

Context And Development Of An Instrument For Quality Assessment
And Guidance For Local Road Safety Policymaking In Flanders, Belgium
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1 **CONTEXT AND DEVELOPMENT OF AN INSTRUMENT**
2 **FOR QUALITY ASSESSMENT AND GUIDANCE**
3 **FOR LOCAL ROAD SAFETY POLICYMAKING IN FLANDERS, BELGIUM**
4

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1 ABSTRACT

2

3 This paper describes the context for and the development of an instrument that enables Flemish
4 local (road safety) policymakers to raise their organization and performances to a higher level of
5 quality management. The tool is developed in response to recent Flemish legislation that
6 emphasizes the need for more sustainability, a reduction in the level of road-casualties and that
7 calls on more assistance, guidance and support for local mobility policymaking. Starting from
8 the widespread Total Quality Management-philosophy, from an analysis of widely applied
9 instruments and models in the domain of quality management and from international best
10 practices and authoritative road safety policy plans; the conceptual model of an innovative
11 guiding instrument has been developed. Based on general management theory, local road safety
12 policymaking has been thoroughly analysed and key components (both managerial and
13 technical) have been identified. Using standardized questionnaires, the tool enables officials to
14 position their performance with regard to a 'ladder of development' and to pinpoint where their
15 future points of attention lay. Based on this self-assessment procedure, local officials receive
16 recommendations and examples of good practices, allowing them to hype up their level of
17 performance. When compared to its predecessors and the instruments currently in use, this tool
18 constitutes a significant added value due to its well-underpinned, process-oriented and objective
19 character. Although the instrument is generated for use in local Flemish administrations, it can
20 easily be adjusted to other regions thanks to its generic nature. The tool is in its final stage of
21 development and is rigorously being tested.

22

1 INTRODUCTION

2
3 Policymakers operate in a very stringent and delicate environment. Not only is the nature of
4 policymaking very volatile and subject to an extended range of regulations and legislation, actors
5 working in this domain are increasingly being confronted with diverse and ever more
6 stakeholders, opinions, special interests, lobbyists, emerging technologies and ideologies. This
7 tendency brings along a growing call for support and guidance, which – up to now – cannot
8 always be provided by the supervising administration. At the same time, a trend towards
9 professionalization in the public sector is distending. More than ever, public administrations are
10 adapting concepts stemming from business economics and private management. The
11 Organization for Economic Cooperation and Development (OECD) defines this trend (generally
12 referred to as ‘New Public Management’) as “a new paradigm shift for public management” and
13 it stresses the importance of its doctrines of public accountability (‘accountingization’) and
14 organizational best practices. (1-3)

15 This paper describes the development of an instrument that aims at assisting local
16 mobility policymakers in enhancing the quality level of their performance. The objective is to
17 build a tool that supports them in bringing their difficult mission to a favourable conclusion. The
18 objective is to assist them in delineating a strategy and policy that is well-founded, has a high
19 level of sustainability and is acceptable for all parties involved and to do so in a structured and
20 more uniform manner. To achieve this goal, the road safety policy domain has been thoroughly
21 analysed for good practices and major concepts of general quality management theory have been
22 introduced into this policy domain.

23 Background

24
25
26 In the Belgian and Flemish administration, the demand for more sustainability, more soundness
27 and more attention for quality management in policymaking has been around for several decades.
28 Especially in the field of mobility management - a crucial policy domain in Flanders (northern
29 half of Belgium) due to its favourable geographical position in the heart of Western Europe and
30 its economically important sector of transport and logistics - a number of initiatives have been
31 undertaken to upgrade the policymaking processes (4). An important step forward was taken by
32 the launch of a plan to preserve the sustainability of Flemish mobility in 2001 [Mobiliteitsplan
33 Vlaanderen, cf. (5)], in which the Government of the Flemish Community drew up a framework
34 to support local administrations in setting up a mature mobility and transportation policy. In this
35 covering plan, five domains of action were identified: accessibility, road safety, liveability,
36 attainability and nature and environment. According to the Flemish Mobility Plan, local
37 administrations are now required to draw up their own local policy plans (Dutch: ‘Gemeentelijk
38 Mobiliteitsplan’), in which they have to describe the current status of their municipality for each
39 of the domains indicated. Additionally, they have plot their ambitions and the future actions they
40 want to undertake. This approach of exploration, data collection, background analysis and the
41 elaboration of aspirations in local mobility plans is heavily encouraged and subsidized (6).

42 After a five-year period, the legitimacy of the communal plan ends. Local officials and
43 stakeholders then have to assess the topicality of the plan and decide on the future focus of the
44 local mobility policy. Using an administrative tool provided by the Flemish Government (‘Quick
45 Check’; Dutch: Sneltoets) (7,8), the local administration can evaluate the accurateness of its plan.
46 By applying this tool, policymakers end up in one of three possible tracks: complete renewal

1 (track 1), enlargement and/or deepening of specific themes (track 2) or confirmation and minor
2 update of the plan (track 3).

3 Although this Quick Check-procedure constitutes major improvements with respect to
4 prior methodologies and local officials consider it to be very helpful and user-friendly, a number
5 of critiques can be formulated. For one, the procedure is of a very qualitative nature and despite
6 the involvement of a commission of independent experts (Provinciale Auditcommissie), an
7 objective verification of the conclusions is hard to achieve. Furthermore, some points of attention
8 and topics are formulated rather vaguely, which leads to conflicting interpretations and
9 heterogeneous implementations. To local officials, the test has a firm administrative and
10 compulsory undertone, which may harm the integrity of the outcome. The most important
11 drawback of the ‘Sneltoets’ is its inability to generate an accurate image of the level of quality
12 and sustainability of the policymaking process itself. The procedure only judges the façade of the
13 policymaking, being the administration’s plans and ambitions and the extent to which this is in
14 line with the current situation. It does not consider any processes and modes of operation
15 ‘behind-the-scenes’. (9)

16

17 **Scope**

18

19 This research aims at enhancing the methods and instruments that are available to local officials
20 in the field of mobility policymaking and at facilitating the process of drawing up a sustainable
21 and high-quality local mobility policy (plan). The ultimate objective is to provide a tool that
22 allows policymakers to self-assess their achievements from an integral perspective and that
23 guides them towards a higher level of performance quality. International experience and the
24 Flemish Mobility Plan indicate that attempting to include all aspects that arise when setting up an
25 integral mobility policy, is a massive challenge. At every step in the decision-making process,
26 side domains such as spatial planning, economics, demographics, technology, environment and
27 socio-cultural evolutions come into play. To limit the scope of this project at this stage, only one
28 of the five domains of action identified in the Flemish Mobility Plan will be addressed for now,
29 i.e. road safety. When the framework of this tool is finalized, the other policy domains will be
30 dealt with. This allows for a step-by-step generation of a well-founded framework, which can
31 fairly easily be adjusted and translated to diverse domains of interest and to other regions.

32

33 **Road Safety Policy**

34

35 The Flemish Government stated in its Mobility Plan that “public road infrastructure and the way
36 it is used do not always comply with the safety level that can be assumed to be socially
37 acceptable: road un-safety implications beyond doubt constitute a significant social issue” (5).
38 Moreover, on an international and supranational level, road safety is a major priority in
39 policymaking. According to the World Health Organization (WHO), 1.2 million human beings
40 are killed in road incidents and another 50 million persons get injured annually. Projections
41 indicate that these figures will swell by about 45% over the next 20 years unless there is new and
42 more commitment to prevention (10). SafetyNet points out that “road traffic accidents in the
43 Member States of the European Union annually claim about 43.000 lives and leave more than
44 1.8 million people injured” (11). Leonard Evans states that in a typical month, more Americans
45 die in traffic than were killed by the 9/11 terrorist attacks in New York! (12)

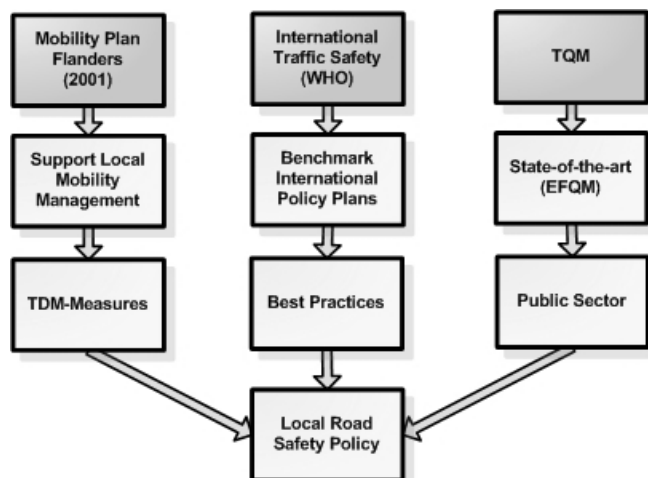
1 Numerous plans and targets have been drawn up to reduce this number of casualties. In
2 its White Paper on the Future of the European Transport Strategy (2001), the European
3 Commission set the ambitious target of halving the number of deadly casualties by 2010 (13,14).
4 As we rapidly approach this time horizon, it is clear that this goal will not be met and that there
5 are significant variations in the progress made by Member States (15). Certain countries
6 significantly outperform others, but the ultimate goal of zero casualties (“It can never be
7 ethically acceptable that people are killed or seriously injured when moving within the road
8 system”, dixit Claes Tingvall, architect of the Swedish Vision Zero approach) has not been
9 achieved anywhere so far (16,17).

10 In Belgium, equally ambitious targets have been set. For the country, the objective is to
11 reduce the number of traffic-related deaths to 500 per year by 2015 (18). The Flemish Regional
12 Government aims at a maximum of 250 victims on its roads by 2015 (19). The most recent data
13 show a number of 1.067 fatalities in 2007 for Belgium and 527 for Flanders (20). When
14 compared to other European Member States, it shows that Belgium has a rather bad report on
15 traffic safety. Independent from the methodology used, Belgium is not ranked as one of the ten
16 best performing EU-countries (21,22).

17 Road safety may seem to be an issue with global dimensions and with a vast number of
18 major actors in various domains involved; one has to bear in mind that any initiative in tackling
19 this immense challenge stands or falls by the very last link in the chain of policymaking and its
20 implementation: the realization of strategies and measures by the lowest level of authority (city
21 council). Local officials are aware of this responsibility and most of them undertake efforts to
22 improve the level of road safety. Nevertheless, only few of them succeed in deploying an
23 efficient, effective and sustainable policy. No precise definition of good traffic safety
24 (policymaking) exists, but there is a common sense of what the concept denotes; the remainder is
25 filled in by each body or official itself. This leads to a mishmash of interpretations and
26 initiatives, one being more successful than another (12). The objective of this research is to
27 contribute to a more harmonized approach and to an increased level of road safety in Flanders by
28 offering local administrations the instrument at hand.

29 30 **METHODOLOGY**

31
32 The backbone of the underlying research is shown in figure 1. Starting from an extensive
33 literature research in three diverse domains, conclusions converged and were reflected to the
34 domain of local road safety policymaking.
35



1
2 **FIGURE 1 Structure of research.**

3
4 **Flemish Mobility Plan**

5
6 The starting point of this research is the Flemish Mobility Plan (5). The goal of the underlying
7 project (entitled: ‘Sustainable Mobility in Flanders’) was to control emerging mobility issues, to
8 force back environmental pollution and nuisance and to guarantee the accessibility and
9 liveability of cities and villages. The spearheads of the plan were the optimization of
10 infrastructural works and a continued development of public transport in order to provide a
11 valuable alternative to car-usage. The idea was to come up with an outline that indicated the way
12 in which the mobility in Flanders should evolve during the next decade (2001-2010). Key
13 challenges of the Mobility Plan were the necessity of a more integrated approach towards
14 policymaking, the development of (monitoring) instruments to support local policymakers, an
15 improved communication and a more thorough consultation of stakeholders. The development of
16 the Quick Check-procedure can be considered to be a direct outcome of these recommendations
17 (6).

18 Furthermore, the Flemish Mobility Plan contained a large number of policy
19 recommendations for each of the five policy domains identified. For the sake of the first stage of
20 this research project, policy measures concerning road safety planning were thoroughly
21 examined and have been used to build up the instrument under consideration.
22

23 **International Benchmark of Road Safety Measures**

24
25 The second perspective, from which this project is approached, has an explicit international
26 background. Starting from a meta-analysis conducted by Elvik and Vaa (23) and policy plans of
27 a selected number of authoritative countries and organizations (Mobility Plan and Road Safety
28 Plan in Flanders, Staten-Generaal voor de Verkeersveiligheid in Belgium, Duurzaam Veilig in
29 The Netherlands, Vision Zero in Sweden, Tomorrow’s Roads Safer for Everyone in the United
30 Kingdom, Road Safety Strategy 2010 in New Zealand, the Transportation Plan in Norway, the
31 European Union’s White Paper on Road Safety and its Mid-Term Review and the WHO Report
32 on Road Traffic Injury Prevention), a benchmark analysis has been carried out in order to
33 identify measures that significantly contribute to road safety. This led to an overview of
34 international best practices in road safety management. Subsequently, the selected actions were

1 classified into a number of summarizing categories: ‘traffic regulation and control’,
2 ‘infrastructure’, ‘education’, ‘sensitization and behaviour’, ‘enforcement’, ‘collaboration’ and
3 ‘flanking measures’. Policy measures that are not feasible for the level of local road safety
4 policymaking were ignored.

5 6 **Quality Management** 7

8 The ultimate objective of the instrument at hand is to enhance the level of quality in decision-
9 making in local mobility policy. This implies that the idea of quality management has to be
10 introduced in this specific policy domain. To gain insight in the theory and practice of quality
11 management, a state-of-the-art review has been made up (cf. (24)).

12 “What is quality?” Formulating an answer to this question is not as straightforward as it
13 may seem. A number of scientists in the field of operations management (e.g. Joseph M. Juran,
14 Philip Crosby and W.E. Deming) have formulated their interpretations over the years, letting the
15 orientation of quality management evolve from a product-approach to a consumer-approach.
16 Each of these ‘quality-gurus’ has contributed to the meaning that the concept ‘quality’ has today.
17 Nevertheless, the judgment of what ‘quality’ denotes still is a very subjective and personal
18 matter and the concept is very hard to quantify (cf. the meaning of the concept ‘qualitative
19 (research)’ as an antonym to quantitative) (25-27).

20 21 *Private sector* 22

23 The idea of contemplating quality as an essential part of organizational management stems from
24 the private sector. Initially, ‘quality’ had a strong output-related connotation: when the final
25 product met the producer’s expectations, a high level of quality was considered to be met. Later
26 on, the (financial) importance of avoiding scrap, rework and loss of products in the production
27 process became more prominent. The focus of quality management was put on controlling the
28 underlying (production) processes, rather than the output. Nowadays, quality is regarded from a
29 more integral, organizational and consumer perspective. The desired level of quality is
30 considered to be met if products comply with consumers’ expectations, if the highest standards
31 are attained and if an explicit quality focus is present in every single layer and cog in the
32 organization. This interpretation constitutes the foundation of the Total Quality Management-
33 philosophy (TQM) and was first introduced by W.E. Deming (27). Cohen and Eimicke define
34 the different components of TQM: “*Total* means applying to every aspect of work, from
35 identifying customer needs to aggressively evaluating whether the customer is satisfied. *Quality*
36 means meeting and exceeding customer expectations. *Management* means developing and
37 maintaining the organizational capacity to constantly improve quality.” Carr and Littman
38 describe TQM as “a fundamentally different approach from traditional management
39 characterized by: a customer focus; elimination of errors and steps that do not add value to
40 products and services; prevention of problems; long-term planning; teamwork; fact-based
41 decision making; continuous improvement; horizontal and decentralized organizational
42 structures; and external partnering arrangement.” (28-30)

43 To support private companies in raising their organizational level of quality (and evolve
44 to the level of TQM), a number of methodologies and instruments have been developed and are
45 frequently applied in practice worldwide. The best known instrument is the model of the
46 International Standards Organization (ISO). This methodology implies that the organization

1 under consideration is evaluated according to the ISO-standards. The goal of this tool is not to
2 rate the business's performance, but to develop a quality system within the organization. It
3 strives towards a standardization of every aspect of the organization according to the highest
4 level of quality. (31)

5 Another popular instrument is the Balanced Scorecard, developed by Kaplan and Norton
6 in 1992. The concept of this approach is to generate an instrument that resembles the cockpit of
7 an airplane: an overview of the organization's performance is presented by making the policy
8 vision operational by means of concrete and measurable indicators, allowing the management to
9 have a clear view on the organization's condition at all times. The Balanced Scorecard manages
10 to summarize the organization's performance, based on monetary and non-monetary data (32).

11 A third widely applied methodology is a model generated by the European Foundation
12 for Quality Management and is known as the EFQM Excellence Model 2000. This model
13 presents a self-assessment methodology that allows managers to pinpoint those policy fields on
14 which they are performing well and which require more attention. The major contribution of the
15 EFQM-approach is that it considers both organizational aspects ('enablers') and results.
16 Completing this self-assignment, critical issues in the organization are revealed and programs for
17 improvement can be started up. (31-33)

18 Apart from the tools described above, numerous sector-specific instruments have been
19 introduced. Most of them share their background with one of the models mentioned above.

20 21 *Public sector*

22
23 In recent years, public sector organizations are trying to get rid of their traditional, caricatural,
24 input-oriented and funds-dissipating image. Carried by the wings of the *New Public*
25 *Management*-movement, ever more aspects and concepts stemming from the private sector are
26 being introduced in public management. Along with this shift, attention for quality management
27 in public administrations has significantly grown (34). Nevertheless, due to the specific
28 characteristics of the public sector, a concept like TQM cannot be translated into the public
29 sector without major adjustments. As Swiss states, "the use of TQM in government has several
30 major problems: insufficient modification for services; insensitivity to the problems of defining
31 governmental customers; inappropriate emphasis on inputs and processes; and demands for top-
32 level intensity that can rarely be met by the governmental culture." Nevertheless, the philosophy
33 on which TQM is based, undoubtedly offers great opportunities to enhance public sector quality
34 management. (35)

35 As in the private sector, a number of instruments have been developed to assist public
36 sector policymakers in increasing the quality level of their work. Most of the tools used in the
37 public sector today stem from the instruments used in private organizations. As suggested by
38 Swiss, these tools have been adjusted for the specific characteristics of public administrations.

39 For ISO-standardization and the Balanced Scorecard, only minor justifications had to be
40 made to make them compatible with the public sector. For the EFQM-approach, completely new
41 tools have been developed. The major advantages of applying the EFQM-approach in public
42 administrations are the fact that the information paucity is reduced and that it clamps down on
43 the initiative overload of individual officials. A popular EFQM-based model for public
44 administrations is the Common Assessment Framework (CAF), which resulted from a European
45 attempt to coordinate the modernization of public services within the Member States and
46 constitutes a simplified version of the EFQM-approach. (31,32,36)

CONCEPTUAL MODEL

Management Cycle

Taking into account that road safety is a major social issue, that the Flemish regional government urges on an increased support for local policymakers and the idea that (total) quality management can significantly improve the achievements of an administration; a conceptual model for a guiding instrument has been drawn up (see figure 2).

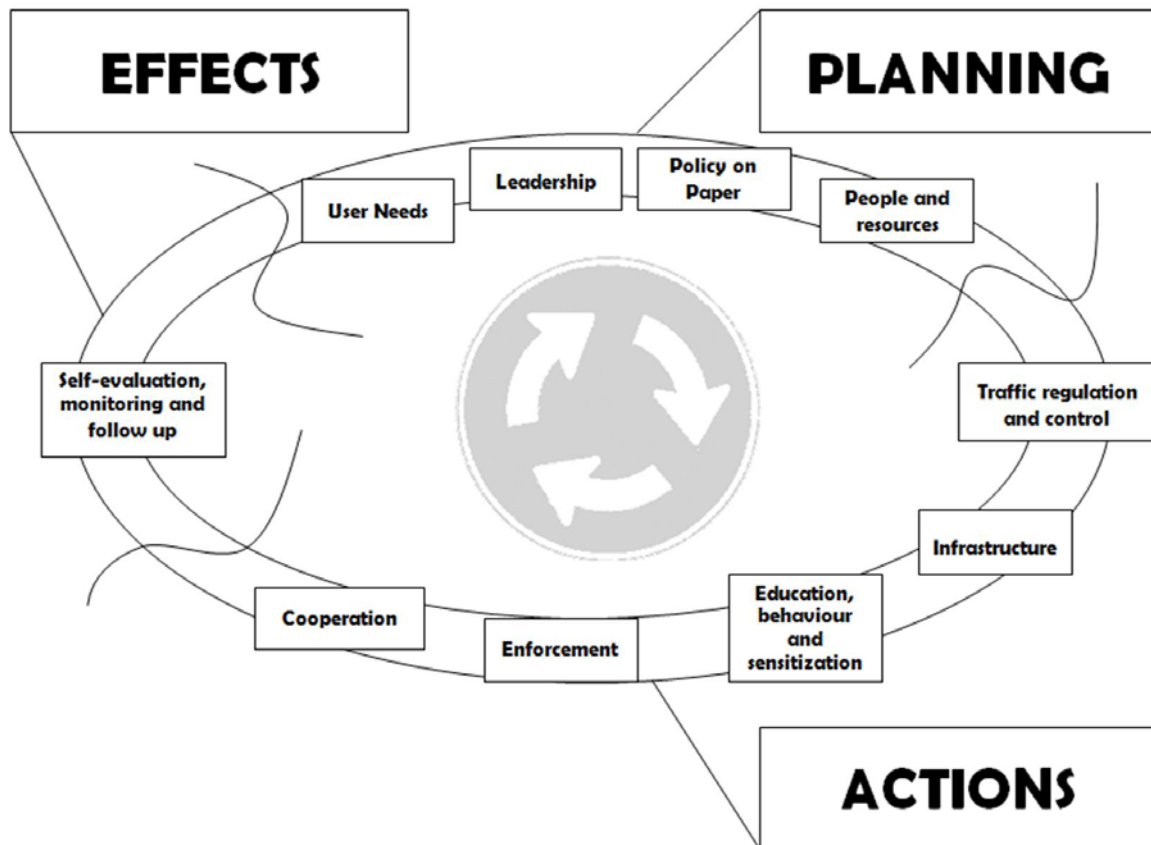


FIGURE 2 Conceptual model.

At the core of the tool is the management-cycle as defined by Deming (27), which is esteemed to be the point of departure for a quest towards TQM. Deming thoroughly analyzed business processes and managed to define four consecutive steps that are continuously repeated when managing an organization: a planning-phase in which is considered how to implement a certain (aspect of a) policy plan, a doing-phase in which it is implemented, a check-phase in which the output or outcome is evaluated and an act-phase to adjust the policy. After this act-phase, a new management loop starts with the plan-phase. This management cycle is also known as the Plan-Do-Check-Act-cycle (PDCA-cycle) and is applied widely in modern Quality Control Management. This approach, which is complementary to the Eastern Kaizen philosophy, is based on the belief that our knowledge and skills are limited, but continuously improving, because we tend to 'learn-on-the-job'. 'Learning-by-doing' occurs when a problem solver associates plans

1 and actions with results. The PDCA-cycle should repeatedly be implemented in spirals of
2 increasing, incrementing knowledge, letting the system converge on the ultimate goal: Total
3 Quality Management. (37,38)

4 *Modules*

5
6
7 The next step consisted of identifying which facets the process of policymaking in local
8 road safety embraces. Bearing the EFQM-approach in mind, two major aspects were considered:
9 organizational ('behind-the-scenes') and concrete ('on-the-field') aspects. For the former, the
10 different aspects and processes that come into play when an administration stipulates and bring
11 into practice its ambitions. The conceptual model of the EFQM-approach and Deming's PDCA-
12 cycle were used as a reference here. Four crucial stages (called 'modules') in the local road
13 safety planning process were identified: 'user needs', 'leadership', 'policy on paper' and 'people
14 and resources'. Of these modules, the last three stem directly from the EFQM-model, whereas
15 the 'user needs'-module was added to account for this specific need in public services.

16 For the lower part of the conceptual model (the actions-phase), the benchmark of
17 international road safety policy plans and best practices was used to define six more modules:
18 'traffic regulations and control', 'infrastructure', 'education, behaviour and sensitization',
19 'enforcement', 'cooperation' and 'self-evaluation, monitoring and follow-up'. These modules
20 result from the categorization with respect to road safety enhancing measures that was carried
21 out in the preparatory phase of this research. Since all identified measures were enclosed and
22 categorized in this analysis, it can be assumed that these modules comprise virtually all elements
23 that road safety policy strategies can embrace.

24 Each of the modules that were identified, was projected on Deming's PDCA-framework.
25 This led to the identification of three major phases: a planning-phase in which a policy strategy is
26 prepared, an action-phase in which the different specific road safety domains are addressed and
27 an effect-phase in which the results of the implemented policy making and the corresponding
28 measures are monitored and evaluated. Subsequently, the planning-phase is picked up again,
29 taking into account the results of the evaluation in the former run of the cycle. Note that in this
30 conceptual model, Deming's act-phase is comprised at the beginning of the planning-phase and
31 that the sequence of the modules within the different phases is not binding. (39)

32 *Aspects*

33
34
35 For every module, underlying aspects were identified. This allows for covering the
36 complete road safety and policymaking domain. As before, organizational aspects were analysed
37 according to the theoretical EFQM-background, whereas the content-oriented aspects were based
38 upon the international benchmark of road safety measures and the selection of best practices. The
39 underlying aspects per module are listed in table 1 and discussed hereunder.

40 To gain insight in the extent to which user needs are taken into account, the method and
41 nature of the collection and the processing of the required data are considered. Furthermore, the
42 frequency and the way in which users (citizens) are consulted are contemplated. Concerning the
43 module 'leadership', the model considers the different types of external consultation and internal
44 communication that are present in the organization (e.g. top-down vs. bottom-up). The level of
45 managerial commitment, the management's motivational capacities and the efforts undertaken to
46 coordinate diverse parties involved are also examined in this module. The 'policy on paper'-

1 module investigates how well policy plans are underpinned, to what extent they are documented
 2 and in which respect they take considerations on sustainability into account. In the fourth
 3 module, three resource management domains that are adapted from the private sector are
 4 considered: financial management, human resource management and responsibility management.

5 Modules 5 to 9 address specific road safety issues. In module 5, the accurateness and
 6 background of traffic regulations and techniques for traffic control are evaluated, hereby focusing
 7 on recent local initiatives. For infrastructural matters, it is verified why and how certain measures
 8 have been implemented and which flanking actions are undertaken to support them. The seventh
 9 and eighth module take a look at the way citizens are encouraged to respect traffic regulations:
 10 by education, by behavioural change, by sensitization and by enforcement. For each of these
 11 aspects, their specific implementation is looked at. Module 9 concerns the cooperation of the
 12 local administration with actors in other policy domains, the private sector and supporting
 13 services (e.g. prevention, medical workers, etc.). Finally, the tenth module focuses on the
 14 administration's openness towards self-assessment, the application of monitoring techniques and
 15 the adaptation of the policy and strategy to the outcome of these evaluations.

16
 17 **TABLE 1 Underlying Aspects**

M1 - User needs	M2 - Leadership	M3 - Policy on paper	M4 - People and resources	M5 - Traffic regulation and control
Data collection	(Internal) communication	Substantiation	Financial management	Contemporaneity
User consultation	Management devotion	Elaboration	Human resource management	Background
	Coordination	Sustainability	Responsibility management	
M6 - Infrastructure	M7 - Education, behaviour and sensitization	M8 - Enforcement	M9 - Cooperation	M10 - Self-evaluation, monitoring and follow-up
Nature of modifications	Education	Nature	Policy domains	Self-assessment
Trigger for modifications	Behaviour	Framework	Private sector	Monitoring
Flanking measures	Sensitization		Supporting services	Policy and strategy adaptation

18
 19
 20 *Ladder of development*

21
 22 A crucial aspect of the TQM-approach lies in its pursuit of continuous improvement or staged
 23 development. A metaphor frequently used to describe this concept is one of mounting a ladder of
 24 which the diverse rungs represent different quality levels that the organization or administration
 25 can attain. Previous research and policy-evaluation tools in which a comparable methodology
 26 was applied [cf. (40-42)], suggested using a ladder with four or five rungs. For the specific case
 27 of local road safety management, four rungs have been defined: 'ad-hoc oriented', 'isolated',
 28 'system-oriented' and 'integral' policymaking. Note that the ultimate level of TQM is not
 29 included in this hierarchy, since this is considered to be a purely theoretical aspiration level.

30 The main distinctions between the different rungs or quality ranks are based on the level
 31 of integrality in policymaking that is attained by the local administration. The characteristics of
 32 each of the four quality standards are summarized in table 2.

1 **TABLE 2 Quality Levels**

	ad hoc	isolated	system-oriented	integral
scope	ex post	short term (1-2 y)	medium term (5-10 y)	long term (10-20 y)
focus	problem solving	project realization	comply with higher policy	integral policymaking
data use	--	-	+	++
budget	irregular	fixed but low	fixed and designated	variable but guaranteed
staff - number	low	low	sufficient	sufficient
staff - skills	low	general knowledge	specialized (by experience)	highly educated and specialized
internal communication	limited	top down	top down	multidirectional
external communication	limited	limited	contact with stakeholders	intense external relations
structure	informal	vaguely structured	well structured	well structured
approach	individual projects	road safety domain	mobility domain	complete local policy domain

2
3
4 The instrument at hand allows to audit and rate the (process of) local road safety policymaking
5 using this ladder of development. This gives the local administration the opportunity to gain
6 insight into its overall achievements with respect to quality management. The asset and added-
7 value of this tool is not only its capability of providing insight into the general level of quality
8 management of the administration; it also allows for positioning its performance on each of the
9 predefined domains (modules) individually. This gives policymakers the chance to conduct a
10 thorough diagnosis of their performances and allows them to (re)orient their focus in order to
11 improve their performances.

12 **OPERATIONALIZATION**

13
14
15 The assessment of the administration's performances will be put into practice by means of
16 standardized questionnaires. Statements have been formulated with respect to the modules and
17 the underlying aspects defined in table 1. For every aspect, a statement is set up for each of the
18 four quality levels (using sub-criteria). This procedure is illustrated below.

19 The local authority and its related stakeholders will be asked to indicate to what respect
20 the different statements suit to the current policymaking activities. Using the Likert-methodology
21 [cf. (43)] and the standardized questionnaire, local officials, politicians, police department,
22 civilians and other stakeholders will be asked to individually judge the local road safety
23 policymaking on the different themes defined. Afterwards, the results are analysed by a
24 supervising moderator and a meeting will be held in which the outcome of the inquiry is
25 discussed with all parties. The goal of this meeting is to open up the debate, to give stakeholders
26 the opportunity to ventilate their opinions and make nuances where necessary. The ultimate
27 objective of this meeting is to reach a consensus on the quality level achieved by the local
28 policymakers. The presence of an objective and neutral moderator should keep the meeting from
29 drifting away from the core of the matter and avoid the dominance of a certain party and thus
30 prevent biased results.

1 Simultaneously, a situational sketch of the city and the local administration will be drawn
 2 up. This is achieved by means of a questionnaire containing standardized indicators on general
 3 situational and specific road-safety related issues. This second questionnaire, combined with the
 4 results of the stakeholders' consultation, allows the coordinating team to suggest immediate and
 5 longer term points of action. Additionally, policymakers' attention can be drawn towards best
 6 practices in which comparable situations or challenges have been addressed. The identification
 7 of these 'best practices' may result from the application of this tool by other administrations.
 8 Policy recommendations can then be formulated both for general road safety management and
 9 for specific action fields (modules).

11 *Illustration*

12
 13 Table 3 illustrates the process of constructing the statements that will be used. Here, the aspect
 14 'data collection' within the module 'user needs' is discussed. The aspect 'data collection'
 15 consists of four sub-criteria which are directly connected to the different levels of quality: the
 16 frequency and regularity of the data collection, the source that is addressed, the body that
 17 executes the data collection and the background of the collected data. These sub-criteria have
 18 been identified based on the benchmark of quality instruments mentioned before. For each of
 19 these sub-criteria, it has been defined which activities and initiatives the administration must
 20 undertake in order to attain a certain level of development (indicated values 1-4 refer to quality
 21 levels as described in table 2; a baseline level has been introduced with value '0'). E.g. if a data
 22 collection is organized on a regular basis, quality level 3 is assigned; if data collection is only
 23 held in case of a critical situation, the quality ladder is only mounted to the first rung. Based on
 24 these interpretations, actual statements have been built up.

26 **TABLE 3 Illustration Generation Statements**

Module 1: User needs

"Data collection"

<i>Frequency and Regularity</i>	<i>Source</i>
4 continuously	4 locally adjusted scientific methods or indicators
3 regularly	3 self-composed databases
2 if potentially useful	2 from nearby or similar entities
1 if necessary	1 from higher administration
0 never/seldom	0 none
<i>Executor</i>	<i>Background</i>
4 specialized or scientific organization	4 general policy
3 local authority, assisted by specialized organization	3 mobility policy
2 local authority, autonomous	2 road safety policy
1 civil notification	1 individual projects
0 none	0 none

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1 **VALIDATION**

2
3 In order to make sure this instrument is applicable and acceptable for practitioners, a thorough
4 validation check is carried out. This embraces two major issues: a validation of the methodology
5 and a content-oriented validation.

6 7 *Methodology*

8
9 The instrument presented in this paper bridges a gap in Flemish mobility policy aspirations. It
10 not only ties in with the Flemish Mobility Plan (2001), moreover it covers the needs expressed in
11 a recent regional decree issued by the Flemish Government (March 11, 2009), stating the
12 necessity of the development of a monitoring system that allows for collecting, managing and
13 analyzing data on the state of local mobility policymaking and that permits to verify whether the
14 operational goals in mobility policy plans are being met in a cost-efficient manner. The
15 conceptual model of this instrument was presented to and approved by the administration of the
16 Flemish Minister of Mobility. Furthermore, the instrument covers up for the drawbacks of the
17 Quick Check-methodology which is currently used. On top, the instrument is designed keeping
18 the methodology of the widely recognized EFQM-approach closely in mind and it takes the
19 specific background of public (mobility) management into account. In addition, several
20 practitioners and experts in the domain of mobility management have been consulted. The
21 necessity and potential for this instrument was generally agreed upon, on condition that the
22 workload for local officials is not significantly increased and the necessary budgets (incentives)
23 for implementing the tool are foreseen.

24 25 *Content*

26
27 With respect to a content-oriented validation, local policymakers and other stakeholders are
28 being addressed in a consultation programme. To ensure that the statements are appropriate,
29 relevant and capable of assigning an administration to a corresponding and preset quality-level,
30 several researchers and practitioners in the field of local policymaking are being approached. For
31 this programme, a Delphi-procedure is applied. Respecting this methodology, several
32 consultation rounds are organized in which the approached persons express their opinion on the
33 accurateness of the statements. In between two consultation rounds, the statements are adjusted
34 to the remarks that are made and thereupon, a new consultation is started. This procedure is
35 carried out repeatedly, eventually resulting in a shortlist of statements that is acceptable to all
36 experts. (44)

37 38 **FUTURE RESEARCH**

39 40 *Weighting*

41
42 It is clear that not every sub-criterion within an aspect, an aspect within a module or a module
43 within the policymaking process is as important as another. Therefore, a suitable weighting
44 methodology has to be applied. The Analytical Hierarchy Process (AHP) will be applied for this
45 sake. In this case, experts will compare modules and aspects in pairs on a scale representing
46 resemblance. This results in a matrix out of which accurate weights can be derived. (45)

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Miscellaneous

Other points of attention that are worked upon consist of identifying a suitable technique to model local mobility management (Business Process Modelling), deciding on a workable visualization methodology, fine-tuning the statements and background questionnaire and implementing test cases of the instrument in cooperation with volunteering administrations. A major challenge consists of incorporating this tool into the Flemish regional mobility policy framework and relating it to ongoing research in the domain of indicator development for road safety management practices.

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