, but it seems that local authorities continue to develop centers formerly promoted at regional level (Nottingham Business School, 2011). In this context, the DIRFT appears as the main regional logistics hub.

Logistics and related services are one of the privileged sectors to create activity by Dutch Limburg too (Provincie Limburg, 2010). Limburg intends to position itself on the European market, by being located at the interface between the large cities and northwest European seaports and on the road connecting the Ruhr and Dutch ports. Economic development initiatives are concentrated on some well-connected clusters (Provincie Limburg, 2010). The aim is to develop Venlo as a european logistics center between the north sea seaports and the rest of Europe (De Ligt et coll., 1998; Provincie Limburg, 2010). Moreover, the desire is to develop a logistics campus, focusing training, research and innovation. To achieve these objectives, the Province wants to operate as coordinators of local initiatives and operations and to promote contacts between economic operators and research institutes.

These regional policies are quite similar. They are all focused on the attractiveness and on the concentration of public action on the comparative advantages of the territory and its actors. They also reflect the transition from a stimulus policy based on the industry to a new one that promotes services and logistics (Gallouj et al., 2006). This commitment is realized by two main types of actions: the creation of logistics platforms and the promotion of innovation and clustering.

b. The creation of large logistics platforms: causes and conditions

From a territorial point of view, the central element of regional policy is the establishment of large logistics platforms. Each region has created, or intends to do so, this type of infrastructure. These initiatives are compared in table 1 to identify the trends that lead their creation.

TABLE 1: CARACTERISTICS OF LOGISTICS PLATFORMS

	Logport Duisburg	Venlo Tradeport	Daventry DIRFT	Dourges Delta 3	Liège Trilogiport
Initiator / Investor	Industrial park: 200 million € of public funds: - port of Duisburg 155m€ - UE-FEDER: 45 m€ Multimodal terminal: 24 % port of Duisburg, 66 % Contargo (Rhenus), 10 % Hupac Real estate investment: Private; including Prologis	Industrial parks tradeports: provision of land by the municipality Multimodal terminal: investment of TCT, a subsidiary of ECT (major handler of Rotterdam port)	Full private investment: Grounds of a former public operator in water distribution Real estate investments: BT, Aviva investors, Prologis	Total investment : 305 millions € - Public ; 138 m€ (100 NPdC /38 UE FEDER) - Private 167 € (real estate)	Total investment: 160 million € - Public: 43 m€: rehabilitation 20m€ (Walloon Region 80 %/Port of Liège 20 %), infrastructure 22 m€ (40% UE FEDER / 60% WR), preliminary studies 700 000 € FEDER - private: 115 millions (DP World, WDP, DLL)
Situation	Old Krupp factory along the Rhine	New industrial spaces along highway and railroad	New industrial spaces along highway and railroad	Former industrial site along the highway and the canal	Former industrial site on the edge of the highway and the Albert Canal
Creation	1998	1980	1997	2003	?
Size	265ha	470ha	174ha	300ha	100 ha
Storage surface	200 000 m²	350 000 m²	300 000 m²	200 000 m²	
Multimodality	trimodal	trimodal	Bimodal rail-road	Trimodal	Bi or trimodal
Management	The port of Duisburg owns 55% of Logoport, the rest is in the hands of RAG Immobilien GmbH Trimodal terminal: CMA CGM, NYK and duisport ProLogis manages a part of land and buildings	Industrial land : private management Terminal : TCT	Industrial land : Prologis Terminal : LDCT (Naviland, novatrans,) Terminal : Malcom Group Industrial Land : Public		Terminal : Port of Liège and DP World Industrial land and warehouses WarehouseDePauw and Deutsche Lagerhaus Gesellschaft
Jobs planned	5000		4000 then 15 000 after extension	1500	2000
Current jobs	1500	1500 full time + 1500 seasonal jobs	3000	1000	
Main occupiers	Wincanton NYK Rhenus IHG Cobelfret Mackprang Group, GNS Imperial group, Rhenus, Rheiner Bronen, Simon Hengele, Helman, DHL, Schenker, GEFCO, Géodis	Prologis, Géodis, DSV, KLG, UPS Arrow, DHL, Eurotyre, Rhenus	Tesco, Royal Mail, Eddie Stobart, DHL, Mothercare, Ingram Micro, NFT, Malcom Group, Nissin	DHL, Kiabi, Decathlon, Gefco, Rexel, Dascher, Leroy Merlin	DP World, WDP, DLG

Sources: Wallonie, DGO2, 2012; Duisport, 2004 & 2009; Delta 3, 2011; Provincie Limburg, 2008; RRSLP, 2010

The logport is an extension of the port of Duisburg on a former steel factory. It is composed of logistics lands and of a trimodal terminal connected to the Rhine (Duisport, 2004). Public investment is focused on the rehabilitation and the clean up of wasteland. Management is entrusted to a consortium between the port of Duisburg, a German property developer, RAG Immobilien and international developers such as Prologis. The terminal has many river and rail intermodal connections linking the ports of the North Sea. It has attracted a large number

of international logistics, who are pursuing regional and European distribution (Hesse, 2002; Duisport, 2009).

The situation of Venlo is particular. It is not a logistics platform, but an area that concentrates several industrial parks oriented to logistics, particularly on food products (Provincie Limburg, 2008). These industrial and logistics parks are the result of a local, regional and national action. These authorities wanted to create a strong logistics cluster, radiating at a European level for the distribution of fresh produce. Moreover, a multimodal terminal was created by TCT, a subsidiary of ECT port handler, which manages several terminals in the port of Rotterdam (Notteboom, 2008). Many international logistics are established, taking advantage of this situation.

The Daventry Intermodal Rail Freight Terminal is entirely funded by private investors. The land is owned by Severn Trent PLC (RRSLP, 2010). Investments in real estate are the result of a consortium gathering Aviva Investors, a branch of the insurance group, British Telecom and Prologis. The main occupier is Tesco that concentrated several national distribution warehouses in DIRFT. The intermodal terminal is operated by the transport company Malcom. Many commuter trains connect it to English ports and to the Channel Tunnel. Although it is a fully private initiative, the DIRFT is part of the regional and national transport strategy and is identified as a "Strategic Railfreight Interchange." The integration of the DIRFT in the public strategy was simultaneous with the creation of this platform. It facilitates the extension of the site (Daventry City Council, 2005).

In Dourges, the Delta 3 platform is the result of a mixed public and private funding. Both the Nord-Pas de Calais regional authority, the central government and the European Union participated in the funding of Delta 3, while the private sector was responsible of logistics real estate (Maillefert, 2009). The terminal is in the hands of a consortium of several intermodal carriers. It provides connections between Dourges French ports and the Ile-de-France. The river terminal is less used, but was established in anticipation of the possible construction of the Seine-Nord Europe junction. Dourges Delta 3 is registered in both national and regional strategies. The main occupants are Decathlon, Leroy Merlin and Kiabi, who established their regional or national distribution center (Maillefert, 2009, Delta 3, 2011).

The platform Trilogiport, Liège is a project implemented by a group of economic interests (*GIE in French*) gathering the Port of Liège, the Port of Antwerp, Liège intermunicipal economic development organism *SPI* +, and several private investors: port handler DP World and two real estate companies both located in the port of Antwerp (Wallonia DGO 2, 2012). The want to develop a logistics platform downstream of Liège in order to develop European distribution activities by promoting the hinterland situation and developing river shuttles between Antwerp and Trilogiport on the Albert Canal. Funding would be based on a public-private partnership bringing together the Walloon Region, the European Union and private operators. From an initial area of about 100 hectares, it could be extended later. The realization of this project depends on the one hand, on the obtaining building of permits, and secondly, on the mobilization of private funds needed.

Several elements are common to the initiatives of the different regions.

With the exception of DIRFT, the investment is always based on a public-private partnership. Public bodies involved are the regional or local authorities and the European Union through FEDER funds. This illustrates the integration of local and regional initiatives in the strategy of the Union. In general, the real estate development is left to the private partner, often a major European or global operator. Similarly, the management of these platforms is shared between public and private, in different ways that depend on the local context. Operational management of multimodal terminals is mainly in the hands of private operators involved in the seaport handling or in the connections between ports and their hinterland.

The locations of these platforms are close to major highways, multimodal and with lot of available space. In this context, it can correspond to converted brownfields, fulfilling the role of logistics as a vector of economic recovery for these regions.

In general, these platforms have rarely met expectations in terms of job creation (Hesse, 2008). However, this can sometimes be explained by the fact that these industrial sites are not yet fully occupied.

Occupants of these platforms are the largest logistics operators in Europe and the world. They use their privileged position to partner with real estate logistics developers. They have sufficient resources to hire large warehouses and they are looking for such sites, in hinterland situation and closed to large cities, to conduct distribution activities at the national or European.

This model of large platforms is not specific to the five regions studied. It tends to increase in Europe, with similar logic of polarization of the initiatives on some well connected nodes (Hesse, 2008; Notteboom et al., 2009).

3 The territorial impacts: the case of Wallonia

These policies have different territorial impacts at several levels: job creation, land use, transport and environment. The creation of large logistics platforms is highlighted. They concentrate enterprises on one site, reducing space consumption, promoting intermodal transport and creating jobs. However, all policies related to logistics do not achieve these goals. The different categories of potential territorial impact of current policies on logistics are discussed in this chapter by analyzing the Walloon situation both qualitatively and quantitatively since public policies cannot always be quantitatively evaluated.

a. lande use, transport and environnemental impacts

The main entry point to analyze the impact of the creation of territorial sites receptions for logistics activities is land use, because it determines the other social, economic or environmental consequences.

From this point of view, the elements highlighted in the literature regarding the organization of the sector are a growing demand for spaces, through an extensive land use and a low density in terms of activities or employment. In this context, public policy can counteract and control this movement, through its policy on logistics areas.

In Europe, both land use and economic development policies are in the hands of local or regional authorities. We argue that it is the articulation and interaction between these policies and the expectations of investors and operators in the logistics sector that determines their territorial impacts.

European public policy in logistics takes place in a context of weak coordination at intraregional or international level. Each authority or decision-making structure act independently and if coordination are conducted, they are voluntary arrangements (Hesse, 2008; Houe, 2010). In consequence, the authorities can take charge of their territorial development, but it also exacerbates the competition between spaces. Indeed, regional and local governments are engaged in the construction or the development of many platforms without a general framework (Hesse, 2004). If this offer does not match actual demand, this situation is likely to generate a high consumption of space and create redundant sites, unfavorable to a rational use of the territory, the densification of logistics sites and, consequently, the modal shift.

These investments are similar to the policy on industrial parks (Mérenne-Schoumaker, 2007). From the Fordist period, governments focused their economic development policy towards the provision of land to attract industrial activities out of urban areas (Mérenne Schoumaker, 2008). In a context of economic growth and of new location choices by the industry, many industrial parks were quickly occupied. This type of infrastructure has become a key tool for economic development (Fischer, 1996).

Many regional and local authorities have considered their approach on logistics as a continuation of their policy about industrial parks (Hesse, 2008, Joignaux et al., 1996; Mérenne-Schoumaker, 2007). Industrial sites located near waterways or railway lines were

easily qualified logistics platforms. The craze for logistics, as well as the ignorance of the needs of the sector favored this movement (Flämig et al., 2011). As a result, the management of some logistics platforms is similar to that of traditional industrial parks. When spaces are left free, because of the lack of interest of logistics, other activities can be implemented. This reduces the risk of vacancy but this leads to a possible banalization of logistics areas and to space consumption (Hesse, 2004).

In this context, the terms of implementation and funding of these infrastructures have a significant impact. The current trend is the strengthening of public or semi-public structures acting in the operational policy, i.e., the provision and development of land and parks for industrial and the prospecting of investors. These structures implement the entrepreneurial vision of the authorities. They create spaces and conditions considered attractive for investors. They follow logic similar to that of private, guided by the search for quantitative results, in term of employment or investments (Perry, 2010).

In addition, many investments in logistics are the result of partnerships between the public and private sectors (Tsamboulas et al., 2003). These may be an association between an industrial and a local authority for an implantation or a logistics platform, mobilizing EU funds associated with the greatest world specialists in logistics real estate. This kind of structure is favored by public authorities, because it reduces the initial investment and it seems to be a guarantee of interest from the business world. This is also a mode of action valued by European authorities (Bestufs, 2005). For their part, private investors encourage the proliferation of this type of arrangement, which reduces the investment and the risk it represents, as it is shared with the public.

In this context, logistics real estate has gained notoriety, financial power and pressure capacity (Hesse, 2004). When contacting the local and regional authorities to obtain land, they can assert their expertise and investment capacity as a guarantee of consistency and job creation and to propose a financial partnership. Yet these initiatives don't necessarily aim at creating activities. They can be only speculative investments, for which the partnership with the public is particularly interesting. This type of structure usually requires that the authorities cede ground built at their expense, while the private operator constructed buildings and markets. Therefore, a speculative investment represents a low risk to the developer. He does not build buildings since he hasn't any client so its initial investment is small.

For example, in Wallonia (see figure 3), there is a multiplication of logistics platforms and multimodal transport terminal. These initiatives are led by the ten Walloon public intermunicipal economic development structures that cover the regional territory. Each structure has its own project and act independently. These logistics platforms projects are mainly the results of public private partnerships. In consequence of this uncontrolled development, some of these platforms are empty or host very little activity (as it is explained in the next section).

Such situations of unframed multiplication of logistics infrastructures are observed in many European regions (Hesse, 2008; Houé, 2010; Flämig et al., 2011, Wang, 1996). They are accompanied by a permissive policy on land, opening the possibility for companies to create new sites almost everywhere (Hesse, 2008). In Wallonia, the situation is worsened by the lack of leadership of the regional government, which is a historical legacy of the urban, economic and social structure of the region (Vandermotten et al., 2004). Even if there is a regional strategy, there is no enforcement tool that could oblige the sub regional actors to respect this strategy.

Multimadal forminate
Rela-Road

Rela-Road

Rela-Road

Rela-Road Hadroway

Rela-Road H

FIGURE 3: THE DEVELOPMENT OF LOGISTICS PLATFORMS IN WALLONIA

In a competitive environment, instead of inspiring the implementation of integreted policies, examples of apparent success of logistics platforms, as in previous section, tend to encourage the surrounding territories to invest in similar infrastructures to imitate their success. They see no advantage to refuse to invest for the benefit of their neighbors. Instead, the success of these seems a guarantee of success for similar structures (Flämig et al., 2011).

b. Economic impacts

The establishment of logistics platforms and the promotion of logistics activities raise the question of their socio-economic impacts.

As part of their competitive positioning, the authorities intend to focus on the implementation of distribution activities at national or European level. The underlying logic is that these sites are less constrained by the local economy and more sensitive to factors related to accessibility or various aids to implementation that can be implemented by the government. These terms have different effects on employment and activities created.

First, these distribution operations correspond to an exogenous logistics activity, i.e. who is not related to the local economy, since it runs on a much larger scale (De Ligt et al., 1998). Relying on this type of activity is consistent with a policy seeking to attract investors because it overcomes the socio-economic context, possibly degraded. If applicable, this volume brings together business and logistics jobs than rather than the potential of the local economy. The distribution of goods is also an activity enduring organizational and geographical changes - increased centralization of operations, peripheralization of settlements - under which public authorities can hope to attract new players. However, the downside is that these exogenous activities have a reduced induced effect on the rest of the economy. As they operate at the national or European level, they are disconnected from the

local reality and have little workout impact. Similarly, the possible arrival of these companies can not fill any deficiency in services businesses, because they are sites where activities conducted are related to physical flows of goods.

Regarding the quality of jobs, distribution activities correspond to low-skilled and flexible jobs, to respond to market developments (AFT-IFTM, 2009). Data relating to distribution centers in Wallonia illustrate this situation (Table 2). The blue collars and workers with no higher education are overrepresented, as compared to the rest of the job in Belgium in the general and in the transport and logistics sector. Similarly, temporary employment is twice overrepresented as compared to the rest of the economy. Male employment prevails, as a result of strong link with the transport sector. This is partly because this activity requires low-skilled staff that many public authorities rely on its development, among others to replace the jobs lost in the industry. However, this led to accept the creation of jobs with high flexibility. Some also point out that this vulnerability affects wages, which would be lower than in other sectors, equally qualified (AFT-IFTM, 2009).

The attraction of distribution activities is not the only policy conducted by public authorities. Clustering or innovation Initiatives are also promoted (Sheffi, 2010). However, job creation is rarely highlighted as an objective of these measures and their results are difficult to measure. In addition, these actions raise fewer funds than public initiatives for attracting distribution activities.

TABLE 2: MORPHOLOGY OF EMPLOYMENT IN THE WALLOON DISTRIBUTION CENTERS

			Part									
Name	Activity	Total employement					Worker qualification			Employement status		
			Full Time	Permanent employement	Temporary employement	Male employement	Primary school	Secondary School	Higher degree, university	Direction	white collar	Blue collar
Sketchers	EDC	162	0,98	1,00	0,54	0,64	0,54	0,22	0,22	0,00	0,25	0,72
Scott Sports	EDC	59	0,92	0,83	0,25	0,61	0,02		0,03	0,00	0,15	0,76
TNT	European Hub	1542	0,36	1,00	0,03	0,88	0,03	0,78	0,19	0,00	0,28	0,72
H&M	EDC	310	1,00	0,76	0,30	0,66	0,40	0,50	0,10	0,01	0,20	0,79
Baxter	EDC	181	0,77	0,92	0,30	0,78	0,00		0,33		0,99	0,00
STEF	NDC	92	0,90	0,90	0,10	0,91	0,14	0,76	0,10	0,00	0,17	0,83
Johnson &												
Johnson	EDC	283	0,92	0,88	0,04	0,48	0,00	0,76	0,24		0,98	0,02
Coopervision	NDC	117	0,91	1,00	0,23	0,54	0,00	1,00	0,00		0,15	0,85
Logitoys	NDC	95	0,95	1,00	0,13	0,61	0,00	1,00	0,00	0,00	0,58	0,42
Les												
	Retail DC	176	0,82	0,89		0,93	0,00		0,07	0,04	0,28	0,68
Deli XL	Retail DC	398	0,88	0,96	0,05	0,74	0,09	0,68	0,23	0,02	0,43	0,55
TTS	Road transport DC	220	0.93	0.50	0.05	0.94	0.00	0.97	0,02	0.00	0,12	0.88
Saint-Gobain			-,	-,	-,	-,	-,	-,	-,	-,	-,	-,
Autover												
Distribution	EDC	103	0,88	1,00	0,27	0,88	0,71	0,10	0,19	0,00	0,24	0,76
TOTA	AL DC	3738	0,68	0,92	0,12	0,79	0,10		0,17	0,01	0,36	0,63
Tota	al belgian econon	ny	0,76	/	0,07	0,55	0,2	0,38	0,42	0,07	0,65	0,27
Total transport	and storage (Nac H)	e 2 Category	0,84	/	0,06	0,8	1	1	1	0,08	0,41	0,51

Sources: Banque Carrefour des Entreprises and Eurostat

In general, when attracting logistics activities, government target largest private actors. These large companies seem to be able to create sustainable jobs. They appear to be the winners of the globalization. In addition, these large companies are likely to implement large sites, creating many jobs. Then, these companies can lobby governments, because of their fame and the fact that their arrival may lead to the creation of new jobs. Finally, it is in the pursuit of economic development policy focused on large industrial investment as a guaranty of strength and durability of the implantation (Gallouj et al., 2006). If the arrival of major operators is a guarantee of job creation, it also raises the question of a greater dependence of the territory vis-à-vis these firms (Perry, 2010).

The attraction of logistics activities occurs in a competitive environment between local, regional or national public authorities. This is to highlight the potential or actual consequences of this situation. The growth of logistics providers contributes to the illusion that this activity is experiencing a major boom. This creates a windfall around logistics activities, encouraging the proliferation of initiatives and infrastructure. However, the

evolution of employment in the sector of logistics and freight transport shows that this sector creates little or no employment and its geography is quite demanding (Savy et al., 2004). The multiplication of logistics platforms poses the risk to create redundant and competing infrastructures, where demand does not follow the offer (Hesse, 2008). In addition, Mimicry between the policies induced a weak ability to challenge the industry trends. Logisticians can play this abundant and similar offer to choose the one that suit to their requirements. Oversupply and cheap offer also encourages companies to relocate locally or regionally, reducing the job creation. Since all territories can not be winners in the creation of logistics jobs, there is a strong competition between European territories and their authorities. Many public authorities invest heavily and offer financial partnerships to investors (Flämig et al., 2006). These public funds come from both local and regional authorities as well as European envelopes and FEDER fund in particular. When interrogating industrial actors of the logistics sector, it appears that these public subsidies contribute to their location choices only at a small scale (Perry, 2010). The competition occurs between contiguous territories (Hesse, 2002b). At this level, these logistics providers can use the territorial competition to obtain better financial terms and to encourage an increase in funds committed by the government. The Walloon situation in terms of public investments in logistics infrastructures illustrates this issue, since many initiatives have required a large amount of public funds, from regional or European origin (see table 3).

TABLE 3: SOME EXAMPLES OF PUBLIC AND PRIVATE INVESTMENTS IN LOGISTICS INFRASTRUCTURES IN WALLONIA

Type of infrastructure		Public investment (millions euros)	Private investment (millions euros)	
Liege airport and TNT European hub	Infrastructures	Walloon region : 280	TNT : 200	
	Insulation / purchase of unsuitable homes	Walloon region : 300		
	Annual grant	Walloon region : +/- 20		
Johnson & Johnson distribution center		FEDER and Walloon region : 11	40	
H&M distribution center		FEDER and Walloon region : 10	50	
Ardenne logistics logistics platform		FEDER and Walloon region : 26	5	

This situation also leads to the establishment of a "lowest bidder" situation where public authorities want to attract investors at all costs (Bistrow, 2005; Flämig et al., 2011). Since the arrival of these investors is seen as one of the only ways to create activities and employment, particularly for areas experiencing bad socio-economic situation, their authorities might be tempted to reduce their requirements to ensure their arrival.

Nevertheless, in addition to the European positioning, the local or regional role of logistics policies should not be neglected. Even though it is rarely highlighted, many of the logistics platforms are occupied by small and medium enterprises, possibly not involved in logistics (Hesse, 2008; Houé, 2003). This situation arises from the close similarity between the management of logistics platforms and the one of traditional industrial parks. Governments may therefore be less selective vis-à-vis the companies seeking to establish in these infrastructures. This may also be the result of inadequate strategy or an oversupply. The logistics platform does not meet an industrial demand so their managers open them to other companies. Therefore, these infrastructures can meet the expectation of smaller players seeking to locate or relocate. As illustrates table 4, many activities located in Walloon logistics platforms are made of Walloon enterprises and of local enterprises that relocate in Wallonia or of activities not related to logistics.

TABLE 4: JOBS AND ENTERPRISES IN WALLOON LOGISTICS PLATFORMS

Name	Total	New enterprises	Relocation in Wallonia	Activities not related to logistics	Walloon enterprises	
	Enterprises / jobs	Enterprises / jobs	Enterprises / jobs	Enterprises / jobs	Enterprises / jobs	
Garocentre	32/1041	18/858	8/183	4/164	19/329	
Ardenne Logistics	4/17	1/no data	3/17	0/0	4/17	
DPML	10/419	7/211	3/208	5/314	9/415	
Liège logistics	19/978	11/654	8/324	1/218	14/560	

Sources: National Bank of Belgium

4 Conclusions

Logistics has become a big issue for public authorities. It is seen as a driver of economic development. At the same time, logistics may create many negative impacts such as, increase in road freight, polluting emissions, land consumption etc.

The way European public bodies are taking these issues into account reflects their broader socio-economic and politic vision. They have en entrepreneurial approach, based on the enhancement of economic development and the territorial competitiveness. In consequence, their actions in logistics are focused on the creation of logistics platforms, in order to attract private investments and create activities. Their results are mitigated. Private actors' action tends to be reinforced because of the competition between public authorities. The latter want to attract investments, so they reduce their requirements and propose financial incentives. They enter in a lower bidder action, in terms of economics, social or environment. This policy may create low skilled jobs, which are a must for old industrial regions, when it participates in the implantation of a distribution centre. But it also leads to a growing dependency on some large investors that implement these distribution centres.

Regarding the Walloon situation, this orientation of the public action seems at least partially inefficient because it worsens the lack of regional leadership and creates lots of redundant infrastructures. Moreover, since this policy is not based on regional economic structure but on foreign investors, it doesn't answer to the weaknesses of this structure, such as the lack of businesses services. However, in the current European political and regulatory context, that enhance the regional competitiveness, this entrepreneurial action is almost the only way of acting. Nevertheless, even if these results aren't highlighted, lots of these logistics infrastructures benefit the small local or regional enterprises, that could move to better location or extend their activities.

Political and social analyses of the consequences of public policies in logistics matters, as well as the macroeconomic approach, are underrepresented in the scientific literature. Yet it seems to be an interesting angle analysis to assess the quality and performance of these policies. The logistics policy in Europe and its results fit in the theories of Weiss, Harvey or Swyngedouw about public regulation. In the competitive regulatory environment implemented by international actors, such as the European Union, public bodies are forced, or at least strongly encouraged, to adopt an entrepreneurial policy - i.e. a policy that favors large/foreign private investment by the creation of incentives and the valorization of social and economic local environment, instead of a direct public intervention or of a endogenous development.

This increases the competition between the territories, which has not proven to be the best way for regulating the territory and favoring the socio-economic development.

References

AFT – IFTM (2009), « 15^e enquête annuelle sur les besoins en emploi et en formations dans la logistique », *Information Presse*, 856.

Bahoken F., Raimbault N. (2012), « La périurbanisation singulière de l'immobilier logistique parisien », *Mappemonde*, 106.

Baudelle G., Guy C., Mérenne-Schoumaker B. (2011), *Le développement territorial en Europe. Concepts, enjeux et débats,* Presses Universitaires de Rennes, DIDACT Géographie, Rennes.

BESTUFS (2005), BESTUFS Policy and Research Recommendations I, Urban Consolidation Centres, Last Mile Solutions, Best urban freight solutions.

Bristow G. (2005), "Everyone's a 'winner': problematising the discourse of regional competitiveness", *Journal of Economic Geography*, 5, 285-304.

Boldt, K. W., Gelhar M. (2010), « Duisburg: Von der Stadt Montan zum Drehkreuz des Westens », Geographische Raudschau, 62/2, 26-33.

Carbone V. (2004), Le rôle des prestataires logistiques en Europe. Intégration des chaines et alliances logistiques, Thèse de doctorat de l'Ecole Nationale des Ponts et Chaussées, sous la direction de Michel Savy, Paris.

Carroué L. (2002), Géographie de la mondialisation, Armand Colin.

Danielzyk R., Wood G. (2006), "Innovative strategies of political regionalization: the case of North Rhine Westphalia", *European Planning Studies*, 12/2, 191-207.

Daventry City Council (2005), Daventry International Rail Freight Terminal (DIRFT) Expansion Design Guide.

De Ligt T., Wever E. (1998), "European distribution centers: location patterns", *Tijdschrift voor economische en sociale geografie*, 89/2, 217-223.

Delta 3 (2011), *Plate-forme multimodale de Dourges Nord-Pas de Calais*, Dossier de présentation.

DRE NPC – Direction Régionale de l'Equipement Nord-Pas-De-Calais (2007), Etude sur l'appréciation de l'impact de la filière logistique sur les territoires des arrondissements d'Arras et de Lens au regard du développement durable, ACT consultants.

Duisport (2004), *Duisport/Logport – The logistics hub in the center of Europe*, Logport - Logistic Center Duisburg Rheinhausen GmbH / POLLOCO Working visit, 31/03/2004

Duisport (2009), 2009 annual report of the Duisport group, Innovation port, Building future.

East Midlands Development Assembly (2006), Regional Economic Strategy for the East Midlands 2006-2020.

East Midlands Regional Assembly (2006), East Midlands Strategic Distribution Study.

East Midlands Regional Assembly (2009), East Midlands Regional plan 2009.

Fischer B. (1996). « Zones d'activités, gaspillage de fonds publics au nom de l'emploi », *Etudes foncières*, 72, 24-25.

Flämig H., Hesse M. (2011), "Placing dryports, port regionalization as a planning challenge – The case of Hamburg, Germany, and the Süderelbe", *Research in Transportation Economics*, 33, 42-50.

Gallouj C., Leloup F., Mérenne-Schoumaker B., Moyart L. (2006), *Services aux entreprises et développement régional, bilan et perspectives*, de boeck, collection de l'Institut wallon de l'évaluation de la prospective et de la statistique (IWEPS).

Harvey, D. (2005), A Brief History of Neoliberalism, University of Chicago Center for International Studies Beyond the Headlines Series.

Hesse M. (2002a), "Gütertransport und Logistik im Urbanisierungsprozess", Kurzbericht zum Habilitationsvorhaben 'Der Einfluss der Logistik auf den Prozess der Sub- und Desurbanisierung Erkundungen in der postmodernen Stadtlandschaft', Mars 2004.

Hesse M. (2002b), "Shipping news: the implication of electronic commerce for logistics and freight transport", *Resources, conservation and Recycling*, 36, 211-240.

Hesse M., Rodrigue J.-P. (2004), "The transport geography of logistics and freight distribution", *Journal of Transport Geography*, 12, 171-184.

Hesse M. (2004), "Land for logistics: locational dynamics, real estate markets and political regulation of regional distribution complexes", *Tijdschrift voor economische en sociale geografie*, 95/2,162-173.

Hesse M. (2006), "Global chains, local pain: Regional implications of global distribution networks in the German north range", *Growth and Change*, 37/4, 570-596.

Hesse M. (2008), The city as a terminal: The urban Context of logistics and Freight, Ashgate.

Houé T. (2003), « Réseaux logistiques et encrage territorial : vers un dépassement des schémas traditionnels d'implantation des activités », non publié.

Houé T. (2010), « Le développement territorial des activités logistiques en Grande Région : une analyse comparée des pratiques et conséquences en France et au Grand-duché de Luxembourg », papier présenté lors du RIRL-8th International Conference on Logistics and SCM Research, Bordeaux, 30/09 – 01/10 2010.

Joignaux G. (2008), « Quel impact de la logistique sur le développement territorial ? », *Notes de synthèse du SESP*, 168, 45-50.

Liefooghe C. (2005) "Services: the Future of Industry? From coalmining and textile industries to environmental services and distance selling in the Nord-Pas-de-Calais Region France", *Regions*, 259, 13-16.

LogistikRuhr (2010), Das netzwerk für die logistik von morgen, LogistikRuhr.

Maillefert M. (2009), « Action collective territoriale et modèles de développement régionaux : Le cas de trois sites de la région nord-pas de calais », *Vertigo*, 9/2.

McKinnon A. C. (1983), "The development of warehousing in England", *Geoforum*, 14/4, 389-399.

McKinnon A. C. (2009), "The present and future land requirements of logistical activities", *Land Use Policy*, 26, 293-301.

Mérenne-Schoumaker B. (2003), « L'émergence d'un marché immobilier d'entreprises. L'exemple de la Wallonie », *Géocarrefour*, 78/4, 295-300.

Mérenne-Schoumaker B. (2007), la localisation des grandes zones de logistique, *Bulletin de la société géographique de Liège*, 49, 31-40.

Mérenne-Schoumaker B. (2008), *La localisation des industries. Enjeux et dynamiques*, Presses Universitaires de Rennes, DIDACT Géographie, Rennes, 4^e édition.

Notteboom T. (2008), "The relationship between seaport and their intermodal hinterland in light of global supply chains", *Discussion paper n*2008-10, Joint Transport Research Center, OCDE, Paris.

Notteboom T., Rodrigue J.-P. (2009), "The future of containerization: perspective from maritime and inland Freight distribution", Geojournal, 74/1, 7-22.

Nottingham Business School (2011), *D2N2 Strategic priorities & areas of economic focus*, Economic Strategy Research Bureau.

Perry M. (2010), *Controversies in local economic development. Stories, strategies, solutions*, Region and Cities, Regional Studies Association, Routledge

Provincie Limburg (2008), *Marktverkenning Greenport Venlo. Ruimtebehoefte bedrijventerrein en glastuinbouw.*

Provincie Limburg (2010), *Provinciaal Omgevingsplan Limburg, Provinciale staaten van Limburg.*

Région Nord-Pas de Calais (2006), *Schéma régional des transports – Faire du Nord-Pas de Calais un hub au cœur de l'Europe*, Conseil Régional Nord-Pas de Calais, Direction des Transports.

Région Nord-Pas de Calais (2008), *Le SDRAT en Action*, Région Nord-Pas de Calais - Direction de la Communication.

Région wallonne (1999), *Schéma de Développement de l'Espace Régional (SDER)*, Ministère de la Région wallonne, Namur.

Région wallonne (2005), « Les actions prioritaires pour l'Avenir wallon », Le contrat d'avenir pour les Wallons.

Rodrigue J.-P., Hesse M., Comtois C., Slack B. (2009b), *The geography of Transport systems*, Second Edition, Routledge, New-York.

RRSLP – Rugby Radio Station Limited Partnership (2010), *DIRFT Symposium Report*, 22/03/2010.

Savy M., Horn C. (2004), « L'emploi dans le transport de marchandises et la logistique : Une évaluation temporelle en France et en Allemagne », Les Cahiers Scientifiques du Transport, 45, 101-123.

Savy M. (2006), *Logistique et territoire*, Délégation interministérielle à l'aménagement et à la compétitivité des territoires (DIACT), Collection Travaux, Paris.

Savy M., Liu X. (2010), « La plate-forme logistique, objet exemplaire de l'aménagement urbain », Communication lors des premières journées du pôle ville de l'université Paris Est Ville : Transport et territoire, quoi de neuf ?, ParisEst, 2010.

Sétra – Service d'étude sur les transports, les routes et leurs aménagements (2009), Les bâtiments logistiques - Fonction et impacts sur les territoires. Synthèse des connaissances. 64p.

Sheffi Y. (2010), "Logistics intensive clusters: Global competitiveness and Economic Growth", *Regional Science Association Annual Conference*, Denver, CO, November 11, 2010

Stratec (2004), Élaboration d'un schéma de développement intégré des réseaux et terminaux de fret en Région wallonne, rapport final, Ministère de l'Equipement et des Transports.

Swyngedouw E. (2000). Authoritarian Governance, Power and the Politics of Rescaling, *Environment and Planning D: Society and Space*, 18, 63-76.

Tsamboulas D. A., Kapros S. (2003), "Freight village evaluation under uncertainty with public and private financing", *Transport Policy*, 10, 141-156.

Vallin P. (1999), La logistique, modèle et méthode du pilotage des flux, Economica, Collection Techniques de Gestion, Paris.

Vandermotten C., Marissal P. (2004), *La production des espaces économiques*, tome 1, Editions de l'Université de Bruxelles.

Wallonie DGO2 – Mobilité et voies hydrauliques (2012), *Présentation de la plate-forme multimodale Trilogiport à Hermalle sous Argenteau*, Service Public de Wallonie.

Wang W. (1996), « La Hollande, région distributive, région encombrée », *Revue d'Economie Régionale et Urbaine*, 1996/1, 7-28.

Weiss L. (1997), "Globalization and the Myth of the Powerless State", *New Left Review*, I/225, 3-27.

Wemelbeke G., Mariotte H. (2007), « L'essor de grandes zones logistiques accompagne la massification des flux routiers », SESP En bref.