THE EMPLOYER MOBILITY PLANS: BENEFITS, ACCEPTABILITY AND EFFECTIVENESS

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ABSTRACT

Companies bring a growing attention to the home-to-work journeys of their workers. As an important initiator of travels, they have been encouraged by the authorities to cooperate in order to reduce the negative impacts of car traffic. Employer Mobility Plans (EMPs) have been implemented in a growing number of companies in recent years. These plans represent opportunities to achieve business objectives. Despite important research on commuting traffic, only few papers cope with EMPs. With the help of a survey among Employees Transport Co-ordinators (ETCs), the aim of this paper is to evaluate the effectiveness and the acceptability of the policy measures included in the EMPs and to assess their benefits at the company level.

The preliminary results show that the companies are particularly motivated by the operational benefits an EMP can generate. Even companies that considered EMPs as a constraint have found indirect operational benefits to their implementations. Among these indirect impacts, the ETCs often cited the improvement of the mood of the employees and of the positive image of the company. These results also show that the policy measures are perceived as effective and well accepted by both employees and employers. The EMPs appear thus to be useful to provide social and operational benefits to the companies.

Keywords: commuting, employer transport plan, sustainable commuting

1. INTRODUCTION

Traffic congestion and air pollution during rush hours are nowadays a well known characteristic of large cities. Besides environmental issues, the reduction of high traffic volumes is required to improve the economic competitiveness. In fact, an effective transport system, which provides a high level of accessibility, pays one's share of economic growth (Banister and Berechman, 2001; Vickerman, 2003). A rational reduction of the use of private cars is therefore essential. The repeated and predictable pattern of commuting traffic offers opportunities to achieve this objective. As an important source of travelling patterns, the companies have a ringside seat to promote and favour a more sustainable mobility (Dickinson *et al*., 2003; Van Exel and Rietveld, 2009). Conscious of the role that companies can play, and to reinforce the likelihood of achieving public policy objectives (Weiss and Tschirhart, 1994), the employers have been approached to cooperate as mediating institutions between governments and citizens[7] (DeHart-Davis and Guensler, 2005). Hence, the managers have increasingly paid attention to the mobility of their employees during the recent years, being aware that mobility also represents opportunities for them to achieve business objectives (Roby, 2009). As a consequence, an always growing number of companies implement Employer Mobility Plans (EMPs) in order to promote sustainable mobility behaviours.

[7] Berger and Neuhaus (1977) define a mediating institution as an institution connecting the private lives of individuals with public policy concerns by communicating societal norms to members and providing social contexts that encourage a commitment to these norms.

Nevertheless, and despite important research on commuter traffic, the EMPs, and particularly their economic impacts, are poorly covered in the literature on commuting patterns. In fact, existing research often focus on a behavioural analysis of individual commuters (e.g. Henser and Rose, 2006) or on an analysis at the municipality level (e.g. Rietveld and Daniel, 2004). The main objective of this paper is to evaluate the effectiveness and acceptability of the policy measures included in the EMPs and to assess their benefits at the company level. To achieve these objectives, EMPs of a set of companies located in the Walloon and Brussels-Capital Regions (Belgium) are analysed with the help of a survey conducted among Employees Transport Co-ordinators (ETCs) or human resources staff in charge of mobility issues.

A decisive step in the awareness-raising of employers for the mediation role the companies can play was the implementation in 1988, in Southern California, of the Clean Air Act, Regulation XV. This act puts the emphasis on the concept of Transportation Demand Management (TDM), which encompasses both strategies and programmes that encourage a more effective use of transportation resources (Litman, 2003). Many applications have been found at the company-level and the concept of EMP emerged consecutively. The Clean Air Act became mandatory in the design of the plans and the training of ETCs (Giuliano *et al*., 1993).

However, the European authorities took a longer time to consider the mobility issues at the company-level. In 1998, the United Kingdom developed a White Paper entitled A New Deal for Transport: Better for Everyone (DETR, 1998) that promoted a voluntary take-up of EMPs. At the same period, Italy laid down the creation of the function of ETC in large companies. In 2001, the Netherlands have overhauled its commuting benefits system to further promote alternative modes of transport (Enoch and Potter, 2003). Two years later, Belgium established a census on mobility practices within large companies to stimulate initiatives and discussions on mobility in the social dialogue (Vanoutrive *et al*., 2010). Recently, the European Commission has recognised the potential of the mediating role of the companies in its Action Plan on Urban Mobility, stating that company mobility management can influence travel behaviours by drawing the employee's attention towards sustainable transport options (European Commission, 2009).

After this introduction, the second section of this paper presents a review of the literature about mobility management in the companies and the description of the Belgian Home-To-Work Travels (HTWT) diagnoses (Section 2). The third section is devoted to the survey design. The results of the survey are presented in Section 4. The paper finally draws some conclusions expressed as policy recommendations.

2. MOBILITY MANAGEMENT BY COMPANIES

The policy measures developed by companies in the framework of their EMP are divers. They affect different features of the daily work of the employees (e.g. the work hours or wages). The designation of an ETC is one of the most conspicuous measures. In fact, the ETC has to manage and facilitate the implementation of the EMP.

This section inventories the range of policy measures the companies can implement. The role of ETCs is also discussed. Finally, the Belgian situation is sketched through the answers found in the HTWT diagnoses.

2.1. Employer mobility plan

An EMP works out a set of actions carried out by a company to promote and favour a more sustainable mobility. It aims at influencing the commuting behaviour of workers through the promotion of alternative modes of transport, which are more environment-friendly and sustainable than the use of single-occupancy vehicles (SOV) (Kingham *et al*., 2001; Dickinson *et al*., 2003). Thereby, EMPs meet both public policy objectives (e.g. reducing congestion, energy consumption or air pollution), and organisational ones (e.g. solving accessibility and/or parking problems). They also represent opportunities for managers to achieve business objectives (Roby, 2009) (e.g. promoting the image, saving costs and/or space, or improving the satisfaction of the employees).

The policy measures included in EMPs can be gathered in 2 categories: incentive or dissuasive measures (Banister, 2008). Both traditionally play on the 2 factors commonly accepted as being the key criteria of commuters' choice of a mode of transport namely the costs, in monetary terms and travel times, and the convenience (Hagman, 2003; Anable, 2005). Despite the lower costs of SOV's alternatives, many workers regard the savings as insufficient against the loss in commodity of a modal shift. Therefore, they keep up favouring SOV use (Rodriguez and Joo, 2004).

Incentive policy measures, or "pull" measures, reward workers who have changed their mobility behaviour. They have to offer a tangible value to the worker (Hwang and Giuliano, 1990). It often consists on financial grants to compensate for the disadvantages of the mode of transport given up. At the contrary, dissuasive policy measures, "push" measures, try to discourage solo driving. Parking management, by price settings, or a reduction of the number of car parks, is an example of a restrictive measure that appears effective (Hole, 2004; Van Exel and Rietveld, 2009).

The companies can promote motorised or non-motorised modes of transport. The promotion of motorised modes of transport consists mainly on favouring the ridesharing or the public transport. The promotion of non-motorised mode of transport comes down to favour cycling and walking. However, the promotion of motorised modes of transport affects a more important number of workers. In fact, the promotion of cycling affects only employees living close to their workplace. Journeys of less than 5 kilometers are within cycling distance for most people, and cycling potential exists up to about 10 kilometres (Rietveld, 2001; Vandenbulcke *et al*., 2009). The promotion of walking affects workers living at smaller distances.

The choice of the policy measures making up an EMP has to take into account characteristics of the workplace. The location of the company and the type of workforce are important factors (Rye, 1997). A limited number of car parks, long home-to-work journeys suits better to the promotion of the train (Hwang and Giuliano, 1990; Rye, 1999a; Kingham *et al*., 2001; De Witte *et al*., 2008). At the contrary, a flat topography, the standards of salary and of education of the workforce tend to favour the use of cycling in the home-to-work journeys (Ortúzar *et al*., 2000; Rietveld, 2001; Dickinson *et*

al., 2003; Vanoutrive *et al*., 2010; Vandenbulcke *et al*., 2009). Nevertheless, the EMPs could turn out to be put in place with difficulty in some companies. The car has a strong symbolic and affective function for people (Cao and Mokhtarian, 2005; Steg, 2005).

In addition to the promotion of alternative modes of transport, the employers have the possibility to make work hours more flexible to favour sustainable behaviours. Giving the possibility to workers to choose their starting and departure times avoids massive commuting journeys at the same time. As a consequence, the commuting traffic at the peak hours is smoothed and the congestion decreases (Giuliano and Golob, 1990; Brewer, 1998). Office-type settings are well suited to such a scheme, in contrast with the manufactures where the coordination of activities is crucial (Hung, 1996). The compressed workweeks (CWs) go further in the flexibility of the work hours. They shorten the traditional 5-workdays week to 4 workdays. Consequently, the employees work longer days to compensate the hours lost due to the extra free day (Hung, 1996). The demand in transport is reduced the day-off and the traffic conditions are improved the other days as the workers commute earlier and later than usual to work their longer hours (Sundo and Fuji, 2005).

Finally, the possibility of teleworking impacts directly in the number or the length of the home-to-work journeys by allowing workers to work at home or at a satellite centre closer to their home (Helminen and Ristimäki, 2007).

2.2. Employer transport co-ordinator

An ETC, or mobility manager, is a member of staff who has to manage and facilitate the implementation of an EMP within a company. The function of ETC became more important in 1988 with the Clean Air Act (Regulation XV) in Southern California. The designation and the training of an ETC were mandatory (Giuliano *et al*., 1993). However, the companies often just added the mobility issues to the other tasks of a member of staff. The appointed ETC could thus only work partially on the EMP and was not necessary interested in the mobility issues (Rye, 1999b). In the UK, only few companies have designated an ETC. Employers do not perceive it as an acceptable and effective policy measure despite that the designation of an ETC is as important as the management commitment to the EMP (Rye, 1999b). In Italy, the designation of an ETC has been laid down since 1998 in large companies.

According to Hendricks and Georggi (2007), companies should select an ETC that is at a managerial level. An ETC should have direct communication access to top management decision-makers and influencedecisions relating to the budget allocated to the EMP (Hendricks and Georggi, 2007).

2.3. Mobility management in Belgium

The programme-law[8] of April 8th 2003 has established the legal obligation for the companies located in Belgium and employing at least a hundred workers to fill in the

[8] A programme-law is a law with a general content which has a programme value in governmental fields.

HTWT questionnaire for each of their workplace employing more than 30 workers (Van Malderen *et al*., 2009). The objective of this law is to stimulate initiatives and discussions in the social dialogues about the home-to-work journeys (Vanoutrive *et al*., 2009). The questionnaire is conducted every 3 years by the Federal Public Service (FPS)[9] Mobility and Transport. Two HTWT surveys have been performed to date (in 2005 and 2008), and respectively 3,269 and 3,733 companies filled in the forms. In total, respectively 7460 and 9455 workplaces are represented, aggregating the behaviour of about one worker out in 3 in Belgium.

The surveys contain 2 sections. The first section focuses on the commuting behaviour of the employees. The workers have to provide information about their main mode of transport to commute. The HTWT surveys contain therefore the percentage workers at each workplace who used each mode of transport. In 2008, the car was mostly used by commuters with a modal part of 68%, followed by the public transport (train bus and metro, 13%), cycling (9%), walking (3%), carpooling (2%) and other modes of transport (5%).

The second section refers to the characteristics of the company (e.g. economic sector) and of their EMP. Employers have to provide information about the policy measures in force. Four categories of measures have been designed: the measures promoting the use of bicycles (15 measures), of carpooling (6), of public transport (6) and miscellaneous measures (11). In 2008, the bicycle was the most promoted mode of transport by the employers (77% of the workplaces report at least one measure promoting cycling), followed by the public transport (40%) and carpooling (15%).

The most popular policy measures are the financial incentives for the use of alternative modes of transport. The financial incentives for the use of public transport take the form of additional reimbursements[10] for public transport tickets. The success of such a scheme, contrary to other countries, is explained by the benefits and income tax systems in Belgium. Additional reimbursements are tax exempted (Vanoutrive *et al*, 2009) and encouraged with a third-party payer system, where authorities step in financially[11]. Providing cycling infrastructures (e.g. sheltered bicycle parks or covered bicycle storages) is also popular among employers. Appendix A shows the frequency of the mobility measures in Belgium.

At the same time, the Brussels-Capital Region laid down the implementation of an EMP to companies employing at least 200 workers[12.] The Flemish Region has created in 2006 a Commuting Fund which subsidies project of employers to reduce SOV use. Forty-nine projects of companies or groups of companies have been subsidized to date, for a total of more than 15 million Euros. The Walloon Region offers support for the making up of EMPs (Vanoutrive *et al*., 2009).

[9] A FPS is the equivalent of a government department in Belgium.
[10] Reimbursing a part of the public transport tickets is compulsory in Belgium. Employers are free to reimburse a more important part than the compulsory one.
[11] In the third-party payer system when an employer reimburses a threshold part of the public transport tickets, authorities paid the remaining part. The employees have therefore no charge.
[12] Decree of February 5th 2004 of the Brussels-Capital government.

3. SURVEY DESIGN

The HTWT diagnoses offer opportunities to analyse the EMPs of companies (Vanoutrive *et al.*, 2009). Previous research showed that companies tend to implement a set of similar measures (financial incentives, the development of facilities or the diffusion of information) and to promote only one specific mode of transport (Van Malderen *et al*., 2009; Vanoutrive *et al*., 2010). It also appears that the financial incentives, the provision of facilities, the diffusion of information and the parking management all play an important role in the promotion of alternative modes of transport (Van Malderen *et al.*, 2009).

However, the questions of the HTWT diagnoses are too general to approach the specific practices of companies. Moreover, important issues such as the motivations, the acceptability and the benefits of the EMPs are not taken into account. More detailed data are thus necessary for the evaluation of mobility management at a particular site (Vanoutrive *et al.*, 2009). Consequently, face-to-face interviews were conducted in order to obtain such data on EMPs. Twenty-nine ETCs have been interviewed in the spring 2010. The interviews were planned to last approximately 30 minutes. This timing was considered as not too intrusive in the daily work (Roby, 2009) and seems to allow enough time to deal with the issues.

This section breaks down the sample selection and the questionnaire design.

3.1. Sample selection

The designation of an ETC is taken up in the miscellaneous category of policy measures of the HTWT diagnoses. The sample of the survey is selected among the companies reporting such a member of staff. The designation of an ETC within a company remains rare. However, their number has doubled between the 2 diagnoses. In fact, only 3.30% of the workplaces reported the designation of an ETC in 2005. They were 6.90% in 2008. This denotes the growing involvement of managers for the mobility issues.

An a priori sampling is used to select the EMPs to analyse. This method is appropriated to collect the opinions of experts in a research field (Giannelloni and Vernette, 2001). The selection criteria used are the degree of successfulness of the EMPs, identified through a cluster analysis (Van Malderen *et al*., 2009) and the economic sector of the company. The financial sector is underrepresented in the sample. The EMPs of those companies are strongly centralised. The ETC of the head office is reported for all local agencies. A geographical criterion is also used as a selection criterion in order to cover the whole Belgian territory. In this way, different accessibility and commuting problems are met. Table 1 shows the split by economic sector and by Regions.

Table 1 – Split of the interviews by economic sector and Regions

	Number of ETCs	
Economic sector	**Brussels-Capital Region**	**Walloon Region**
Manufacturing	2	5
Electricity, gas and water	1	1
Construction	1	0
Wholesale and retail; repair of motor vehicles and consumer goods	0	1
Universities and other higher education institutions	1	1
Finance	2	0
Real estate, renting and producer services	1	0
Public administration and defense; social security insurance	2	1
Local governments	0	3
Health	0	1
Non profit	1	1
Other community, social and personal services	1	2
Public Transport Companies	1	0
Total	**13**	**16**

A personalised email was sent to the selected ETCs. The mail explained the objectives of the survey and asked for co-operation. Non-respondents were contacted by a phone call. The 29 ETCs interviewed represent a 53% positive response rate. The lack of time or of mobility measures have mostly been appealed as a refusal motive.

3.2. Questionnaire design

A semi-directive questionnaire was developed to guide the interviews. Some adaptations for specific situations have been made. Irrelevant questions for a company were not asked. The questions focus on the following themes: activity spheres of the ETC, time span, original and current motivations of the EMP, and the benefits for the company of the EMP. Additional data, such as workplaces' accessibility rates, were gathered before the interviews. The objective was to get an a priori knowledge of the mobility problems of the company.

The questions about the effectiveness of the measures and their acceptability by the employees and employers were asked by means of a Likert scale (Likert, 1932). A five-points ranking scale was used. Rank 1 represents a very high unacceptability/ineffectiveness and rank 5 a very high acceptability/effectiveness. Rank 3 is a neutral point. The choice of 5 response categories was motivated by its quickness and easiness to use by the respondents (Preston and Colman, 2000). However, the

multiplicity of mobility measures has lead to a classification of the 37 measures of the HTWT survey. The classification was based on an exploratory factor analysis (Vanoutrive *et al*., 2009). Twelve categories of measures have been defined. Interviewees were asked to reply whether or not measures of the category have been implemented. They were also asked to detail the policy measures in force. Table 2 displays the defined categories of mobility measures.

Table 2 – Categories of mobility measures

Financial incentives to the use of alternative modes of transport	Encouragement to use alternatives mode of transport
Diffusion of information about alternative modes of transport	Guarantee for the return journey of carpoolers
Offering facilities to encourage cycling	Organization of mobility days
Provision of bicycles and of repairs facilities	Parking management
Organization of carpooling/creation of a carpooling database	Collaboration with other companies/the public transport
Teleworking	Alternative work hours

4. RESULTS

The EMPs of the companies were analysed in an economic and managerial perspective. The survey dealt with the motivations that led to the implementation of the EMP, and with the effectiveness and acceptability of the mobility measures included. The benefits of the EMPs at the company level are also discussed. The results of the survey are detailed for each of the above themes in this section.

4.1. Motivations

The motivations leading to the implementation of an EMP were divided into 2 groups: in one hand the primary motivation, defined as the main reason given for the EMP (Roby, 2009), and in the other hand the secondary motivations. Only one motivation for each type of motivation was recorded. The possibility to have no secondary motivations was left. The ETC had also to make a distinction between the original motivations, i.e. at the time of the implementation of the EMP, and the current motivation. The objective is to study the evolution of the motivations over time. In this way, the impact of the legal obligation of the Brussels-Capital Region and of the HTWT surveys on the behaviours of the companies can also be studied.

i. Primary motivations

The primary motivations given by the ETCs have a diverse range. They fall into 3 categories: the operational, ethical and compulsory motivations. Table 3 shows a comparison of the original and current primary motivations.

Table 3 – Comparison of original and current primary motivations

	Motivations	Original motivations (%)	Current motivations (%)
Operational motivations	Car parking problems	4	4
	Congestion/accessibility problems	8	7
	Recruitment problems	8	4
	improvement of the positive image	15	7
	Reduction of costs	0	4
	Demand of the workforce	15	15
Ethical motivations	Environmental concerns	12	11
	Corporate social responsibility	15	19
	Leading by example	0	4
Compulsory motivations	Legal obligation	12	26
No answer		12	0

Operational motivations are the main reason of implementation of EMPs. The willingness to solve mobility problems detrimental to the activity of the workplace (e.g. difficulties of recruitment or lack of car parks) shows that managers perceived the EMPs as a useful tool. In some cases, these mobility problems are outlined by the workforce during meetings of the work council. The managers tackle the problems thereafter with an EMP or additional policy measures. In addition to solve the problems raised, the objective is also to improve the satisfaction of the employees, and as a result the labour relations climate. The EMPs are also implemented in the framework of larger plans aiming at the improvement of the image of the company. The home-to-work journeys are considered as well as other issues more customers-oriented (e.g. marketing campaigns). One can also notice the diminution of the importance of the operational motivations over time. In fact, a shift from operational motivations to ethical ones is observed. Notice also, that a shift to other operational motivations than the original one is observed in some companies. Therefore, one can conclude that the original objectives of the EMP have been achieved and new objectives planned out.

The legal obligation and the ethical concerns are motivations that take importance over time. The assumption can be made that the importance of the legal obligation goes together with the establishment of the obligation to develop an EMP of the Brussels-Capital Region. Nevertheless, it is mainly in the Walloon Region that ETCs have cited the legal obligation as primary current motivations for their EMP. In fact, the legal framework does not appear as clear enough for the ETCs. The HTWT surveys have been perceived more as an obligation to act in favour of the mobility instead of simple diagnoses. This denotes the importance of the authorities in the mobility fields and confusion of ETCs about the legal framework.

EMPs were implemented on a voluntary basis in the companies where the ETC cited the ethical motivations as primary ones. The environmental concerns and the corporate social responsibility are the main reasons of EMP's implementation in those companies. The mobility issues are also perceived as a component of larger projects, such as obtaining an ISO certification. The achieving of such a certification can have operational motivations but their mobility components are perceived only as environmental issues. The growing importance of this motivation over time is explained as said above by a shift from operational motivations to ethical ones.

ii. Secondary motivations

Half of the ETCs interviewed have not cited an original secondary motivation for the EMP of their company. Only 12% of the ETCs have not cited a current secondary motivation. This denotes that the ETCs have perceived the implementation of an EMP as resulting from one specific motivation. This denotes also that other utilities have been found to the EMP with its development over time. Operational motivations and ethical considerations take thus a growing importance. Notice that the evolution over time of the importance of the ethical concerns is similar to the one observed in the analysis of the primary motivations. This shows the growth in awareness of managers for the home-to-work journeys issues and that companies considering an EMP as strictly utilitarian also take into account social aspects.

Table 4 shows the percentage ETCs selecting each original and current secondary motivation.

Table 4. – Comparison of original and current secondary motivations

	Motivations	**Original motivations (%)**	**Current motivations (%)**
Operational motivations	Car parking problems	8	4
	Congestion/accessibility problems	0	8
	Growth of the activity of the company	4	4
	Demand of the workforce	8	4
Ethical motivations	Environmental concerns	4	24
	Corporate social responsibility	8	16
	Leading by example	4	12
Compulsory motivations	Legal obligation	8	12
	Obligation of the head office	0	4
No secondary motivation		50	12

4.2. Effectiveness and acceptability

A Likert scale (Likert, 1932) was used to assess the effectiveness and the acceptability of the categories of policy measures included in EMPs. The ETCs had to rank the effectiveness and the acceptability of those categories of mobility measures. The acceptability was considered in 2 ways: firstly the acceptability by the employees and secondly the acceptability by the employers.

i. Effectiveness

The ranking of the effectiveness of the policy measures were on a scale of 1 (high ineffectiveness) to 5 (high effectiveness). Rank 3 represents a neutral point. The categories of policy measures with an average ranking of more than 3 can be considered as perceived as effective by the ETCs. Table 5 shows the average ranking of the categories of policy measures.

The financial incentives to the use of alternative modes of transport are perceived as the most effective policy measures. Only the ETCs of companies poorly served by public transport and with poor access to cycling paths are considering this type of measures as ineffective. In the same way, offering cycling facilities have been considered as ineffective only by the ETCs of companies located in industrial parks or next door important railway stations. The importance of the neighbourhood in the successfulness of a policy measure is therefore outlined. The EMP can only be effective if the promoted modes of transport provide an alternative to the car for the employees. Too long distances to public transport stops and unsafe cycling paths are cited as brakes to modal shifts.

The least effective policy measure is teleworking. Teleworking is not applicable in many companies due to operational necessities. In addition, the ETCs do not think that teleworking can improve the accessibility of their workplaces. In fact, teleworking is still considered as an occasional measure. As a consequence, the trips saved are too scarce to improve the circulation around the workplace. The mobility pattern of teleworking is not taken into account by the employers. Teleworking is implemented to increase the satisfaction of the employee. Alternative work hours are considered at the contrary as more effective when considering the accessibility of the workplace. Nevertheless, ETCs emphasize on its impact on the parking accessibility at the arrival and departure times of the workers.

However, the results have to be moderated. In fact, a measurement of the effectiveness of the policy measures has been developed by only few companies. The HTWT survey is still not considered as an effective measurement.

ii. Acceptability

The policy measures are perceived by the ETCs as well accepted either by the employees as the employers (Table 5). The parking management is the only measure which is not accepted by the employees. Its average ranking is lower than 3. The car parks are considered as a gain made by the employees. Parking management is

perceived as a threat for this gain. Many employers share this point of view, as employees and employers often use the same car parks. However, parking management is perceived as an opportunity to save costs by some employers. Decreasing the demand in car parks reduce the costs linked to the parking. This explains the neutral average ranking of the parking management acceptability.

The ETCs perceived the diffusion of information as a well accepted measure by the employees. The same is true for the collaboration with other companies and especially with the public transport providers. One can conclude that employees still consider public transport as an insufficient alternative to the car. In addition, the employees do not look after information in many cases. They are not aware of the existing alternatives to commute by public transport. The companies can thus fill the gap by providing information about public transport. It is a cheap policy measure, which is also well accepted by the employers.

The guarantee back for the return journey of carpoolers is a measure that only one company interviewed has implemented. The ETCs think that such a measure would be well accepted by the employees, and would address the employees' fear of difficulties for their return journeys. The provision of bicycles is also well accepted. The acceptability of these 2 measures denotes that employees are looking for alternatives to the car.

Notice the preference of the employers for low-cost policy measures. The diffusion of information and the encouragement to use alternative modes of transport are better accepted than more expensive ones, such as the financial incentives for the use of alternative modes of transport. At the contrary, the employees prefer logically measures that bring value to them, as the financial incentives for alternative modes of transport or a more important offer of bicycle facilities (e.g. covered bicycle storage).

Table 5 – Effectiveness and acceptability of categories of mobility measures

Category of measures	**Average ranking**		
	Effectiveness	Acceptability by employees	Acceptability by employers
Financial incentives to the use of alternative modes of transport	4.1	4.5	3.4
Diffusion of information about the alternative modes of transport	3.5	4.2	4.2
Offering bicycle facilities	3.8	4.3	3.8
Provision of bicycles and repair facilities	3.5	4.0	3.0
Organization of carpooling/creation of a carpooling database	3.4	3.9	4.1
Guarantee for the return journey of carpoolers	3.2	4.0	3.3
Parking management	3.6	2.0	3.0
Collaboration with other companies/the public transport	3.6	4.0	3.7

Organization of mobility days	3.5	3.9	3.7
Encouragement to use alternative modes of transport	3.7	3.9	4.2
Teleworking	3.1	3.9	3.4
Alternative work hours	3.7	4.2	3.5

4.3. Benefits

The ETCs were asked if their EMP has brought a benefit to their company. Interestingly, 79% of them cited a benefit. The most cited benefits are the improvement of the mood of the employees and the improvement of the image of the company, either the external (i.e. for the customers of the company) as the internal (i.e. for the employees) image. However, the improvement of the image of the company is not a single consequence of the EMP. As previously said, they can be parts of more global plans aiming at improving the image of the company. Notice also that the improvement of the mood of the employees and the improvement of the image of the company are 2 indirect operational benefits. Consequently, it is difficult for the ETCs to evaluate them, particularly in monetary terms.

At the contrary, costs and space savings are direct operational benefits. The costs savings are linked to the space savings. Thanks to its EMP, the company can reduce the number of car parks. This benefit is particularly cited in companies located in environment where land is rare and costly. The space saving are also gain thanks to a reduction of car parks. The objective of the space saving is to reuse it in other projects.

Table 6. – Benefits of the EMPs

Benefits	**Frequency (%)**
Improvement of the mood of the employees	32
Improvement of the image of the company	21
Space savings	11
Cost savings	7
Improvement of the punctuality of the employees	4
Easiness to recruit and to retain employees	4
No benefits	21

5. CONCLUSION

Mobility issues have taken a growing importance in recent years. The daily congestion of the main cities and the resulting accessibility problems have encouraged the economic actors to tackle these issues. The home-to-work journeys have been particularly targeted due to their repetitive and predictable patterns. As initiators of commuting, the companies have a ringside seat to promote a sustainable mobility and have developed initiatives to improve the mobility of their workers. This paper copes with the mobility management of the companies thanks to a survey among ETCs of the Walloon and Brussels-Capital Regions (Belgium).

The results show that mobility management has appeared to the companies as a tool to achieve business objectives. In fact, operational motivations are the main sources of motivations when companies consider the implementation of an EMP. If the legal framework and the ethical concerns play a main role for some companies in the implementation of an EMP, operational functions are found to the EMP and motivate thereafter those companies to pursue and improve their EMP. Moreover, the majority of the ETCs surveyed find that the EMP of their company has provided benefits to their company. The most common benefits are the improvement of the mood of the employees and of the image of the company. The mobility issues appear thus to be an opportunity for employers, and not a constraint.

In addition to operational benefits, EMPs also provide social benefits. They have a real influence on the commuting behaviours of workers. The policy measures included in the EMPs are judged as effective by the ETCs of the companies surveyed and have consequently a potential of modal shift. The policy measures are also judged as well accepted by both the employees as the employers, which would make the implementation of such measures easier.

However, companies have to adapt their EMP to their location in order to promote a more sustainable mobility. The modes of transport promoted have to be perceived as able to provide alternatives to the car by the employees. Companies also have to be encouraged to pursue their efforts in the mobility field. A stronger communication on the potential benefits an EMP can bring would probably be helpful to achieve this objective. The EMPs appear to be useful to provide social and operational benefits to companies.

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APPENDIX A

HTWT survey 2008 — Mobility measures and their frequency

Mode of transport	Description of the measure	Frequency (%)
Bicycle	Covered bicycle storage	40.30
	Secured bicycle storage	28.11
	Showers	28.38
	Provision of a changing room	27.48
	Bicycle repair facilities	3.80
	Improvement of the infrastructure	3.40
	Provision of rain clothes	2.60
	Making bicycles available for work trips	11.80
	Bicycle maintenance facilities	1.13
	Making bicycles available for commuting	2.90
	Bicycles available at the railway station	1.00
	Cycling measures: other	5.10
	Diffusion of information about cycling routes	3.18
	Additional payment for cycle commuting	48.00
	Additional payment for work trips by bicycle	10.45
Public transport	Additional payment for using public transport	24.96
	Organisation of public transport by employers	5.27
	Coordination with public transport authorities	4.55
	Diffusion of information about public transport	9.66
	Encouragement to use public transport	9.07
	Other	7.24
Carpooling	Organisation of carpooling	6.49
	Carpooling database	5.91
	Reserved car parks for carpoolers	2.00
	Guarantee for the return journey	2.05
	Diffusion of information about carpooling	5.00
	Other	3.49
General	Mobility manager	6.90