BENCHMARKING OF MOBILITY NETWORKS PERFORMANCES: COMPETITIVE THREAT OR COOPERATIVE TOOL?

Authors: Yves Mathieu, OGM (consultant acting for Governments, public authorities and public services operators) and Claire Plantié, head of the European department of the “Union des Transports Publics” (UTP, the French operators association).

Abstract

This paper proposed a synthesis of the potential fields of application of benchmarking in the field of mobility, based on the most recent initiatives of the European Commission and practical applications. After a definition of the categories of benchmarking, the authors propose the possible scenarios in the next years: application by transport operators, by public authorities in charge of public transport, application in frontiers domains more then on the classical approach of the activity (passengers, other sectors, “no mans lands”). The main tools for benchmarking are proposed: method, common framework, consensus building and implementation of the results.

No doubt that benchmarking contributes to a convergence process. It generates a positive retro-action in the management system of the benchmarkers: more benchmarking reduces the cost of access to the understanding of the performances and increase the value of the information resulting from the process.

Table of contents

1. Introduction: in search of high performances for mobility networks
2. Scope of application of benchmarking in the mobility field
3. Two examples of application: benchmarking in a performance contract (Brussels) and system benchmarking (European Union)
4. Trends and scenarios for mobility networks benchmarking
5. Tools for performance benchmarking
6. Benchmarking and convergence process
7. Conclusions.

Appendix 1: THE INDICATORS OF PERFORMANCE OF LOCAL MOBILITY NETWORKS (source: final report on stage 1 of the pilot exercise in benchmarking local mobility network) www.eltis.org
1. Introduction: in search of high performances for mobility networks

Benchmarking is a management technique broadly applied in the private sector. Its aim is to improve business performance, through a continuous process of screening the industry, identification of the best performances, and understanding the processes and strategies leading to these performances. One reason of the success of benchmarking is its strong connection with the reality: it provides realistic targets as they can be experienced in the reality of a specific operator/sector.

In the recent years, it has been successfully applied in the public sector, in particular by Governments\(^1\).

In the mobility management field, benchmarking has been applied by different networks (in particular under UITP – the International Union of Operators, hosting Comet and Nova networks). The European Commission took some initiatives, in particular under the form of a pilot exercise of benchmarking of local passenger transport systems, involving 15 cities (1998-1999). By 2000, the European Commission has foreseen to launch a research programme and thematic network on benchmarking applied to all areas of its transport policy\(^2\).

At the light of these initiatives, it is possible to raise the question of the potential use of the benchmarking in the general context of public transport sector, where the market forces play an increasing role. How far can benchmarking operate its expected results in a competitive environment, and how far could it be a substitute for living competition? Can we expect from the development of benchmarking more co-operation between actors, in the view of pushing ahead the performances of the mobility systems?

2. Scope of application of benchmarking in the mobility field\(^3\)

We may identify five fields for the application of benchmarking:

---

\(^1\) See ERT, benchmarking for policy makers

\(^2\) BEST, thematic network in the 5\(^{th}\) European Research and Development programme, combined with a research on benchmarking (BOB), co-ordinated by OGM and NEA

\(^3\) this section of the paper has been developed by Peran van Reeven, Erasmus University in Rotterdam, in the frame of the preparation of BEST/BOB; special thanks to him for his contribution to this paper
Benchmarking in a regulatory/contractual setting

Authorities are sometimes confronted with monopolistic operators (especially in passenger rail and urban public transport) that, for various reasons, cannot be subject to competition (i.e. tendering or direct competition). In those cases benchmarking is an instrument that could be designed to develop effective performance contracts by using the performances of other (comparable) companies or industries as a benchmark for setting targets.

Systems benchmarking

Systems are characterised by interconnection and compatibility of services (e.g. intermodal transport).

Benchmarking can be used to study and improve the underlying processes and means for realising this interconnection and compatibility.

Systems benchmarking is also relevant for improving air transport systems (including land side), urban mobility systems, intermodal freight transport, etc.

(Cross-) sectoral benchmarking

Benchmarking of sectors enables authorities to continuously monitor the performance of specific sectors and monitor how they react to specific policy instruments. Also sectors themselves (through their representative organisations) can have an interest in being able to show objectively their performance (e.g. environmental efficiency) vis-à-vis other sectors.

When a regulatory body is in charge of a market, benchmarking is relevant for this body is a position to compare existing operators in their performance. By benchmarking these local performances with other regions of the world, it generates a stimulus for more performance.

Benchmarking of framework conditions

The Dutch Ministry of Economic affairs has shown that benchmarking can be used for improving the framework conditions for industry in order to attract businesses. In a similar way, benchmarks could be developed to appraise the performance and subsequently improve the key elements of the framework conditions for sustainable transport.
Policy benchmarking

Instruments for realising policy objectives can be benchmarked on the basis of their effectiveness and associated costs. Comparison with other practices can also result in the identification of 'new' more efficient and effective instruments that an authority has not been used before.

3. Two examples of application: benchmarking in a performance contract (Brussels) and system benchmarking (European Union)

Example of benchmarking in a regulatory/contractual setting: the Brussels Region/STIB management contract

The case of the management contract of the Brussels transport company (1996) shows how benchmarking can support the introduction of a slight touch of competitive pressure, without a formal introduction of competition.

In Belgium, public transport regulation is a competence of the regional governments (three Regions in Belgium: Brussels, the Flemish and Walloon Region). The national railway company is under the responsibility of the federal Government.

The STIB is a public company. The regulatory regime in Brussels gives to the STIB the monopoly of public transport in the Region, and attributes some operating rights to three other public transport companies: TEC (public operator in the Walloon Region), VVM (public operator in the Flemish Region) and SNCB (national railways). A project of regional train, resulting from a partnership between the four public operators and under the co-ordination of the four governments is under preparation.

In 1996, the Government decided to take into account the possible revision by the Commission of the directives regulating inland passenger transport. It would result in the introduction of competition for exclusive right given to networks or routes by the authorities in charge of public transport regulation.

In 1996, the Region and the STIB agreed to introduce in the management contract a clause demanding to the STIB to organise a benchmarking of performances with networks of the size of the STIB, and to present to the Government regular assessment of the competitive performance of the STIB, in regard with key performance indicators.
The objective was to push the managers of the STIB in a way where they assess their performance not in relation with the local situation, but with the European situation. A specific benchmarking network has been set up by the STIB Benchmarking Manager. This network relies on a confidentiality agreement. No private company working in a deregulated environment is participating to this benchmarking network.

The expected results are that the benchmarking and its implication will increase the STIB performances to a point where it will be in fair position to face competition.

Practically, the results of the benchmarking are kept confidential. The Government is informed through its Commissioner attending the company board.

This experience shows the interest and the limits of benchmarking in such context:

- increased information inside the company on relative performances at European level and in consequence, reduction of the threat of competition (because facts give more confidence that rumours);
- possibility to include a benchmarking clause in a performance or a management contract involving a public operator and a government;
- natural trend towards limited share of information with the authority resulting in increased asymmetry of information between the public company and the public authority;
- benchmarking centred on company management and operations; few information on benchmarking elements on the global competitiveness of networks, including elements under the responsibility of the authority;
- difficulty to involve in such network a company or a branch working in total deregulated environment while the market performances and market responsiveness is one field where public transport local monopolies may expect high information return;
- benchmarking limited to public transport operations.

At the light of this experience, here are some propositions to improve such benchmarking process in a management/performance contract:

- joint benchmarking operation: to increase the level of exchange of information between the authority and the operator, and to develop a benchmarking operation covering all dimensions of the performance of the networks, the authority and the operator should be both involved in the process (one benchmarking manager appointed in each body);

---

4 This may be explained by the fact that deregulated companies do not want to risk to share strategic information with public companies that might become competitors on their own market (some public companies have recently created specific subsidiaries dedicated to external market competition like RATP (Paris operator) with its subsidiary RATP international or SRWT (Walloon Region operator) with Eurobus).
• definition of the benchmarking criteria to be included in the contract by the authority (in particular those aspects linked with the citizens mobility experience, the market performance, the capacity of the system to make a local reality with the citizens’ network);
• clear reporting procedure with a specific agenda on the topics and the deadlines;
• publicity of the results, in particular presentation of the results to the bodies representing the users and the citizens (Parliament, Consultative committees, …)

Other general benefits of contractual benchmarking

As the European Commission intends to generalise the principle of competition for exclusive rights of transport in Europe, such benchmarking clause could be proposed to all cases where competition do not exist, in a transitory period of two to four years, in order to ease the transition and reduce the social risks of sudden competition. Benchmarking is a pedagogical tool for managers and politicians.

The inclusion of benchmarking clause in this contract could be a mean to reduce the frequency of the tendering procedure (and their cost) by introducing a regulatory device. The idea could be that in case of significant deviation for specific indicators the tendering could be launched in advance or a strong penalty would be applied.

It can also give an idea of the potential impact of competition, by comparing performances (or cost and market efficiency) and pace of evolution. It is a fact that such information on performances will be an internal management tool to propose to the staff the appropriate strategy to reduce the gap with potential competitors. This is to be seen in relation with the driving force of the company. In the case of private company, the profit objective will be the final output of benchmarking. In the case of public company, it will be to demonstrate that the social objective is compatible with performance.

Examples of systems benchmarking

In July 1998, the European Commission launched a pilot exercise of local mobility networks performances benchmarking. It involved 15 cities. Based on a first stage of self-assessment, the benchmarking in itself has led to a co-operation between 20 cities to understand good performances in mobility networks. Benchmarking has resulted in the preparation of local implementation of practices of interest in the 15 involved cities, in application of local mobility strategies. The results are publicly available on [www.eltis.org](http://www.eltis.org) (the internet site of the European Local Transport Information System, sponsored by the EC and managed by Polis and UITP).
The self assessment of the mobility networks covered walking, cycling, public transport and car. It included descriptive indicators, performance indicators and a strategic analysis of the performances, based on trends and citizens experience (see Appendix 1).

As presented by the European Commission,

« The objective of this initiative is to show European best practice, to allow transport decision makers to be proud of their successes and to stimulate emulation where more needs to be done. The European Commission does not intend to stigmatise poor performance, or provide a data set for academic research. The presentation of the data – focussing on successful performance – reflects this.

The data are supplied by the cities and transport operators themselves. Often, they count things in different ways. Footnotes reveal some of these differences. In the longer term, we hope that cities and operators will move towards common approaches to counting things. »

Some lessons from this pilot exercise :

♦ the involvement of the authority in charge of the mobility networks is a key condition to associate benchmarking with open co-operation : there is low level of competition between authorities and the willingness to share information and make it public is high for these bodies ;
♦ benchmarking reduces the cost of access to the relevant information. By sharing a process, using the existing information and offering to the other participants time and information resources, the results are low cost high value information ;
♦ to benchmark, you don’t look at a report done by someone else : you do it yourself. Personal commitment in local assessment, in identification of high/poor performance and in the benchmarking in itself with others demands a high level of willingness to learn and to share with others ;
♦ benchmarking the performance of mobility networks relies on the availability of information; while the consolidated information on public transport and car use are broadly available, it is not the case for information on soft modes like walking and cycling ;
♦ benchmarking small and large territories is possible and useful; the common unit between these territories is the passenger. Small territories may be very efficient in proposing a good solution for some market segments, implementable in large cities (and vice-versa) ;
♦ territories from accession countries (countries having formally demanded their accession to the European Union) have elements to share with EU territories ;
♦ to be part of a successful benchmarking process, you need to know what you are looking for and what you will do with that information ;
benchmarking is a win-win process, not a process stimulating competition between partners (it would result in reduction of available information, while in this case, it resulted in more information available);

- there is a demand for such process, organised on a continuous basis, in a large pan-European or world-wide basis.

4. Trends and scenarios for mobility networks benchmarking

It is expected that mobility networks benchmarking will know more development under the initiative of operators and authorities. To gain more value, benchmarking will focus on “frontiers” of performances.

**Operator benchmarking**

In Europe, the recent developments of the industry show very clearly the increasing role of strong private groups, operating on a multi-countries (world-wide) and multi-networks basis (land transport - all modes or land and air transport). It is a fact that these groups do benchmark their performances and the performances of their subsidiaries.

In an European research project on the relations between operators and authorities in charge of public transport (ISOTOPE, 1997), a survey among a sample of operators showed that in 1996 two third of them were familiar with benchmarking at international level (against one third of the public authorities, at the national level).

This type of benchmarking does provide information to operators in order to improve their market efficiency, in particular in the view of being awarded with new contracts/market, and strengthening their position where they want to avoid new entrant on the market. There is a direct link between the value of the company and the benchmarking procedure.

When organised between different companies, this benchmarking is undertook in the frame of confidentiality agreements (NOVA, Comet, inside UITP). This practice shows the economic value of benchmarking results : operators pay to participate to such processes.

**Authorities Benchmarking**

It is a fact that the development of international networks of public authorities in charge of Public Transport creates a positive climate for the development of benchmarking of performance mobility networks or benchmarking of the regulatory frameworks. At local level, public authorities in charge of
public transport are not in a position to accept on a long term a strong asymmetry of information between them and the operators on the capacity of the systems to perform better.

Recent developments show that in response to the strong development of operators benchmarking, the public authorities in charge of mobility are developing their specific information system.

There are two possible scenarios for the next years:

1. The public authorities do benchmark the performance of their mobility systems without any involvement of the operators, and create in consequence their specific information data base on the potential improvement of performances. This information will be used in tendering procedure (specifications of expected performances, network improvement, evaluation procedure, policy benchmarking).

2. The public authorities associate the operators in such process, in order to create a local consensus on the possibilities to perform better in the future and to act in co-operation where it seems that the gap between high performer can be reduced. This demands that benchmarking network performances is seen as a co-operative tool.

**Frontiers benchmarking**

What should be the topic of benchmarking?

Classically, we can benchmark one mobility network with other mobility networks (cfr. systems benchmarking). It will appear that it is possible to identify high level of performance in a specific area, and to launch the benchmarking on this area. For instance, the city of Oulu has one of the highest rate of cycling market share in Europe. It is one of the northern city of the continent, and a priori, it was not expected to find such performance there.

Besides classical analysis of performance indicators, there are other ways to define the topics for benchmarking. Frontiers benchmarking may brought relevant information for quick improvement. Practically, what kind of frontiers is it possible to benchmark?

We propose as examples, the following frontiers: the passenger, the other sectors, and the “no mans lands”.
The passenger frontier

Recently, during an advanced Public Transport marketing seminar organised by OGM in Brussels, a marketing manager presented the results of new mobility services in a large French city. He took the example of a line where all indicators were good. Good cost coverage, good quality of service, good patronage. Everything looked good from the point of view of the classical indicators.

After some discussion with passengers and non clients, it appeared that some strong improvements could be brought to the service. Specific express service, new route definition, and new pricing. Profits have been increased by 20% on this sector and patronage is increasing regularly since the new service definition.

To identify the frontiers of service performance, there is one “unit” to refer to when you benchmark: the passenger. She/he is the source of information to identify the areas where strong improvement are necessary and possible. Her/his experience is a fantastic source of inspiration.

This is why in a benchmarking process, the customer should be associated in a way or another. Not as “the average passenger”, but in its extraordinary diversity.

The frontier of the other sector

To identify other information, it is possible to benchmark “mobility networks” with other networks or other realities.

When you go to Disneyland Paris, you may chose the “multi-days package”, including the access to the park and the hotels. You will sleep in one of the comfortable rooms of the resort, and will have the possibility to use the resort bus system. Have you see how Disney solves the problem of missing the bus ? (I mean the frustration that inhabits you when you arrive at the stop and see the bus just leaving). On the back of the bus, it is written “next bus in 5 minutes”. This way of keeping the client at the stop show a possible way to improve the service for urban “classical” services. (in an other network on advertising agency used this space to promote taxi “you missed this bus, call ….. Taxi in 5 minutes to pick you up”).

Other example : the Internet access providers. They have a high level of similarity with public transport operators : they do provide access. Virtual in their case, but access.
From the research Quattro\(^5\), dedicated to quality in tendering and contracting public transport, one key element was to show that the first step to create a quality programme in public transport is to refer to the appropriate concepts.

Very often, a network is described in reference with the number of stops. Difficult to put on the market a service defined in terms of “stops”. The term of access is more appropriate. Access to the system, access to the city or the area, access to persons, activities or places. Using the appropriate concept, you will discover new unexplored fields for benchmarking (and gain a lot of information). Can you imagine all what you can learn from the internet access providers to increase the performance of a transport network? Topics like customer loyalty, individualised service, generation of “word of the mouth” are areas where mobility networks can learn from internet access provider.

In the same logic, we know that a mobility networks provides time of access. Time benchmarking will open the doors of the industry selling “time”. Not clocks and watches, but telecom, TV channels, tourism operators.

*The “no mans lands”*

Most of recent strategic plans dedicated to urban mobility insist on the need to improve the “nodes” in the networks. It is a matter of fact that often these nodes are often “no mans land”, where the passenger is engaged in an assault course to go from one mode the other. Nodes are a frontier in mobility. From airport to public transport, from cycle to trains… the expected good conditions for connections are to be improved in the future. To day, it is sometimes like if you had to change your computer when you want to have access to different internet sites. By focusing on these nodes and platforms, benchmarking will contribute to stimulate innovation in management and technical solutions.

5. Tools for performance benchmarking

**Methodology**

Successful benchmarking rely on a sound methodology. The European pilot exercise on benchmarking the performance of local mobility network offers one method, including a self assessment guide. One method is needed to organise the exchange of information between the benchmarkers. Milestones, communication techniques, organisation of seminars, responsibility for

\(^5\) QUATTRO : Quality Approach in Tendering/contracting Urban Public Transport Operations. Quattro is a research project funded by the European Commission (DG VII) under the Transport RTD Programme of the EU’s 4th Framework Programme for research, technological development and demonstration (Urban Transport – task 5.2.14). Quattro was co-ordinated by OGM.
final reports, roles and responsibilities of the partners are some elements to cover by the proposed method.

Common language

Benchmarkers need to speak the same language. Mid 2000, the project of European standard on service quality for public passengers transport is expected to be formally approved inside the European Committee of Standardisation (CEN). This standard proposes a definition of quality that can structure the approach of network performance, in the logic of the citizens’ network. Though a systemic definition of quality of passenger transport service, it gives to public authorities, operators and citizens to share the same concepts and the same logic to assess the service performances.

Consensus building

Benchmarking appears as a co-operative tool more then a competitive threat. Because benchmarking of network performances demands to work at the system level, not at the level of one mode in particular. And this relies on partnership and consensus building in an geographical area.
There is much to learn from the benchmarking of the decision making process and the consensus building process having led to strong innovation in the management of the networks and their development.

The acceptance of the required measures to improve the conditions for good mobility is a result of local consensus. For instance, the conditions of mobility of goods in the area is now one of the aspect that enter into strategies to increase the mobility of the persons. This means that in the system, the economic partners are stakeholders of the system improvement. It is a fact that the local consensus will be stimulated by examples of good implementation in other cities. Benchmarking is a support for such consensus building process.

Implementation

The more powerful tool to sustain benchmarking programme is the implementation of measures
From information to reality, the way of success is paved with practical impact of benchmarking for the users, staff, manager and policy makers.
Successful implementation of benchmarking results will increase the demand for it (positive retro-action).
6. Benchmarking and convergence process

The secrets are made public

It is a fact that a benchmarking process shared by a large group of territories will lead to a progressive convergence process: making public the “secrets” of high performance, the benchmarking process will push the performances to the top. It will push forward the “operators benchmarking”. Back on tendering and contracting procedures, benchmarking results lead to better capacity of the actors to negotiate the right conditions to reach the objectives of the mobility policy (by reference to existing situation, not to purely speculative objective).

The key players share the results

The publicity of the results of the benchmarking is a key to inform the key players of the market, including the users and the bodies acting on their behalf. And from this publicity, it is expected that in the process of policy or strategy making, it will be clear that the level of expectation of the users will be higher if the performance of other networks is known. Democracy in mobility will be increased.

Costs are lower and value is higher

Benchmarking contribute to a new paradigm: it generates a process of strong reduction of cost of information on performance, in parallel with increased value of the information: as the principle is to learn through co-operation with others, the learning process is shared and the information cost is reduced. The larger the scope of exchange, the higher is the value of the results.

Rewards and recognition

Finally, benchmarking is a way to recognise good decision making process and good management of collective resources. From the results of benchmarking, local players may expect a return in term of local and international recognition of good management. A benchmarking label/award could be proposed (cf. the citizens’ charter award in UK, organised by the Government to focus all public services on the best service commitment of public organisation in UK and stimulate continuous improvement process).
7. Conclusions

It is proven that benchmarking the performance of mobility networks produces information with high value, at low cost.

In the coming years, it is expected that benchmarking will know a strong development involving public authorities and mobility operators from large geographic areas.

From the present situation, where benchmarking is used in an economic prospective, the field of application of benchmarking will be extended to this point of policy benchmarking.

The expected benefits are in final to make a local reality the citizens’ network and to stimulate continuous improvement and innovation in mobility management.
Appendix 1: THE INDICATORS OF PERFORMANCE OF LOCAL MOBILITY NETWORKS (source: final report on stage 1 of the pilot exercise in benchmarking local mobility network) www.eltis.org

A. The cities, their people, and how they travel

A1 Basic facts about the cities (area, population, population density)
A2 How people travel today
A3 How people travelled 10 years ago
A4 Are alternatives to individual motorised transport winning new users?

B. Availability of public transport

B1 Public transport stops/stations (of all types) per square km of area
B2 Kilometres of public transport route (of all types) per square km of area
B3 Off-vehicle sales points for public transport tickets, per 100,000 inhabitants
B4 The proportion of low floor vehicles in the public transport fleet
B5 Park and ride spaces (for cars and powered two wheelers) per 100,000 inhabitants
B6 Number of taxis per 100,000 inhabitants

C. Priority for public transport

C1 Proportion of road-based public transport routes that are on reserved lanes
C2 Number of road junctions with devices giving priority to public transport, per 100,000 inhabitants
C3 Average commercial speed of buses in the city centre at peak times

D. Information about public transport

D1 Annual public expenditure on information services for public transport users, 1000 Euro per 100,000 inhabitants
D2 Existence of public transport service information on the Internet or minitel

E. Attractiveness of public transport

E1 Proportion of passenger trips that are by public transport
E2 Trends in public transport’s share of passenger trips
E3 Normal fare (Euro) for a month of public transport use
E4 How many litres of petrol could be bought for the same amount as the normal fare for a month of public transport use?
E5 Availability of through ticketing between different forms of transport
E6 Existence of service guarantees/compensation for passengers

F. Walking

F1 Proportion of passenger trips that are on foot
F2 Trends in walking’s share of passenger trips
F3 1000 square metres of pedestrianised zone per 100,000 inhabitants

G. Cycling

G1 Proportion of passenger trips that are by bicycle
G2 Trends in cycling’s share of passenger trips
G3  Km of cycle path per 100 000 inhabitants
G4  Public bicycle parking spaces, per 100 000 inhabitants

H.  Car use

H1  Proportion of passenger trips that are car trips
H2  Trends in cars’ share of passenger trips
H3  Car ownership per 1000 inhabitants
H4  Car ownership as compared to the national average
H5  Typical price of an hour’s parking in the city centre on a weekday (euro)
H6  Price of a litre of petrol (unleaded, Euro super 95)

I.  Use of powered two wheelers

I1  Proportion of passenger trips that are powered two wheeler trips
I2  Trends in powered two wheelers’ share of passenger trips
I3  Powered two wheeler ownership, per 1000 inhabitants

J.  Air pollution

J1  Trends in the number of days per year on which fixed air pollution thresholds are breached.

- Information on the pilot exercise on local mobility systems benchmarking is now available on www.eltis.org; see also www.ogm.be/mobility for the executive summary of Quattro research (available in 5 languages)

- “Transportation Services – Public passenger transport – Service quality definition, targeting and measurement” – WG5 Draft proposal
  Agenda item 7.4, 1999-06-09
  CEN/TC 320 : Transportation Services / N 157

- Benchmarking – Implementation of an instrument available to economic actors and public authorities
  Communication of the Commission COM(97) 153/2
  European Commission Directorate-General III – Industry
  Rue de la Loi, 200, B-1049 Brussels


- Benchmarking the competitiveness of European Industry, European Commission (COM(96) 463)

- Benchmarking for Policy-makers, European Round Table of industrialists, ERT, 1996.
The paper is presented by Yves Mathieu (37), president of OGM.

CV

Yves Mathieu is a consultant in the field of mobility management for Governments and public authorities (Paris, Brussels, Lyon, …).

He and his team support Governments in preparing regulatory frameworks, tendering/contracting procedures, and participate to the preparation/assessment of mobility strategies.

Public transport operators have developed specific programs with Yves for the search of improvement of service and implementation of service charters (internal/external).


He graduated in 1984 from the Brussels University (Business School) and in 1985 from the Ecole des Mines de Douai (F) (Master degree in quality management). He is in charge of a seminar of economical statistics at the University of Brussels and of a specific training programme on quality management in tendering and contracting, in France on behalf of the National Association of Public Transport Authorities.

OGM is located in Brussels, in the European district. OGM is a leading consulting company in Belgium in the field of the continuous improvement of public services and public governance.