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Performance assessment of local mobility policy-making administrations using the principles of total quality management in Flanders, Belgium: Expounding the decision-making processes

Hans Tormans^{1*}, Willy Miermans¹, Mario Cools^{1,2}, Evelien Polders¹, Davy Janssens¹, Geert Wets¹

¹ Transportation Research Institute (IMOB), Hasselt University, Wetenschapspark 5 bus 6, B-3590 Diepenbeek, Belgium

² Hogeschool-Universiteit Brussel, Warmoesberg 26, B-1000 Brussels, Belgium

{hans.tormans, willy.miermans, mario.cools, davy.janssens, geert.wets}@uhasselt.be

mario.cools@hubrussel.be

evelien.polders@student.uhasselt.be

* Corresponding author

Fax: +32(0)11 26 91 99

Tel.: +32(0)11 26 91 37

1 **ABSTRACT**

2 This paper describes a quality assessment of the processes underlying municipal mobility
3 policy-making in Flanders (Belgium). 25 criteria and 176 aspects were queried during 25
4 interview sessions. Results were aggregated at the level of 7 quality domains of action and
5 suggest that Flemish municipal mobility policy-making is generally fairly frail and of an ad-
6 hoc nature. Four factors are found to be determining for this finding: default of *political*
7 *continuity*, *internal conflicts* between stakeholders, lacking *internal expertise*, and deficient
8 *financial resources*. Inter-stakeholder *collaboration*, residents' *participation*, and *policy-*
9 *integration* with higher-level programs are the strengths of current mobility policy practices in
10 Flanders.

1. ISSUES IN LOCAL MOBILITY POLICY-MAKING

1.1 Setting the scene

Policy-makers at different levels of authority operate in a complex and volatile environment and the field of mobility policy does certainly not constitute an exception hereto. To attain the ambitious targets with respect to sustainable development that have been set, numerous initiatives and (policy) action plans have been formulated at different levels of public authority (Vlaamse Overheid, 2011a). All of them serve the same goal: to confine the side effects of human mobility on road safety, on the accessibility of economically important locations, on the livability of our cities and neighborhoods, on the social inclusion of all members of society, and on the environment (European Commission, 2001; Ministerie van de Vlaamse Gemeenschap, 2001; European Commission, 2006). Whereas a lot of effort is put into the generation and validation of higher-level policy plans, little attention is paid to supporting the decision makers that are ultimately responsible for bringing a major share of the higher-level mobility objectives into practice, i.e. the local or municipal authorities. In 2006, the European Conference of Ministers of Transport (ECMT) addressed this issue by stating that national governments should support local or regional authorities through technical, financial or other means as necessary and appropriate in the development, appraisal, monitoring and evaluation of integrated, sustainable, urban travel strategies (European Conference of Ministers of Transport, 2006). In response to this call, a number of isolated initiatives have been taken in some EU member states (May, Page, and Hull, 2008) to ameliorate the lower-level authorities, but a truly integrated initiative to address these issues is not known to the authors.

Despite being a vital cog in the policy machine of actors and stakeholders that should eventually produce a more sustainable society and ditto transportation system, it turns out that local policy-makers are more often than not unable to attain the high level of performance that they aspire. The fairly modest means that municipalities have at their disposal and the different visions and interests of the stakeholders they have to serve are

commonly put forward as the main causes hereof. Moreover, most of the available means are invested in infrastructure, whereas monitoring of performances and evaluations of measures are certainly not common practice in the domain of municipal mobility policy-making. Especially officials representing smaller municipalities tend to refer to an acute shortage of (financial) means and personnel as an excuse for their underperformance (Van Vlierden, Miermans, and Zuallaert, 2003). It is evident that sufficient availability of funding and staff is a necessary precondition for any organization to optimize its productivity, its policy outcome and society's benefits. But it is very unlikely that solely providing more means and personnel will turn municipal administrations into top-notch performing organizations. Is a shortage in means truly the determining factor behind this problem or is there a more fundamental explanation to this and do they intrinsically possess the necessary means to ameliorate their performance?

The main research objective of this paper is thus to verify to what extent external factors (e.g. the size of the municipalities and the availability of funds and personnel) are responsible for the low quality level of municipal mobility policy-making in Flanders, Belgium (see figure 1). Furthermore, the authors want to assess whether and which internal and controllable factors are to be held (partially) accountable for this. Analyzing the direct results of policy initiatives (the effects of the policy as can be observed in practice) is a necessity, but not a sufficient precondition for proceeding towards sustainable mobility policy-making. It is evenly essential to gain a good overview of the processes running 'behind the scenes' of the local administration. Therefore, this paper focuses on the decision making process.

This study can be of interest to practitioners, policy-makers and researchers, since it may provoke municipal actors and other stakeholders aware of their current performances and it may trigger them to explore the opportunities that lay in conducting a more integral approach to managing their organizations.

1.2 General challenges

In a number of European Union Member States and in the US, attempts have been made to tackle the concerns regarding local mobility policy-making mentioned above. Among other countries, the UK, France, Italy and the US require municipal or local-level authorities to draw up transport plans in which they are required to specify their objectives, strategy, proposed schemes and implementation plans with respect to mobility management (i.e. demand driven strategies and programs that encourage more efficient use of transport resources (road and parking space, vehicle capacity, funding, energy, etc.). They are also requested to set targets to be achieved over a predefined time-horizon. All plans and ambitions have to be based on end-user involvement, should be in line with higher-level legislation and policy planning and financial objectives have to be safeguarded (Litman, 2003).

Diverse evaluation studies of the individual approaches in the countries mentioned above show that a number of issues with regard to local mobility planning recur. It is generally agreed upon that the process of guided policy-making has fruitfully introduced a step change in the level of consultation and partnerships, forced local authorities to use long term funding more effectively and put focus on wider policy goals and on commonly agreed-on support for sustainable transport modes. However, the studies also pinpointed a series of weaknesses in municipal mobility policy-making that figure as points of particular interest in this research: conflicting interests between diverse policy plans (e.g. mobility vs. environmental planning); managerial and political barriers to cross-boundary working; lack of integration between transport and land use planning; weak evidence base for setting targets; reluctance to share good practices; limitations in staff recruitment and development of skills; and inappropriate financial and political structures (Zavanella and Tira, 2000; Wolfram, 2004; Kaufmann et al., 2008; May, 2009).

The fact that mobility policy-making mostly occurs at municipal level is in itself considered to be a potential source of failure, since controlling negative spillover effects, such as network

or environmental externalities, is assumed to be much harder at a lower level of policy-making. A higher-level (state) authority constitutes a better basis for legitimate and credible planning decisions because of the mostly indirect democratic representation on regional bodies. Finally, the local administrations prove to be unable of taking advantage of the economies of scale that accrue to central-office administrations (Taylor and Schweitzer, 2005).

Taking into account the current issues in local mobility policy-making identified above, this paper intends to verify whether the issues that are found in several European countries and in the US also occur in local mobility policy administrations in Flanders. In the next section, the administrative context of mobility practice in Flanders will be outlined.

1.3 Flemish Local Mobility Context

1.3.1 Flemish Mobility Policy Structure

In federalized Belgium, mobility policy-making is dispersed over multiple levels of authority. At the federal (national) level, a secretary of state is in charge of mobility policy-making for matters that affect the whole territory. Key ambition at this level is the realization of a sustainable future mobility system in which economic activities are compatible with the environment, public health and safety. The main issues that are dealt with are interregional multimodal commuting, traffic legislation and enforcement, sensitization, vehicle registration and regulation of rail transport, maritime transport and aviation (Schouppe, 2009).

At the regional policy level, a Minister is in charge of mobility and public works in Flanders. In collaboration with the federal administration, the provinces, the municipalities and officials, the Flemish Region aims at realizing selective accessibility of the important economic hubs and ports in Flanders, the social inclusion of all members of society by offering everyone the opportunity to travel, a substantial reduction in the number of road casualties, and a decline of mobility related pressure on the everyday surroundings and on the environment. These policy ambitions have to be realized in a multi-modal approach, respecting the following

1 order of priority: walking, cycling, public transit and individual motorized traffic. Evidently,
2 related policy programs such as environmental and climate policy and spatial planning have
3 to be addressed or reinforced. Strong focus in Flemish mobility policy-making is put on
4 participation: residents are to be involved timely and effectively while preparing, defining,
5 executing, monitoring and evaluating the mobility policy (Vlaamse Regering, 2009).

6 Concerning the road network, a clear distinction has been made between the different levels
7 of authority: highways, primary and secondary roads that connect cities and regions within
8 Flanders are under higher-governmental jurisdiction (federal and regional government) and
9 account for 11,50% of the total road network. The remaining share (over 53.000km) is under
10 jurisdiction of the 308 municipal authorities. It is clear that sustainably designing, maintaining
11 and preserving mobility on these roads constitutes a major challenge for municipal
12 authorities for which a stable for guidance and horizontal and vertical cooperation is
13 indispensable (Algemene Directie Statistiek, 2011).

14 *1.3.2 Municipal level*

15 In this study, the focus is explicitly put on the local, municipal level, evidently taking into
16 account the preconditions set by the higher level policy programs. In Flemish municipalities,
17 mobility policy-making is mainly the responsibility of the town council. In virtually all town
18 councils, at least one of the elected representatives holds the responsibility for mobility or
19 traffic in his portfolio. Policy preparation and execution are taken care of by the
20 administration, preferably in close cooperation with the political representative(s) and the
21 local police force. In many municipalities, an independent mobility department has been set
22 up. In other cases, the mobility service comes under other related departments (mostly the
23 technical department).

24 The designated official(s) responsible for municipal mobility policy-making pursue the
25 following assignments: plan projects and conduct research, qualitatively design the public
26 space, integrate slow and public transport modes in the transportation system, set up
27 projects concerning transportation marketing and traffic and mobility education and work on

1 regulation and enforcement (in cooperation with the traffic police department). The officials
2 have a strong advisory function with respect to the town council which holds the ultimate
3 power of decision (Vlaamse Overheid, 2008).

4 *1.3.3 Mobility Covenants Program*

5 The interactions between different stakeholders that are involved in local mobility policy-
6 making processes in Flanders have been regulated under the framework of mobility
7 covenants (Dutch: '*mobiliteitsconvenanten*') since 1996. "The Mobility Covenants Program of
8 the Flemish regional government promotes and sustains local governments' processes of
9 sustainable mobility policy-making. Its aim is to incite municipalities to make a mobility plan
10 and to encourage traffic safety, livability, and modal change. The program is structured
11 around three key items: a task force of transport specialists that sets out the procedures for
12 policy planning, communication and education strategies; a covenant between the
13 municipality, the Flemish public transport company and the administration for transport and
14 public works; and the approval of the municipality's plan in an audit by external experts. The
15 program has turned the traditional, unimodal traffic policy planning into a multimodal
16 process" (Zuallaert, 1997).

17 By signing a mobility covenant, all participating partners engage to cooperate, to confer, and
18 to agree on future municipal mobility policy. The framework of the covenants allows to better
19 coordinate the spending of the means available and to tackle mobility-related issues in a
20 more integrated, systematic and multimodal fashion. The mobility covenant is not a goal in
21 itself, but a lever to develop a sustainable mobility policy. Because resources are essentially
22 limited, spending has to be as efficient as possible. Municipal cooperation and flanking
23 measures will enhance the investments' efficiency (Vlaamse Overheid, 2011b). The
24 framework that was generated has contributed significantly to a more sustainable transport
25 system and is generally recognized to be a very fruitful approach for mobility policy-making.

26 Until 1996, an important (communication) gap existed between the Flemish regional
27 authority and the municipal policy level. The local authorities did not have any say in projects

and initiatives of higher authorities. They were merely kept informed. The mobility covenants have played a crucial role in bridging this gap. The regional authority has learnt to give serious consideration to demands and insights of the local authorities who now take the lead. Moreover, the local authorities involve third-party stakeholders (schools, merchants, interest groups, etc.) in their policy-making process on a structured basis. The strengths of the Flemish mobility covenants are thus the (obligatory) and systematic cooperation between stakeholders, the long-term policy orientation and the introduction of municipal mobility plans that act as a solid grip in often turbid political waters. Identified weaknesses are the lack of internal steering of administrations and the excessive administrative burden that the extensive procedures have brought along (Asperges, 2004). As such, the introduction of the mobility covenants signified an important step towards more integral mobility policy-making.

1.4 Mobility Policy Ambitions

Over recent years, as in most European regions, the impact of the transportation system on the Flemish society has –at least in some respects– declined. Technological developments (vehicles and infrastructure), policy programs (Mobility Plan Flanders and Mobility Covenants Program) and socio-economical trends (economic recession, higher gas prices) have lead to a diminished share of heavily polluting vehicles, a decline of road casualties, an increased use of public transport (social inclusion) and an enhanced relationship between the transport system and the quality of life in our cities (livability and pollution). However, it is evident that there still is a long way to go to reach a truly sustainable transportation system. The 70% car-use in commuting traffic's modal split, the annual 4 million hours lost due to congestion, the yearly exhaust of 16,524 kton CO₂-equivalents, and the 479 lives lost on Flemish roads in 2009 clearly show that a lot of work still is to be done. It is believed that structured, highly-qualitative institutional management, and a better coordinated and integrated approach to municipal mobility management has the potential to strengthen the effects of outcome oriented policy initiatives and favorable societal trends on the

- 1 transportation system and on society (Studiedienst van de Vlaamse Regering, 2010;
- 2 Belgisch Instituut voor de Verkeersveiligheid, 2011).

2. RESEARCH FRAMEWORK

The main goal of this paper is to analytically identify those factors that are accountable for the absence of integrality in mobility policy-making at the municipal level in the region of Flanders. The concept of integrality is defined as a measure of quality according to which the coherence of ongoing internal processes that precede policy decisions can be assessed. These internal processes are grouped under a number of strategic managerial aspects that will serve as a framework for assessment: detection and incorporation of social demands and developments; leadership; strategy-building; management of co-workers, means and partnerships; implementation of actions and instruments; and appreciation, recognition and analysis of results.

To this end, twenty-five Flemish municipal mobility policy-making administrations have been investigated by means of standardized interviews. The outcome of this assessment reveals the strengths and weaknesses of current local mobility policy-making processes, both at the municipal and at the regional level. This information provides stakeholders in local mobility management in Flanders with a clear insight into their running processes and gives them an indication on which managerial domains to focus in order to optimize their policy planning and policy implementation activities. Despite the rather context-specific background of the methodology applied, it is believed that the general framework and approach of this study constitute a useful approach for addressing the issues of underperformance of local mobility policy-making in other regions and countries as well.

Before the results are discussed, a brief introduction to public quality management and its application in the (Flemish) mobility context is provided. Subsequently, the generic framework and conceptual model that constitute the background for this assessment are discussed, followed by an overview of the methodology applied. Results are then analyzed and conclusions are drawn both at the micro- and macro-level of mobility policy-making. Policy recommendations and suggestions for further research conclude the manuscript.

3. QUALITY FRAMEWORK

3.1 Quality Management

Quality and quality management have been of interest ever since human beings started to trade their (excessive) products and goods. To be able to provide products and services of high quality to yourself and to others is not only satisfying because of the (material) return it generates, but it also constitutes an important advantage when competitors are present (Reed, Lemak, and Mero, 2000). Since the 1930s, a vast number of managers and researchers have been reflecting on the importance and the potential benefits of quality considerations within a (private sector) organization (Juran, 1974; Crosby, 1978; Ishikawa, 1985; Deming, 1986). The commonly agreed on premise is that highly qualitative processes are a prerequisite to obtain highly qualitative products and services. To facilitate managers in raising the quality of their organizational processes and outputs (and thus increasing their competitive advantage), a range of supporting instruments has been developed (e.g. the ISO-standards, the Balanced Scorecard and the successive Excellence Models developed by the European Foundation for Quality Management (EFQM) (Tormans, Brijs, et al., 2010). Since the early 1980s, quality management has also made its way to the public sector. Numerous concepts and management techniques that originate from the private sector have successfully been introduced in public organizations. In resemblance to the instruments that were available for private organizations before, similar tools have been developed for use in public administrations (Hood, 1995; Van Roosbroek and Bouckaert, 2009; Tormans, Brijs, et al., 2010; Tormans, Janssens, et al., 2010).

3.2 Total Quality Management

It is currently commonly agreed upon that a primary precondition for highly qualitative management implies contemplating the organization from an integral, holistic perspective. Well-functioning organizational processes significantly raise the odds of successfully delivering the right goods or services to the market or the public. Hereby, continuously

1 striving for improvement in all facets of its day-to-day functioning is a necessity for any
2 modern-day organization in order to satisfy its customers' needs and to maintain the
3 acquired position in the market. It is essential for managers to grasp that focusing separately
4 on individual projects or on particular organizational sub-domains is out of the question. In
5 order to successfully deliver services to the public, an organization has to be able to rely on
6 each of its members. Because of the strong interdependency of its stakeholders –especially
7 in fairly small organizations such as local mobility administrations– the strength of the
8 organization can significantly be constrained by its weaker links. This statement relates with
9 the Theory of Constraints (TOC) that recognizes that “system constraints limit the
10 performance of a system and consequently proposes a set of principles and concepts to
11 manage the constraints” (Gupta et al., 2010, 867). Constraints can be physical (availability of
12 means, market demand, productivity, etc.) or non-physical (absenteeism, partnerships,
13 motivation, communication, etc.).

14 The ideas expressed here form the cornerstones of a management philosophy that is
15 commonly known as Total Quality Management (TQM) which will figure as the backbone of
16 this paper (Reed, Lemak, and Montgomery, 1996). Bouckaert and Thys (2003) define Total
17 Quality Management as a group of managerial techniques that aim at realizing customer
18 satisfaction by pursuing continuous improvement with a strong focus on coworkers'
19 participation. An organization is assumed to have attained the level of TQM when it excels
20 on the following managerial aspects: customer orientation, commitment and leadership of
21 senior management, planning and organization, using quality management techniques and
22 tools, education and training of staff, involvement of stakeholders and teamwork,
23 measurement of results, and openness to feedback and cultural change (Vinni, 2007).

24 The use of quality management methods and practices is not new to the domain of urban
25 transport policy. Metri (2006) describes the transposition of the basic ideas of TQM to the
26 practice of transportation service provision and generalized his findings under the concept of
27 'Total Quality Transportation' (TQT). According to Metri, TQT-providers subscribe to a

customer-oriented transport service philosophy of continuous improvement that involves commitment to meet or exceed customer requirements, participation by critical mass of stakeholders, using statistical tools for analysis, continuous review of processes, exercising strong quality leadership, providing training and retraining programs, safety improvement, analysis of current performance, green transport system and meeting local needs and regulations. The assessment tool discussed later in this paper incorporates all aspects listed up here. Cirillo et al (2011) stress that customer's satisfaction is the most relevant measure for evaluating the performances of transit services by quoting Berry et al (1990): "customers are the sole judge of service quality". Ahn et al (2011) state that service quality is made up by customer satisfaction and evaluation: the difference (or gap) between the user's perception of a service and his expectations determines the judgement of the level of quality of the service. Therefore, capturing passengers service perceptions about the service aspects provides a service quality measure, hereby taking into account that user's perceptions of transit service are very heterogeneous (Cirillo et al, 2011). This certainly also applies to the assessment conducted in this article, implying that the context and background of the municipal administrations has to be taken into account. Crotte et al (2010) found that in the interest of promoting sustainable mobility, quality of service of transit services (measured in terms of rail car kilometers operated per capita) will need to improve at higher rates than income. Aspects of distance to a stop or a station, total travel time (in-vehicle and out-vehicle), information provision, cleanliness, ventilation etc. were not explicitly taken into account in this study. It is noted that service quality elasticities in larger cities and in rural areas are higher than in smaller cities.

Macário (2001) presents the structure of a TQM-model that serves as a basic framework for the planning and control of the urban mobility system. He denotes the importance of the decision-making processes at the strategic, tactical and operational level to be consistent and stresses the need for the different aspects in the organization to simultaneously improve their performance. In addition, Macário states that "urban transport services have a

1 particularity that makes quality control more difficult than the majority of the other services.
2 The final product results from a production chain, not controlled by one organization but
3 instead by a system involving different organizations interacting in an uncontrolled
4 environment - the urban space” (Macário, 2001, 94). This stresses the complexity of
5 municipal mobility policy-making.

6 At the European level, several projects have been carried out in an attempt to allow policy-
7 makers to systematically assess and enhance their efforts. Examples hereof are the Quattro-
8 project (1996-1998), the EQUIP-project (1999-2000) and the MEDIATE-project (2008-2010)
9 which focused on public transport provision and the BYPAD-project which was oriented at
10 improving urban and regional bicycle policy-making. Nevertheless, systematic quality
11 assessments at the general level of municipal mobility policy-making have not been
12 conducted to the authors’ knowledge.

4. QUALITY MANAGEMENT IN LOCAL MOBILITY POLICY-MAKING

4.1 European Perspective

The European Conference of Ministers of Transport (ECMT, cf. supra) stated that institutional, acceptability, financial, information, regulatory and process barriers exist which obstruct the design of highly qualitative sustainable urban transport and land use systems. The ECMT highlighted the following most predominant barriers: poor policy integration and coordination, counterproductive institutional roles, unsupportive regulatory frameworks, weaknesses in pricing, poor data quality and quantity, limited public support, lack of political resolve and difficulties in policy formulation. Especially “those [barriers] concerning process, acceptability, information and skills and finance are amenable to action at local government level” (May, Page, and Hull, 2008, 329). The commitment and involvement of all affected parties is essential, so that imaginative and effective measures can be implemented (Banister, 2000). Many of the issues addressed here are interrelated with the management principles put forward in the Total Quality Management (TQM) approach. This is why it is believed that incorporating the ideas of Total Quality (public) Management in the specific field of local mobility policy-making may contribute to the development of a safer and more sustainable transportation system and society.

4.2 TQM in Flemish Authorities: Conceptual Model

In Flanders, the interest in the potential benefits of (total) quality management has only recently emerged in the field of local policy-making, but several initiatives have already been taken to enhance the use of quality management instruments in higher-level governance and municipal administrations. Especially in the domains of social services, healthcare and education, their use has been systematically encouraged and has (in some cases) become statutorily obligatory (Bouckaert et al., 2009; Van Roosbroek and Bouckaert, 2009). Nevertheless, only few initiatives have been taken in the domain of mobility policy-making, taking the form of the mobility covenant policy mentioned above and a number of explorative

research projects (Van Vlierden, Miermans, and Zuallaert, 2003; Paris and Van den Broucke, 2006).

In 1999, the Flemish Regional Department of Environment and Infrastructure (LIN) called for an assessment in which managerial aspects such as organizational structures, human resource management, communication and collaboration with residents, financial management, cooperation with external stakeholders and reporting and evaluation procedures were to be evaluated for a small number of municipal mobility authorities. Special attention was drawn to the level of performance quality that the different administrations under consideration had attained. As a result of this study, a generalized framework was drawn up in which seven spheres of action in local mobility policy-making were identified (see Table 1):

1. *social demands and developments*: the analysis of societal needs and the way in which these are taken into account in the policy-making process;
2. *leadership*: the position of senior management and its importance for the organization;
3. *strategy*: the way in which policy ambitions and strategies are defined and underpinned;
4. *co-workers*: the implementation of human resource management;
5. *means and partners*: the management practices concerning material resources and partnerships, including financial management, logistics and the enhancement of external collaboration;
6. *actions and instruments*: the preparation, development and implementation of policy plans in practice;
7. *appreciation, recognition and results*: the assessment of the organization's performance by residents and co-workers.

These domains are bound together by process management and communication. By striving for improvements in all of these domains of action (preferably simultaneously), the level of

development (or performance quality) of a local mobility authority can systematically be enhanced in a gradual and sustainable fashion (Miermans and Zuallaert, 2001). This framework has been used as the backbone for the assessment described in this paper.

4.3 Ladder of development

A useful metaphor that facilitates the interpretation of the gradual enhancement of organizational performance is one of mounting a ladder of which the diverse rungs represent the different quality levels that the organization or administration can attain. Given this figure of speech, current performances of the administrations under consideration can be graded for each of the seven domains that have been identified in Table 1. This 'maturity approach' is consistent with the ideas of Total Quality Management since it allows the organizations' leaders to gain insight into the quality level of their achievements and to compare their current status with prior assessments, inspiring them to continuously seek for potential actions for improvement. Simultaneously mounting the ladder for each of the spheres of quality management entails evolving to a better performing organization, both intrinsically and contextually. The levels of development that are represented by the different rungs of the ladder are briefly characterized below:

- *Rung 1: Activity-oriented policy* – an organization paying minimal attention to quality management: short term policy-making, informal culture and practices, ad hoc and responsive actions, individual and unstructured initiatives.
- *Rung 2: Process-oriented policy* – an organization with systematic, though fairly limited consideration for quality management and in which processes are not fully controlled: systematic identification of societal needs and policy priorities, global agreements with a limited binding character, unguaranteed continuity of policy practice, absence of support and guidance and deficiencies of diverse natures are common.
- *Rung 3: System-oriented policy* – a well-functioning organization with a clear and overall perspective on its daily practices: high-quality data-availability, formal and

1 binding agreements, a thoroughly planned approach to renewal and improvements,
2 explicit attention for competence-based promotions, adjusted job descriptions,
3 stimulation of engagement and empowerment.

- 4 • *Rung 4: Chain-oriented policy* – an organization that continuously strives for
5 improvement and that is characterized by intense relations with target groups,
6 political actors and other stakeholders: regular systematical analysis and assessment
7 of the organization's performance, use of quality criteria (indicators) as a policy
8 instrument, structural problem-detection and problem-solving, future minded and
9 innovative thinking, existence of synergetic effects of collaboration within and outside
10 the organization.

- 11 • *Rung 5: Integrated policy* – an authoritative and externally oriented organization:
12 quality criterions (indicators) evolve positively for all domains, external collaboration
13 is very common and the organization's expertise is recognized by externals as 'best
14 practice'.

15 Combining the conceptual model with this ladder of development constitutes a useful
16 framework to assess the performance of an organization that is responsible for the
17 development and implementation of a sustainable mobility policy at a municipal level.

5. METHODOLOGY

5.1 Framework

The framework described above was originally designed to be used autonomously by local practitioners to self-assess their organizations and performances. Within the scope of this research, it was elected to guide this assessment process by means of a personal interview, structured by standardized questionnaires. This allowed for gaining more in-depth background information when startling or contradictory elements were encountered and it ensured comparability of the results. For each of the seven domains of quality management, a limited number of criteria and underlying aspects were defined (see Table 2). The criteria and aspects mainly stem from the study from which the conceptual model in section 4 has been deducted (Miermans and Zuallaert, 2001). Before being implemented, the criteria and aspects were updated and feedback on was obtained from three experts in the domain of municipal mobility management who were involved the development of the conceptual model described above and in a prior assessment of mobility policy-making in ten Flemish municipalities (Van Vlierden, Miermans, and Zuallaert, 2003).

By way of illustration, the criteria for the domain 'social demands and developments' are shown in the upper part of Table 3. The underlying aspects for each of the criteria were transformed into simple statements, taking the form of polar questions (yes/no). When required, the interviewer had the opportunity to specify or to nuance the answers by adding remarks. The statements and questions used for the criterion 'Level of involvement of societal representatives' are shown in the lower part of Table 3. A detailed description of all statements adopted in this research would be too extensive for the scope of this paper. The outline of the standardized questionnaire is based on the earlier mentioned research by Van Vlierden et al (2003) and is thoroughly discussed in a report by Gysen et al (2008).

In total, 25 criteria and 176 aspects were defined and applied during the interview sessions (an overview of these criteria is presented in Table 1, the translation to the five pre-identified quality levels in Table 2). The results of this data collection procedure were then aggregated

at the level of the seven quality domains of action and were linked to the predefined rungs on the ladder of development. This provided insight in the overall level of performance of the local mobility administrations.

5.2 Data collection

The scope of the research was limited to the Flemish region, since the mobility policy domain is assigned to the regional authorities in the federalized Belgian governance structure and is thus subject to Flemish regional legislation. Moreover, the largest cities were not included in the study population since their administrations clearly operate at a much more professional level. Neither were very small municipalities included, for a designated mobility official is merely unavailable within these administrations. The study population thus consists of all Flemish municipalities with a population between 9,000 and 75,000 inhabitants. 75.7% of the Flemish population lives within municipalities that are included in the study population and 79.5% of the total surface of Flanders is covered.

The municipal administrations responsible for mobility management, typically consisting of 0.5 to 2 FTE's, were addressed by email and - in case of a non-response - contacted by telephone after seven days. Eventually, 25 out of 237 municipalities in the study population (thus 10.55%) participated in this study and had their local mobility policy-making assessed. The majority of the contacted administrations addressed voluntarily participated in the project (25 out of 38; 65.79%). The most commonly heard reasons for not participating were a lack of time, the fact that there was no designated official for mobility policy-making or that the mobility administration had only recently been established. The voluntary character of the authorities' recruitment constitutes a major drawback for this study, since the motivation for non-participation may be provoked by the fear for inferior performances and bad practices getting exposed.

Within every municipality, the responsible politician and/or the designated official (preferably both and simultaneously) and a number of residents were surveyed (total number of participants: 62). By incorporating the views of both internal actors (politicians, officials) and

external stakeholders (residents), the researchers have incorporated both the producers' and the consumers' perspective. This is an essential point in quality management assessment, for both parties have different interests to look after. However, the main focus of the research is on the producer's point of view, since the external interviewees do generally not have insight into the internal processes that are assessed. Notwithstanding, the extent to which the policymakers attempt to identify users' concerns and needs, the involvement of the public in the development of policy programs and the assessment of residents' satisfaction are explicitly incorporated in the methodological framework.

All participants were questioned by means of the semi-structured interview protocol described above. Every interview was conducted by two researchers and took approximately half a day per municipality. The recorded meetings were independently transcribed by both interviewers and were processed by the supervising researcher. The conceptual model that was developed and adapted prior to the interviews provided the necessary directions to categorize and cluster the results.

Additional and background data were found in the municipal mobility plans that the local authorities have to draw up in the framework of the Mobility Covenants Program, provided they were still valid. The data collected from the mobility plans were merely limited to information that allowed the interviewers to gain insight into the specific mobility context of the municipality under consideration, which is essential for a correct interpretation of the interviews (Macário, 2001). Combining information from these documents with the data collected during the interviews allowed for completing the questionnaires and for obtaining a complete image of the local mobility policy. Afterwards, the retrieved data were screened for inconsistencies and abnormal values and additional information was obtained if necessary. To ensure the validity of the data and to enhance the cooperation of the local stakeholders, it was explicitly stressed during the consultation process that all information gathered was to be treated confidentially. Therefore, there will be no in-depth discussion of individual cases and specific performances in this paper.

5.3 Results

The aggregated results of this data collection effort are presented in Table 4. The numbers in this table refer to the identified levels of development on the different managerial domains (level 1: activity oriented = 1 - level 5: Total Quality Management = 5). The last column in Table 4 shows the averaged level of development per municipality. Note that the scores in this table represent consensus-scores; i.e. a level of performance that all interviewees per municipality agreed upon. While conducting the interviews, the researchers observed a tendency of local politicians having a more positive view on the administration, whereas officials tend to be more pessimistic. Consulted residents' visions could usually be situated between the politician's and the official's view.

The data reveal that the initial assumptions of underperforming administrations can be confirmed: more than half of the municipalities in the sample are unable to reach the second level of development, the average score is only just above level 2 ($\bar{x}=2.05$) and only three municipalities in the sample reach or exceed level 3. The spheres 'actions and instruments' and 'strategy' prove to be the domains on which the administrations obtain the highest scores, whereas 'co-workers' and 'appreciation and results' have the lowest grades. The sample mean ($\bar{x}=2.05$) and confidence intervals indicate that the average level of performance approximates quality level 2 for each of the domains of action. This suggests that a major potential for improvement is present for all of these domains.

6. DISCUSSION

It is clear that the level of performance of Flemish municipal mobility administrations is of fairly low quality. In order to explore the factors that underlie these observations, the background information that was gathered during the interview sessions was analyzed. The arguments provided by the respondents were screened and clustered, leading to the results discussed below. As indicated above, the discussion hereunder primarily focuses on the producer's view on service provision.

6.1 Quality Domains of Action

It is likely that different factors account for the level of performance on different managerial domains of action. Bearing the ideas of integral management in mind, special attention was paid to those factors that are simultaneously affecting two or more domains of action.

With respect to *social demands and developments*, it seems that most administrations carry out a superficial analysis to identify crucial bottlenecks. More often than not, this analysis focuses strictly on traffic-related issues, implying that social and ecological concerns are mostly disregarded. Close collaboration with local police forces proves to be a valuable (if not the only) source of relevant data. An analysis of residents' needs usually constitutes a one-time effort, entailing that the data on which the policy-making process is based remain unadjusted despite the continuously changing environment. Stakeholders and target groups are generally involved when individual (major) projects are to be implemented, but they are rarely consulted during the strategic policy-making processes. Residents are informed on mobility issues and policy decisions by means of public hearings, informative leaflets, the municipal website and regional television stations. Individual complaints are typically adequately dealt with and swiftly resolved, but their registration is usually substandard, making them unusable for further policy planning.

For the domain of *leadership*, most policy-makers (politicians and officials) have developed a clear vision as an internal point of reference. However, this vision is communicated neither to

external stakeholders, nor to other administrations within the municipality. This leads to misunderstandings and raises barriers in communication. Internal dissent between officials and political representatives because of conflicting interests (serving society vs. serving individual voters) is considered to be another major cause of inferior performances.

The *strategy* of local mobility policy-makers is generally attuned to the plans and ambitions of external partners (e.g. services for public works, utilities, police departments, etc.) and the higher-level authorities. This harmonization usually takes the form of one-way traffic. Societal needs are taken into account into strategy building for as far as they are known. The process of drawing up policy plans is very often outsourced to external specialized agencies. Strategic planning is usually oriented on a short term perspective. Conflicts in vision between politicians and officials and the rather short political terms (6 years) often cause medium and long term perspectives to be left unaccounted for.

Most administrations are short of sufficiently trained or specialized *co-workers*. In many cases, no specific position is designated to the mobility domain, implying that mobility policy is considered to be one of the subtasks of an official that is primarily in charge of another policy field (mostly urban development, sustainable development or environment). Insufficient internal expertise frequently leads to a hands-off mentality in which barely any initiatives are taken. Opportunities for in-service training are generally available, but they are often left untouched due to time pressure and budgetary constraints. Communication between co-workers is fairly well organized, both horizontally (between different departments and policy domains) and vertically (top-down and bottom-up).

Since the mobility domain is often regarded as a sub-domain of another policy field, there is mostly no designated budget at its disposal. Basic technology for collecting and processing data is often missing, implying that local authorities have to rely on external partners (e.g. police department) for data gathering and analysis. Available *means* are thus rather scarce and *partnerships* are generally of a compulsory nature.

1 Infrastructural actions and projects commonly require long term planning, making them
2 potentially incompatible with the 6-yearly political terms. During the preparatory process of
3 specific actions and projects, the planning of public works, utility services, and public service
4 organizations are often taken into account in order to reduce costs and to limit the nuisance
5 for road users and residents (cf. *supra*). Other types of *actions and instruments* such as
6 sensitization, enforcement, education and promotion are of a more flexible nature and
7 cheaper, making them easier to be implemented within the political framework of municipal
8 policy-making. Mobility-related actions and projects are generally in line with guidelines and
9 programs of higher-level authorities, but plenty of room is left for the development of local
10 and small-scale initiatives.

11 The assessment and follow-up of *appreciation and results* is clearly not common practice in
12 Flemish (municipal) administrations. Residents' experiences with the municipal mobility
13 policy are mainly monitored through the (poor) registration of complaints, the effects of
14 projects or individual measures are rarely evaluated and internal screening is mostly absent.
15 The unavailability of time and means are the most commonly heard arguments for these
16 shortcomings.

17 **6.2 Administration's Dimension**

18 *6.2.1 Does Size Matter?*

19 Stakeholders in smaller municipalities often assume that larger entities automatically perform
20 better because of higher availability of funding and staff. Additional statistical analyses have
21 been conducted in order to verify whether the size (number of residents) of the municipality
22 is determining for the level of development that is attained. An independent samples t-test
23 revealed that it cannot be concluded that larger municipalities ($\geq 30,000$ residents; $n=7$) who
24 obtain an average score of 2.39 perform significantly better than smaller entities ($< 30,000$
25 residents; $n=18$) with an average score of 1.92 ($P=0.106$). The authors are aware that the
26 chances of finding statistical significant differences between the subsets are rather small due
27 to the small sample size in terms of absolute numbers ($n=25$), despite the 8.12%

1 participation grade of Flemish municipalities. Although a significant statistical difference in
2 the level of development between larger and smaller municipalities could not be found, a
3 number of typical issues could be identified based on the interviews conducted and are
4 described next.

5 *6.2.2 Small municipalities*

6 In smaller municipalities (between 9,000 and 30,000 residents; 64,96% of Flemish
7 municipalities), the average level of development over the seven domains of action probably
8 lies between 1.61 and 2.23 (95% C.I.). For their authorities, the lack of know-how, motivation
9 and initiative is apparent. This is mostly due to the horizontally oriented structure of their
10 organizations, the low number of (sufficiently educated) officials, the deficient guidance from
11 higher authorities and the undervalued position of the mobility domain in general municipal
12 policy-making.

13 Very often, no designated official for the domain of mobility policy is appointed. Internal
14 political support and essential resources (e.g. GIS-software, database management, training
15 and education) are absent to a large extent. Tax revenues are generally rather low (because
16 of the limited number of residents) and are preferably spent in (even) more pressing and
17 (electoral) more attractive policy domains. In addition, conflicts of vision and interest
18 between politicians and officials are omnipresent. In these smaller communities, the
19 relationship between political representatives and residents is often of a very direct nature,
20 implying that electoral motives may suppress the general public interest. Furthermore, the
21 administrations and their representatives are in very close connection to the local political
22 actors, which adds to the latter's influence. Combined with the 6-yearly political terms, these
23 elements constitute an unfavorable context for the development of an integral approach
24 towards mobility policy-making, resulting in a responsive and short term policy practice.

25 It can be concluded that the quality level of mobility policy-making in smaller municipalities is
26 largely dependent on the motivation, dedication and even the sense of honor of individuals.

1 Structural reforms and improved guidance are required to establish a basis to sustainably
2 better policy-making.

3 *6.2.3 Large municipalities*

4 Larger municipalities (between 30,000 and 75,000 residents; n=7) intuitively seem to be
5 performing slightly better and obtain scores between 1.85 and 2.97 (95% C.I.), but only for
6 the domains 'leadership' (P=0.04) and 'means and partners' (P=0.09), a statistically
7 significant difference between the mean scores of the smaller and larger municipalities could
8 be found at a 10%-significance level (independent samples t-test). Again, the small sample
9 size is considered to be mainly responsible for the lack of explaining power of this t-test.

10 Several explanations may account for this observation. In most large municipalities, a
11 dedicated position is foreseen for a mobility official and co-workers have generally received
12 a thorough training program. The relationship between officials and local politicians is slightly
13 better and of a more professional nature, facilitating the development of an integral approach
14 to mobility policy-making. The budget availability is typically higher. Finally, because of the
15 higher number of residents, external stakeholders commonly have more interest in these
16 municipalities since a larger market (potential customers) can be addressed at once.

7. OVERALL CONCLUSIONS AND RECOMMENDATIONS

The initial research question for this study stems from signals sent out by practitioners. Particularly since mobility policymaking became a fully fledged policy domain by the end of the twentieth century, local administrations and officials have become aware of the importance and relevance of their tasks, but a guiding framework to sustain them was not satisfactory provided. Multiple initiatives have been taken over the years, but merely in an uncoordinated fashion. Most local administrations are aware of their inability to approach local policymaking from an integral perspective (harmonization of the individual policy domains), the lack of cooperation between stakeholders and the absence of support and guidance to local officials; but they struggle to pinpoint or to quantify shortcomings and they fail to convince other stakeholders of the urgent need for action. The research intended to explore these issues in great detail. The added value of this paper lays in the application of wide-spread techniques of quality management and assessment in the quasi untouched domain of mobility management.

7.1 Determining Factors

The explorative research described above indicates that different types of local authorities have to cope with similar issues. Four key factors that determine the quality level of performance of Flemish local mobility administrations could be identified.

The first factor is the presence (or absence) of *political continuity*. Although the position of a local mobility official is not directly connected to the 6-yearly political terms, they are nonetheless strongly interrelated since the administration operates under the direct supervision of the local politicians. Discontinuity in local legislations can therefore pose a serious menace to the quality level of mobility policy-making at a municipal level. Long term planning and the realization of policy initiatives stand a better chance if the administration can work in equilibrate collaboration with the successive political actors and not strictly under their supervision.

1 The second crucial element is the potential existence of *conflicts between local officials and*
2 *local politicians*. Since these parties may have different visions and interests and internal
3 communication is usually feeble, internal conflicts can easily arise. This type of conflicts is
4 more common in smaller municipalities where the relationships with residents are closer,
5 potentially causing one of the parties to be tempted to serve individual demands. In the worst
6 case, soared relations can lead to mistrust between residents, politicians and officials. It
7 should be guaranteed that the (well-trained) officials can fulfill their duty under all
8 circumstances, independently from electoral motives.

9 A third determining factor is the *professional expertise* of the local officials. The lack of
10 specific formation is especially apparent in smaller administrations, often leading to a 'laissez
11 faire'-mentality. The low level of competence brings along that local administrations are
12 unable to draw up and elaborate on the required policy objectives and concrete actions in
13 response to the emerging local mobility needs. As a result of this deficiency, external
14 expertise (specialized agencies) has to be brought in. Stimulating and organizing specific
15 educational programs for local mobility officials could be an opportunity for the regional
16 government to support municipal mobility management in a sustainable fashion.

17 The final factor that could be identified is the chronic lack of *financial resources*. At a
18 municipality level, funds are generally not too scarce, but only a very small amount of it
19 passes on to the seemingly unpopular (yet essential) domain of mobility policy. The higher-
20 level authorities may hold the key to take the mobility domain out of its disadvantaged
21 position by redistributing their budgets.

22 A suggested way to overcome these issues is to lift mobility policy-making to higher
23 (regional) level of authority. This authority would hold a firmer position towards local
24 politicians and could facilitate integral policy-making since its jurisdiction would exceed the
25 municipal borders. Furthermore, data-gathering efforts and know-how could be concentrated
26 and applied more efficiently. One possibility is to lift local mobility policy-making to the
27 administrative level of the 113 police-zones (Dutch: '*Politiezones*') that were established

1 during the police-reforms in 2001. This reorganization has raised many –but not yet all– of
2 the traffic and mobility related tasks of the police forces to a supra- and inter-communal
3 level, which has led to better coordinated traffic enforcement performances (Bruggeman et
4 al., 2009). It is suggested to graft local mobility policy-making to authorities that operate at a
5 similar scale. Another possibility would be to transfer mobility policy-making to the level of
6 the administrative districts (Dutch: *'arrondissementen'*) which form a decision-making level
7 between the municipalities and the provinces. This suggestion however does not imply an
8 insulation of politics (elected officials) from the policy-making process. Forces could be
9 bundled at a higher, supra-municipal level, ensuring society's interests to be primordial and
10 making it harder to impose electorally driven measures, but involvement of and cooperation
11 with both locally and regionally elected representatives and officials is indispensable.

12 When comparing the issues that arise in the Flemish planning context to those in the US, the
13 UK, Italy and France, it can be concluded that they have most of them in common.
14 Budgetary limits, lack of legal authority for the officials and absence of expertise at the local
15 level occur in all cases. Furthermore, the potential benefits of a higher-level government
16 intervention in metropolitan transport planning were also encountered in the American case
17 (Taylor and Schweitzer, 2005).

18 **7.2 Strengths of Current Policy Practice**

19 Although there is a lot of space for improvement left, the quality level of local mobility policy-
20 making in the Flemish context has already significantly improved over the last two decades.
21 Spurred by far-reaching reforms and initiatives of the higher-level authorities (e.g. the
22 covenants-policy) and a general change in mentality in public policy-making, local authorities
23 have taken better control of their mobility issues. Despite the ever increasing amount of trips
24 and the growing number of cars on our roads, numerous efforts have been undertaken to
25 safeguard road safety, livability, accessibility and the nature and our environment. This has
26 led to a number of positive aspects and good practices in Flemish municipal mobility policy-
27 making. Especially the enterprising spirit and motivation of all stakeholders (officials,

1 politicians and residents) and the numerous initiatives to get the communication with
2 residents on track are strengths in current Flemish mobility policy practice. The adjustment
3 of policy plans to the ambitions of other administrations, to the plans of adjacent local policy
4 domains and to the objectives of higher-level authorities indicate the evolution towards a
5 more integral approach of the mobility issues. Flemish local mobility policy-making seems to
6 outperform other countries and regions when it comes to the horizontal and vertical
7 integration of policy-making initiatives and processes, whereas political instability hampers
8 longitudinal and consistent policy-making more strongly.

9 As a final remark, it is important to mention that it may not be necessary for every local
10 administration to aspire the highest level of development straight ahead. Nevertheless -
11 according to the philosophy of TQM- one should not rest on one's laurels either. To
12 continuously look for actions of improvement and to stepwise evolve towards an integral
13 level of local mobility policy-making certainly takes a lot of effort, energy and resources,
14 whether the organization is currently performing at an activity-oriented level or is already
15 approaching highest rung of the ladder. But it has to be borne in mind that facing mobility
16 issues in a proper manner today is critical to ensure the quality of life of future generations.

17 **7.3 Further research**

18 Suggested future research is to further (quantitatively) analyze the relationship between the
19 attained level of development and other determining characteristics such as the available
20 operational budgets, the number of staff (FTE) involved in local mobility policy-making, the
21 educational level of co-workers and outcome indicators (e.g. the number of casualties). A
22 specific study could be conducted with respect to the very small municipalities (< 9,000
23 inhabitants) where a dedicated official is mostly not assigned. Furthermore, approaches to
24 overcome the issues identified in this paper could be examined. It would also be useful to
25 extend the current sample of 25 authorities in order to further enhance the validity of the
26 results and to improve the statistical significance of the results. Finally, it could be examined

- 1 what the effect of lifting local mobility policy-making to a higher, supra-municipal level of
- 2 authority.

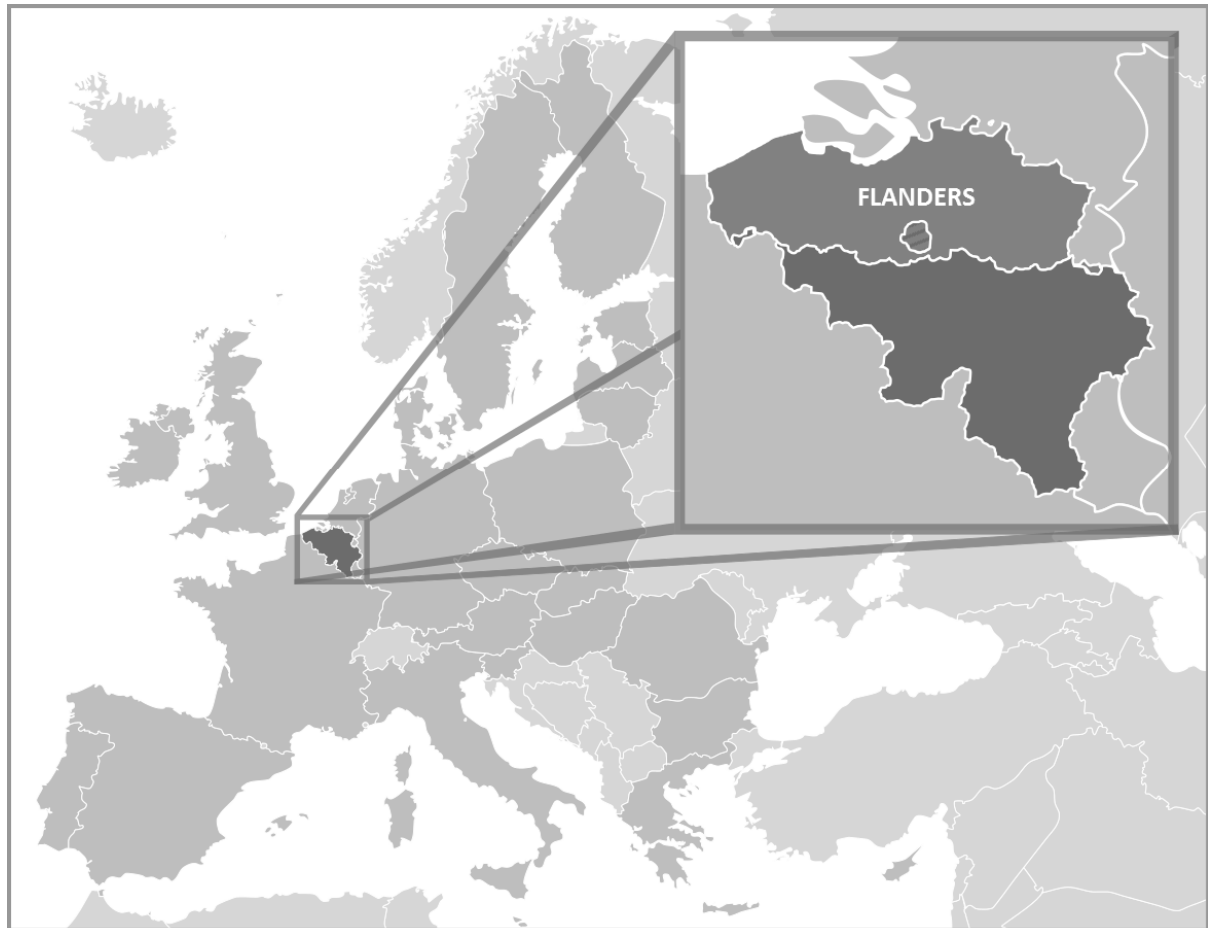
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1

2

Figure 1 - Location of Flanders in Belgium and in the European Union.

1 **Table 1 – Criteria**

Module 1. Social demands and developments <ul style="list-style-type: none"> A. Level of involvement of societal representatives. B. The extent to which ecological, economical, financial, infrastructural, legislative and societal issues are considered in combination with specific mobility themes (safety, livability and accessibility for different transport modes). C. The existence of feedback loops to social demands and developments during the process of policy development. D. The nature of collaboration between policy-makers and other stakeholders.
Module 2. Leadership <ul style="list-style-type: none"> A. The development and communication of a mission, vision and values by the organization's management B. The management's commitment to amelioration of local mobility policy C. The management's devotion to residents' and societal stakeholders' needs D. The management's devotion to co-workers
Module 3. Strategy <ul style="list-style-type: none"> A. Incorporation of current and future complaints and needs B. Incorporation of quantitative data, research, knowledge, experience and creativity C. Strategy development, review and renewal D. Strategic projects E. Communication and executive management
Module 4. Means and partners <ul style="list-style-type: none"> A. Use of financial means B. Use of technological resources C. Material support and housing D. Availability and management of information
Module 5. Co-workers <ul style="list-style-type: none"> A. Structure, dialogue and communication lines B. Co-workers' profile C. Competence recognition D. Empowerment E. Rewarding and performance recognition
Module 6. Actions and instruments <ul style="list-style-type: none"> A. Incorporation of higher objectives and long term strategy-building in actions and projects B. Information and communication on actions and instruments
Module 7. Appreciation and results <ul style="list-style-type: none"> A. Quality assessment, monitoring, control and follow-up of actions and instruments

1 **Table 2 - Authorities' Assessment per Quality Domain of Action**

		Activity oriented	Process oriented	System oriented	Chain oriented	Integrated
Social Demands and Developments	A	<ul style="list-style-type: none"> ▪ Coincidental and unstructured ▪ Representatives only ▪ Low budget 	<ul style="list-style-type: none"> ▪ Organized ▪ Report generated ▪ Weak integration in policy ▪ Minimal budget 	<ul style="list-style-type: none"> ▪ Well selected respondents ▪ Methodological approach ▪ Sufficient budget 	<ul style="list-style-type: none"> ▪ Inclusive selection of respondents ▪ Well-considered approach ▪ Designated budget 	<ul style="list-style-type: none"> ▪ Consultation of full population ▪ Permanent consultation ▪ Exemplary
	B	<ul style="list-style-type: none"> ▪ Economical and financial issues ▪ Road safety ▪ Subjective and selective analysis 	<ul style="list-style-type: none"> ▪ Legal and infrastructural issues ▪ Livability ▪ Objective analysis 	<ul style="list-style-type: none"> ▪ Ecological and social issues ▪ Accessibility ▪ Collection missing information 	<ul style="list-style-type: none"> ▪ All societal issues are mapped and processed ▪ Integrated analysis of issues 	<ul style="list-style-type: none"> ▪ Policy addresses societal issues ▪ Integration supply and demand ▪ Evaluation method
	C	<ul style="list-style-type: none"> ▪ Awareness of consultation in policy preparation ▪ Incomplete and selective feedback 	<ul style="list-style-type: none"> ▪ Inclusion of consultation in policy preparation ▪ Incomplete and non-systematic 	<ul style="list-style-type: none"> ▪ Consultation is basis for policy preparation ▪ Results steer planning process 	<ul style="list-style-type: none"> ▪ Frequent update by repeated consultation ▪ Results steer study and policy process 	<ul style="list-style-type: none"> ▪ Frequent consultation ▪ Results steer implementation process
	D	<ul style="list-style-type: none"> ▪ Not prescribed ▪ After policy phase ▪ Expected: accept ▪ Level: inform 	<ul style="list-style-type: none"> ▪ Prescribed ▪ After policy phase ▪ Expected: agree ▪ Level: inform + sensitize 	<ul style="list-style-type: none"> ▪ Prescribed ▪ During full process ▪ Expected: adapt ▪ Level: consult 	<ul style="list-style-type: none"> ▪ Prescribed ▪ During full process ▪ Expected: act ▪ Level: interact 	<ul style="list-style-type: none"> ▪ Open planning process ▪ Participative planning ▪ Exemplary
Leadership	A	<ul style="list-style-type: none"> ▪ Unpublished V/M¹ ▪ Common sense = reference ▪ Non-steering V/M ▪ No harmonization ▪ Low reflection 	<ul style="list-style-type: none"> ▪ Published V/M ▪ V/M = reference ▪ V/M is discussed ▪ V/M as basis for scenario-building ▪ Communicated 	<ul style="list-style-type: none"> ▪ V/M = reference for all actions ▪ Adjusted to other domains ▪ V/M = steering ▪ Underpinned 	<ul style="list-style-type: none"> ▪ V/M = integrated in other domains ▪ Underpinned ▪ Quantified ▪ Permanent debate ▪ Basis for allocation 	<ul style="list-style-type: none"> ▪ V/M = reference for other auth. ▪ Monitoring of V/M as basis for policy ▪ Exemplary
	B	<ul style="list-style-type: none"> ▪ 'because its compulsory' ▪ Budget-driven ▪ Support public works and police department 	<ul style="list-style-type: none"> ▪ Systematic approach ▪ Project mgt ▪ Intern. adapt./ communication ▪ Data mgt. 	<ul style="list-style-type: none"> ▪ Designated dept. ▪ Good data mgt. ▪ Syst. interaction ▪ Outcome monitoring ▪ LT-fin. planning 	<ul style="list-style-type: none"> ▪ Relation and integration with other domains ▪ Integrated teams ▪ Good-practice analysis 	<ul style="list-style-type: none"> ▪ Open culture ▪ Permanent improvement ▪ Syst. adaptation based on results ▪ Exemplary
	C	<ul style="list-style-type: none"> ▪ 'because its compulsory' ▪ Occasional communication ▪ Closed communication ▪ Classical boards 	<ul style="list-style-type: none"> ▪ 'because it may be helpful' ▪ Improve communication to residents ▪ Semi-closed com. ▪ Project-oriented 	<ul style="list-style-type: none"> ▪ 'because we should' ▪ New lines ▪ Improve communication with residents ▪ Semi-open comm. 	<ul style="list-style-type: none"> ▪ Integration of results ▪ Empowerment of stakeholders ▪ Interactive communication ▪ Open comm. 	<ul style="list-style-type: none"> ▪ Culture of public involvement ▪ Automatic interaction ▪ Broad support ▪ Exemplary
	D	<ul style="list-style-type: none"> ▪ Officials only execute ▪ Project-focus 	<ul style="list-style-type: none"> ▪ Officials are involved in policy preparation ▪ Competence differentiation 	<ul style="list-style-type: none"> ▪ Officials lead policy preparation ▪ Quality demands for projects ▪ Cooperation with other domains 	<ul style="list-style-type: none"> ▪ Officials evaluate policy practices ▪ Policy supported by officials ▪ Cooperation with other domains 	<ul style="list-style-type: none"> ▪ Policy supported by officials ▪ Exemplary HRM
Strategy	A	<ul style="list-style-type: none"> ▪ No underpinning by facts ▪ Follower's strategy ▪ Few initiatives ▪ Problem-solving 	<ul style="list-style-type: none"> ▪ Little pro-activity, mostly problem-solving ▪ Complaints are steering 	<ul style="list-style-type: none"> ▪ Aggregated management of complaints ▪ Discussion with elected official 	<ul style="list-style-type: none"> ▪ Systematic mgt. of complaints ▪ Discussion with sounding board and councils 	<ul style="list-style-type: none"> ▪ Complaints as input, not binding ▪ Exemplary mgt. of complaints
	B	<ul style="list-style-type: none"> ▪ Mere guesswork ▪ Use of already available data ▪ Pro-forma research 	<ul style="list-style-type: none"> ▪ Evidence-based ▪ Monitoring of key indicators ▪ Project-based measurements 	<ul style="list-style-type: none"> ▪ Systematic monitoring ▪ Technical means available ▪ Outsourcing 	<ul style="list-style-type: none"> ▪ Data collection, processing and interpretation-GIS ▪ Cooperation with other authorities 	<ul style="list-style-type: none"> ▪ Non-traffic indicators ▪ Anticipation ▪ Own research department
	C	<ul style="list-style-type: none"> ▪ Complaint oriented ▪ General knowledge 	<ul style="list-style-type: none"> ▪ Project-oriented planning ▪ No global strategy building 	<ul style="list-style-type: none"> ▪ Underpinned LT vision ▪ Cooperation ▪ Planning on paper: basis and back-up 	<ul style="list-style-type: none"> ▪ Process-oriented planning ▪ Incorporation of sustainability goals 	<ul style="list-style-type: none"> ▪ City-oriented development ▪ Cooperation and evaluation ▪ Inclusive mgt.

¹ Vision/mission

	D	<ul style="list-style-type: none"> ▪ Follower-strategy ▪ Ad-hoc measures 	<ul style="list-style-type: none"> ▪ Visible and dominant projects ▪ Discontinuous ▪ Higher authority is leading party 	<ul style="list-style-type: none"> ▪ LT financial planning ▪ Intermediate targets ▪ No pre-ranking 	<ul style="list-style-type: none"> ▪ Covenant approach: intense cooperation with external stakeholders 	<ul style="list-style-type: none"> ▪ Municipality as leading actor ▪ Intense cooperation
	E	<ul style="list-style-type: none"> ▪ No residents' involvement ▪ Limited and no-risk communication 	<ul style="list-style-type: none"> ▪ Involvement after decision-making ▪ Authority = lone rider 	<ul style="list-style-type: none"> ▪ Public support = essential ▪ Involvement of representatives 	<ul style="list-style-type: none"> ▪ Involvement of (all) individuals ▪ Open discussion, no dilemmas 	<ul style="list-style-type: none"> ▪ Societal needs prevail ▪ Recognition knowledge of the public
Means and partners	A	<ul style="list-style-type: none"> ▪ No designated budget ▪ Focus on physical measures ▪ No external partners 	<ul style="list-style-type: none"> ▪ Incorporated in budget ▪ Means for studies ▪ Means for external consultation 	<ul style="list-style-type: none"> ▪ Traffic expenses by multiple services ▪ Interdisciplinary studies ▪ Shared external consultation 	<ul style="list-style-type: none"> ▪ Expenses for flanking measures ▪ Effect and feasibility studies ▪ External consultation for internal processes 	<ul style="list-style-type: none"> ▪ Interdisciplinary budget ▪ Explicit study budget ▪ External consultation for inspiration
	B	<ul style="list-style-type: none"> ▪ No counting or measurement apparatus ▪ No specific hard- and software 	<ul style="list-style-type: none"> ▪ Specific equipment available through 1 department ▪ General software 	<ul style="list-style-type: none"> ▪ Multiple services possess equipment ▪ Specific traffic-related software 	<ul style="list-style-type: none"> ▪ Share equipment warehouse ▪ Operational gis-system 	<ul style="list-style-type: none"> ▪ Active and coordinated purchase policy
	C	<ul style="list-style-type: none"> ▪ Mobility department is not physically recognizable 	<ul style="list-style-type: none"> ▪ Mobility department resorts under other service 	<ul style="list-style-type: none"> ▪ Mobility department is physically recognizable 	<ul style="list-style-type: none"> ▪ Mobility department coordinates multiple disciplines 	<ul style="list-style-type: none"> ▪ Mobility department stands out
	D	<ul style="list-style-type: none"> ▪ No literature available ▪ No participation in workshops 	<ul style="list-style-type: none"> ▪ Limited availability of literature ▪ Sporadic attendance of workshops 	<ul style="list-style-type: none"> ▪ Literature available for multiple services ▪ Regular attendance of workshops 	<ul style="list-style-type: none"> ▪ Integrated library ▪ Frequent attendance of multi-disciplinary workshops 	<ul style="list-style-type: none"> ▪ Active literature gathering policy ▪ Regular talks in workshops
Co-workers	A	<ul style="list-style-type: none"> ▪ One-person service ▪ External management 	<ul style="list-style-type: none"> ▪ Project teams ▪ Designated service ▪ External advice followed 	<ul style="list-style-type: none"> ▪ Intra-service and multidisciplinary cooperation ▪ External input for decision-making 	<ul style="list-style-type: none"> ▪ Structural interdisciplinary cooperation 	<ul style="list-style-type: none"> ▪ Internal and external structural cooperation
	B	<ul style="list-style-type: none"> ▪ Random selection from present officials 	<ul style="list-style-type: none"> ▪ Traffic official, formed by workshops and courses 	<ul style="list-style-type: none"> ▪ Team of educated officials ▪ Hiring based on complementary profiles 	<ul style="list-style-type: none"> ▪ Highly qualified officials ▪ Cooperation with external experts 	<ul style="list-style-type: none"> ▪ Officials with externally recognized expertise in the domain
	C	<ul style="list-style-type: none"> ▪ No means for formation 	<ul style="list-style-type: none"> ▪ Formation on one's own initiative 	<ul style="list-style-type: none"> ▪ Recruitment of highly qualified profiles ▪ Formation is essential, budget available 	<ul style="list-style-type: none"> ▪ Officials have a notion of all complementary domains ▪ Formation is evident 	<ul style="list-style-type: none"> ▪ Renowned experts ▪ Provide formation to third parties
	D	<ul style="list-style-type: none"> ▪ No specific competences, strictly execution of policy 	<ul style="list-style-type: none"> ▪ Competences at project level 	<ul style="list-style-type: none"> ▪ Responsible for mid-term planning 	<ul style="list-style-type: none"> ▪ Responsible for multi-disciplinary communication ▪ Policy preparation and follow-up 	<ul style="list-style-type: none"> ▪ High level of autonomy ▪ Consulted as external experts
	E	<ul style="list-style-type: none"> ▪ None 	<ul style="list-style-type: none"> ▪ Compliments for successful projects 	<ul style="list-style-type: none"> ▪ Systematic performance recognition 	<ul style="list-style-type: none"> ▪ External recognition ▪ Promotion policy 	<ul style="list-style-type: none"> ▪ Intrinsic and extrinsic rewarding
Actions and instruments	A	<ul style="list-style-type: none"> ▪ Ad-hoc approach ▪ Problem solving 	<ul style="list-style-type: none"> ▪ Projects based on higher-level policy ▪ Strictly traffic-oriented ▪ Infrastructure 	<ul style="list-style-type: none"> ▪ Prudent interdisciplinary approach ▪ Consideration of available instruments 	<ul style="list-style-type: none"> ▪ Project planning with external partners ▪ Tuning with higher-level policy 	<ul style="list-style-type: none"> ▪ Pilot projects ▪ Innovation ▪ Creativity
	B	<ul style="list-style-type: none"> ▪ None (or informal) 	<ul style="list-style-type: none"> ▪ Project-related (hearing, local magazine) 	<ul style="list-style-type: none"> ▪ Systematic communication with residents 	<ul style="list-style-type: none"> ▪ Well-targeted external communication ▪ Two-way orientation 	<ul style="list-style-type: none"> ▪ Communication on background ▪ PR and city marketing
Appreciation / Results	A	<ul style="list-style-type: none"> ▪ None 	<ul style="list-style-type: none"> ▪ Project outcome 	<ul style="list-style-type: none"> ▪ Multidisciplinary evaluation of effects 	<ul style="list-style-type: none"> ▪ Measurement of effects ▪ Monitoring of results at different levels 	<ul style="list-style-type: none"> ▪ Continuous self-evaluation ▪ Exemplary

1 **Table 3** - Exemplary Extract from the Questionnaire (translated)

DOMAIN OF ACTION 1: SOCIAL DEMANDS AND DEVELOPMENTS			
<p>* Level of involvement of societal representatives.</p> <p>* The extent to which ecological, economical, financial, infrastructural, legislative and societal issues are considered in combination with specific mobility themes (safety, livability and accessibility for different transport modes).</p> <p>* The existence of feedback loops to social demands and developments during the process of policy development.</p> <p>* The nature of collaboration between policy-makers and other stakeholders.</p>			
CRITERION: <i>Level of involvement of societal representatives</i>	YES	NO	REMARKS
Are stakeholders consulted on a regular basis?			
Are public hearings organized on a regular basis?			
Are complaints and social demands adequately registered?			
Are private local stakeholders (residents, organizations, companies,...) involved in the policy planning process?			
Are contact directories systematically and regularly updated?			
Is a designated budget available for communication with officials and local stakeholders?			
Is 'communication' a recurring theme in budget planning?			
Are policy results systematically evaluated?			
Is the authority exemplary for other administrations when considering social needs and developments?			

1 **Table 4 - Authorities' Assessment per Quality Domain of Action**

City ID	Population	Density (inh./km ²)	Social demands and developments	Leadership	Strategy	Co-workers	Means and partners	Actions and instruments	Appreciation and results	Average
#01	11,090	394	1	2	2	2	2	2	2	1.86
#02	9,468	537	1	2	2	2	2	2	2	1.86
#03	17,874	433	2	3	3	3	2	4	3	2.86
#04	34,320	888	2	2	2	1	1	2	2	1.71
#05	13,929	266	2	1	1	1	1	1	1	1.14
#06	17,988	251	2	2	3	1	1	2	2	1.86
#07	12,098	220	1	2	2	1	2	2	1	1.57
#08	24,724	419	2	2	3	2	2	3	2	2.29
#09	13,803	258	1	1	2	1	1	2	1	1.29
#10	12,611	138	4	3	3	3	3	3	3	3.14
#11	16,156	377	2	2	2	1	2	2	1	1.71
#12	13,194	306	2	1	3	2	3	3	2	2.29
#13	15,813	452	2	2	3	1	1	2	2	1.86
#14	16,999	331	3	3	3	3	4	3	2	3.00
#15	20,060	509	2	2	2	2	2	3	2	2.14
#16	30,173	397	3	3	4	3	4	4	3	3.43
#17	22,845	392	2	1	2	1	1	2	1	1.43
#18	19,171	292	1	1	2	1	2	1	1	1.29
#19	64,095	729	3	3	3	3	4	2	2	2.86
#20	70,584	690	3	3	2	2	2	2	3	2.43
#21	11,874	277	3	3	2	2	1	2	1	2.00
#22	14,876	275	1	1	1	1	1	1	1	1.00
#23	33,060	289	2	3	2	2	2	3	4	2.57
#24	38,427	359	1	2	3	2	3	2	1	2.00
#25	32,083	477	2	2	2	1	2	2	1	1.71
Avg			2.00	2.08	2.36	1.76	2.04	2.28	1.84	2.05
St.D			0.82	0.76	0.70	0.78	0.98	0.79	0.85	0.65
C.I.			[1.66-2.34]	[1.77-2.39]	[2.07-2.65]	[1.44-2.08]	[1.64-2.44]	[1.95-2.61]	[1.49-2.19]	[1.78-2.32]