

ENVIRONMENT BENCHMARKING- A MODERN
MANAGEMENT TOOL APPLIED TO PUBLIC
ADMINISTRATION IN WORLD ECONOMIC
CRISIS

Abstract

This paper is an attempt to clarify and present the many definitions of benchmarking. It also attempts to explain the basic steps of benchmarking, to show how this tool can be applied by local authorities as well as to discuss its potential benefits and limitations providing a series of examples it illustrates the effective use of this management tool, and its requirements for comparable data and information.

Keywords: benchmarking, local authorities, sustainable development, innovation

JEL CODES: Q56, M11, M12

BENCHMARKING-UL DE MEDIU-UN INSTRUMENT MANAGERIAL MODERN APLICAT ÎN ADMINISTRAȚIA PUBLICĂ ÎN CONDIȚIILE CRIZEI ECONOMICE GLOBALE

Sebastian CEPTUREANU
Eduard CEPTUREANU

Sebastian CEPTUREANU

Asistent univ. drd., Facultatea de Management,
Academia de Studii Economice din București
E-mail: ceptureanu@yahoo.com

Eduard CEPTUREANU

Asistent univ. drd., Facultatea de Management,
Academia de Studii Economice din București
E-mail: eduard_ceptureanu@yahoo.com

Rezumat

Această lucrare încearcă să prezinte și clarifice multiplele definiții ale benchmarking-ului. De asemenea, încearcă să definească etapele de bază ale benchmarking-ului, pentru a arăta modul în care acest instrument pot fi utilizat de autoritățile locale, precum și pentru a discuta despre beneficiile potențiale și limitările sale oferind o serie de exemple se ilustrează eficacitatea utilizării acestui instrument de management, cerințele de date și informații comparabile.

Cuvinte cheie: benchmarking, autorități locale, dezvoltare durabilă, inovare

1. INTRODUCTION

During the cross-current economic crisis, Europe needs a high level of competitiveness to ensure its standard of living. However, competitiveness is not an end in itself. It is targeted at improving the living standards of people. Humanity is the result of evolution over that accumulated residues long - material and immaterial - all models of existence that it has come, and which, taken together, form a barrier to progress sought by current generations. Its defeat is unthinkable without rapid progress and profound knowledge on society, but especially on the economy. Multiplying the population has exceeded the level of sustainability of natural ecosystem. Humans have evolved even after they have reached their knowledge, as if not aware that they live in a closed, self-healing capacity exceeding the planet and witness an enormous waste of resources specific to consumer society.

Reflecting the new economy in terms of environmental management requires the use of new instruments as micro-economic and macro-economic, as are the Environmental Management System (EMS) and Environmental Costs Managerial Accounting (EMA-Environmental Management Accounting). Scopes of Environmental Managerial Accounting are multiple, but this study is based primarily on analysis of environmental benchmarking process, which aims for long-term objective to create sustainable prosperity. Unfortunately, often benchmarking is misunderstood only as a tool to reduce costs in the short term basis. Such an interpretation would discredit benchmarking as an instrument focused on designing a society based on innovation and economic development.

Environmental benchmarking exceed ideological approaches and contribute to finding rational solutions to adopt best practices in the world.

The whole study is based on highlighting the importance of environmental bench marking's eco-efficiency requirements. When we speak of eco-efficiency relates mainly to increased environmental quality and increased satisfaction of citizens at the lowest cost.

2. BENCHMARKING- THEORETICAL CONCEPTS

Benchmarking is seen although mainly as a theoretical concept, be regarded as more than a tool for comparing performance indicators or criteria. As benchmarking developed mainly on enterprises level in order to improve performance and productivity, both by globalization of competition, this methodological approach are more accessible and applicable mainly at enterprise level, where opportunities for improvement can be easily identified and implemented. In the private sector there are no limits in addressing this methodology, which can be applied to inputs, outputs, methods, processes and short

and long term goals. Available types of benchmarking can be applied both internally, and here we refer to the comparison of units of the same entity, and externally, comparing entities with similar features and products, operations and strategies, setting targets and objectives achieved.

If we refer only to the general conditions required can be said, however, that there is a method with universal applicability. Although it is rather difficult to compare activities or production efficiency in public services or politics compared to the private sector, is not impossible, and this assertion is the premise of the present study. Why we say this? Because is relatively simply to copy a factor or policy to achieve the desired performance. What should be considered important in the application's benchmarking is to identify steps to take for each of the items. Therefore, a benchmarking framework project should be directed to inputs and outputs of certain processes for their development. But all at once and effective policies should cover the field. The current structural inflexibility in the act of governance, public services and institutions will slow improvement of framework conditions in key areas established through benchmarking. In addition, there is a lack of political power and at E.U. community level, and often at the level of member states to implement immediate change-oriented best practice.

2.1. Definition

There is considerable confusion in the matching process actually means. Often the process of benchmarking is understood as simply a numerical comparison process different performance levels in different organizations. However, if benchmarking is seen as a tool for improvement, it is more than just the comparison and classification. This goes beyond setting benchmarks, standards and norms, and practices that support investigating benchmarks. Benchmarking philosophy is well expressed through the following statements: "*Benchmarking is the practice of being humble enough to admit that someone is better than you, and be wise enough to learn how to adapt their practice to the best standards.*"¹ Benchmarking is a finding of the existence of differences in performance and learning about best practices from others. Benchmarking concept was introduced by Xerox Corporation to cope with market competition from Japan by '70.

A broader and more conventional definition of this process would be as follows: "*Benchmarking is the process of comparing their performance with other organizations, identifying the organizations with the highest level of performance and trying to adapt their organization high performance techniques.*"It should also be noted that there is often confusion between a reference point and the real process of benchmarking. A benchmark is simply a standard of performance. Standard may be established by the

¹ APQC (American Productivity and Quality Center), What is benchmarking?
<http://www.apqc.org/best/whatis.cfm>

organization as a target or expected level of performance or for various other reasons. Benchmarking can also be established by looking outside the organization. However, reference values should not necessarily involve benchmarking process, as reference values can be used by other management tools such as quality management or environmental management.

An important element of the definition of benchmarking is best practice. Best practices, more traditional uses of benchmarking site, defined by Robert Camp as "those practices that best serve the needs of most customers. Thus, it is argued that the objectives of a benchmarking study should be based on client needs, whether customers are internal (departments within the organization) or external (consumers, citizens, regulators, local and national legislators, environmental groups, investors). Make a benchmarking study is insignificant if it is not designed to respond to specific customer requirements.

Should be noted that, especially regarding environmental issues, costs and benefits cannot always be expressed in quantitative terms. If there are improvements in air quality due to a comparative analysis would not be possible (or necessary) to express all benefits in financial terms. Also, benefits such as networking and partnerships are difficult to quantify. These qualitative aspects must be considered when talking about environmental benchmarking.

What is environmental benchmarking different from normal? Basically, the idea and methodology of site environmental benchmarking is no different from any other benchmarking process. In fact, could be questioned the term "environmental benchmarking" is used for all cases. To avoid misunderstandings, it might be more appropriate use of phrases such as "environmental benchmarking for improved performance," benchmarking for continuous environmental improvement, "benchmarking to improve waste management costs" or "strategic environmental benchmarking" depending on the scope of the benchmarking process.

As benchmark's overall there different notions about what's environmental benchmarking actually means. Often, the term "environment" refers simply to share and compare and rank the environmental performance of different organizations. For example, the efforts of third parties such as environmental NGOs comparison of air emissions or waste. However, if your environmental benchmarking is understood as a tool for improvement, it should go further. This should involve analysis of practices leading to superior environmental performance.

2.2. Different types of benchmarking

Benchmarking could have both objective and different application domains, because is no unique way of approaching this process. Different types of benchmarking can be distinguished and classified in

accordance with what is compared and who make such comparisons. Thus there are different types of benchmarking and to make a correct classification, it is imperative to put our two questions: What is compared? and Who compares? So we can distinguish the following types of benchmarking:

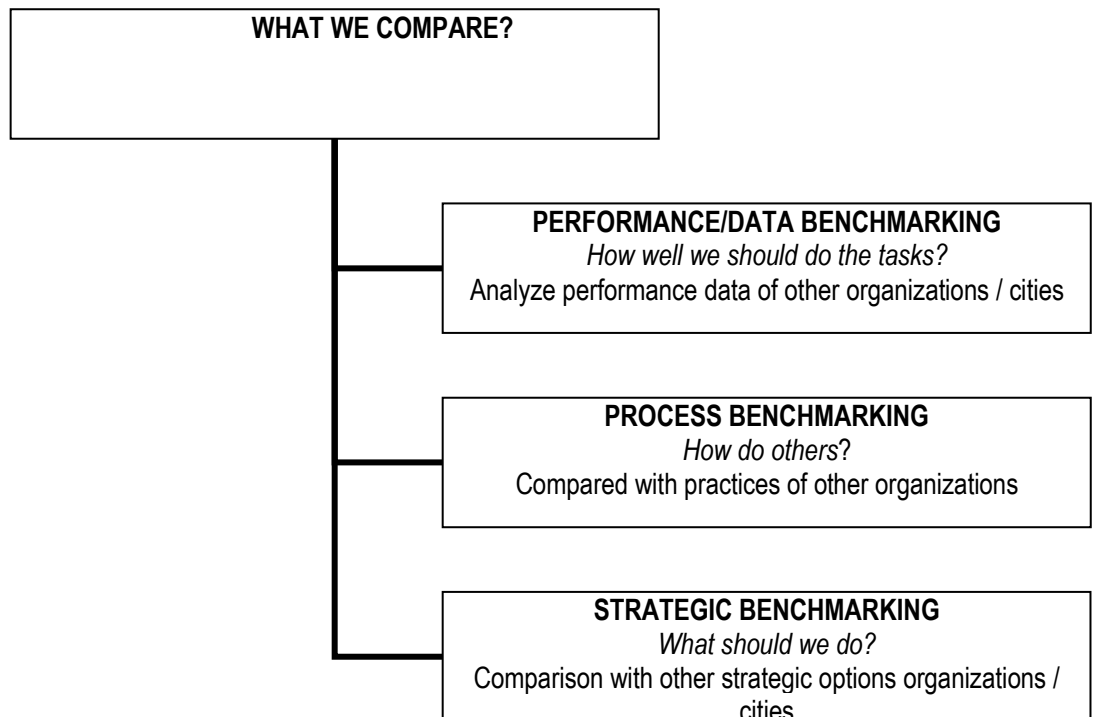


FIGURE 1. TYPES OF BENCHMARKING (1)
 (Source: authors opinion)

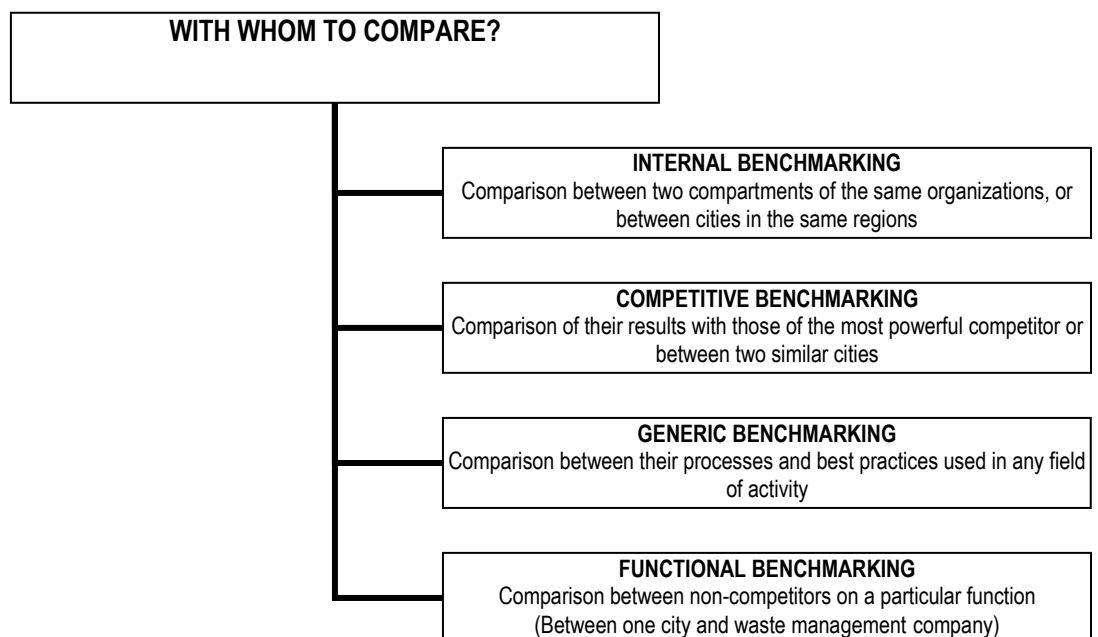


FIGURE 1. TYPES OF BENCHMARKING (2)
 (Source: authors' opinion)

We can consider if such classification is necessary. Reasons are many, but what is really important, is that identifying the correct research methods, default and will correctly identify strategies for improved performance. Properly implementing such types of environmental benchmarking, environmental responsibility and increase the costs involved. Local authorities will improve environmental quality of services offered, but with minimum costs, so the public sector must adapt to the practices used in the private sector, the concept "New Public Management", including an orientation towards results and efficiency, in terms limited budget. Also must increase transparency to the public and central authorities on the use of money. Becoming more apparent is that most people want a healthy environment. Because of this, they must learn how to identify and improve weaker activities, where they stand compared to other municipalities, as well acting goals, at what level to set targets. A clean environment could be used as an argument for marketing to attract tourists and investors. The basic idea of benchmarking is to learn from the experience of those who have achieved high levels of performance.

Types of benchmarking environment that would best suit the local authorities in cities can be seen in the table below (Table 1):

TABLE 1. TYPES OF APPROPRIATE LOCAL ENVIRONMENTAL BENCHMARKING

	PERFORMANCE BENCHMARKING	PROCESS BENCHMARKING	STRATEGIC BENCHMARKING
INTERNAL BENCHMARKING			
Internal benchmarking	Comparing the indicators with targets	Benchmarking of a certain functions of the municipality	Not very useful
EXTERNAL BENCHMARKING			
Competitive benchmarking (with other local authorities)	Comparison of indicators	Benchmarking of specific processes	Comparing different strategies
Functional benchmarking (with other organizations)	Comparison of indicators	Benchmarking of specific processes	Not very useful
BENCHMARKING BY A THIRD PARTY			
Competitive assessment	Comparison between regions based on the indicators	Comparison or awarding practices	-

Source: Popescu, Scurtu and Russu, (2006)

3. BENCHMARKING PROCESS

Benchmarking is a process that includes a series of actions, steps, functions or activities with a purpose or a result of identifying and importing best practices to improve performance. The main objective of benchmarking is to learn how to operate in a much more performance than is currently the case.

There are dozens of sources that describe the benchmarking process. It is called by some people "nine steps in the process of benchmarking", or by other persons "four steps of the benchmarks." The following description according to Andersen and Pettersen offering benchmarking process as "wheel benchmarking", indicating that benchmarking is a continuous process².



FIGURE 2. WHEEL OF BENCHMARKING PROCESS BENCHMARKING
Source: Andersen and Pettersen, (1996)

The time required (and hence costs) for a benchmarking study depends on the scope and depth of study, but normally takes at least eight months and 18 months. Effective implementation of the improvements may take much longer depending on how it is changing radically.

² Andersen, B. and Pettersen, P-G, "The benchmarking handbook. Step-by-step instructions", Chapman&Hall, London 1996

4. BENEFITS AND LIMITS OF ENVIRONMENTAL BENCHMARKING

Like any other process and benchmarking has benefits and limits that can be identified according to each type of benchmarking. Those can be traced summarized in the tables below (Table no.2 and 3):

TABLE 2. ENVIRONMENTAL BENCHMARKING BENEFITS

	PERFORMANCE BENCHMARKING	PROCESS BENCHMARKING	STRATEGIC BENCHMARKING
Internal benchmarking	Readily available data Comparability Stimulate competition Basis for further analysis	Establish best practices Experience for external benchmarking Supports quality management / environment	-
Competitive benchmarking (with other local authorities)	Enables organizations to recognize places where Support to improve performance speed	Focusing on key processes Good basis for lasting partnerships	Knowledge of other approaches Allow an integrated approach
Functional benchmarking (with other organizations)	-	Generate new ideas	-

Source: Popescu, Scurtu and Russu, (2006)

TABLE 3. LIMITS OF ENVIRONMENTAL BENCHMARKING

	PERFORMANCE BENCHMARKING	PROCESS BENCHMARKING	STRATEGIC BENCHMARKING
Internal benchmarking	Analysis of gaps does not necessarily lead to improvement Narrow vision	Internal rivalry Exhaustive Maybe there is comparability	Different strategic concepts in the organization / municipality scarce
Competitive benchmarking (with other local authorities)	Analysis of gaps does not necessarily lead to improvement Lack of comparability	Finding partners Rivalry between organizations / municipalities (data sharing)	Possible resistance to implementing new strategic concepts
Functional benchmarking (with other organizations)	Lack of comparability	Finding partners Discouraged without benchmarking experience	Not useful

Source: Popescu, Scurtu and Russu, (2006)

An important problem of each process benchmarking consist on indecision in the election process which can occur with each organization or municipality (Barker,1999). There is a certain sequence in each type of benchmarking, so it's appropriate that national benchmarking to be done before the external. Measuring and comparing performance with targets may be a prerequisite for quality and environmental management, but also for benchmarking your process. Process must be understood and analyzed is therefore imperative subjecting a performance benchmark. Choice mainly depends on the objectives to

be achieved, the experience and training in benchmarking, human and financial resources available, the available data and other instruments that can be used as an alternative to benchmarking, such as analysis of performance indicators, management and other systemic processes.

5. THE IMPORTANCE OF BENCH MARKING'S PRACTICE BY LOCAL AUTHORITIES

What should be the objective of environmental benchmarking for a community? In general, we can say that the basic idea is to learn how other communities manage to be "eco-efficient", i.e. how the failure to achieve an optimal level in terms of environmental protection and satisfaction to the citizens lower utilization of financial resources.

Process benchmarking with other communities often can open our eyes regarding the performance, such as for example the cost in terms of selective waste collection, wastewater treatment, or how clean is the air in cities like. If the data are analyzed in time, this may also show progress could be made in some communities. Such benchmarking processes, or benchmarking of sustainability indicators between cities, can be a sign of improvement, especially for benchmarking results. A growing number of cities trying to become eco town to improve their performance, as this may attract more tourists and more people who like to live in a healthy city, and could be popular for conferences or for a new type of entrepreneurs- "eco- entrepreneurs". Performance benchmarking helps in this regard to promote good environmental practices.

Nine Steps Agency of the Office of Public Services in Great Britain have conducted a benchmarking study in the public sector to improve value for money³. This desire to improve the value of money has led to developing a range of effective tools. In this context, benchmarking is one of the instruments are becoming more recognized as valuable. The study was conducted among local authorities, including police and fire services in England and Wales. The study began in 1992 and is an evolving process. Local authorities are responsible for a wide range of essential services such as education, housing, spatial planning, social services and waste disposal. In addition, police and fire services are funded and operated by local budgets. There are a total of 449 local authorities, consisting of 47 county councils, 333 district councils, 36 metropolitan councils, and work is underway to streamline the system. Together, they employ more than 1.5 million people and are responsible for spending over 44 billion euro's.

An important component leading to the choice of the British government to improve public sector performance has been creating alternative means of improving existing performance (Cowper and

³ <http://www.globalbenchmarking.org/publications/articles>

Samuels,1997) in the private sector (for example- good practices on private sector). This included requirements set by the central government to local authorities to make certain activities within a competitive framework for all public services to consider areas of activity that could transfer private sector innovation.

Agreed methodology consists on choosing performance indicators that were defined for each area of activity. Each indicator was designed by the competent bodies to ensure that the activity was measured and the resources needed for proper data collection were not excessive. Research method and selected indicators were published in 1993. Given the wide range of activities and the number of selected areas to compare performance indicators were around 200, of which we can mention the following:% of draft statements of special educational needs prepared within six months,% of minor items of equipment to help people to live at home have been provided within three weeks, the number of books and other items issued by libraries per capita, total expenditure per capita,% of household waste was recycled ,% of planning applications were resolved in 8 weeks, the number of inspections of food stations as% of all inspections should be carried out, the quality of complaints procedures, etc. ⁴

Following the results of studies conducted annually since 1996 reportedly concluded that the highest performing councils in the previous year were significantly improved, especially five councils have improved their performance between 30% -60%.

However, a small number of councils registered changes. The latter, however, compared with similar councils, which have been excellent performances for similar costs, suggests that there is reasons to improve. Returning to the police services, it was found that the performance of services deteriorated, despite the significant increase in funding, while others with much smaller increases in funding have improved their performance significantly. However, the Audit Commission, which dealt with the study and interpretation of results, noted that more time is needed because funding for this purpose to be efficient and effective public service.

With increasing experience in this field, the emphasis is on efficiency special tools allowing organizations to choose specific skills to their situation. This freedom is transposed ongoing studies whose results are made public for both customers and the public services of all citizens to see the evolution of performance over time. Through this approach, the UK pursues continuous improvement of public services, while maintaining public accountability for service delivery.

⁴ Performance Benchmarking in the public sector: The United Kingdom Experience, Jeremy Cowper and Dr. Martin Samuels Next Steps Team, Office of Public Services Cabinet Office, United Kingdom

6. IMPEDIMENT TO ENVIRONMENTAL BENCHMARKING

Benchmarking process is resource intensive, especially if made with foreign partners. Evaluation exercise will be executed if the value is not focused on process improvement and learning from others.

Regarding internal benchmarking process, there may be limitations to find benchmarking partners within the municipalities because many processes in the area of environmental protection (Godeanu, 1997). Often have separate departments dedicated to certain environmental problems. How waste is held by one entity and how to make the collection might be the same throughout the city, with a single department responsible for coordination. Therefore, partners will be found externally.

Moreover, internal benchmarking process is likely to not disclose progressive ideas. Different departments within a city may well learn from each other, but the probability of finding approaches that are completely different and give much lower results compared with external benchmarking site. Barriers of internal benchmarking could come also from members of the organization itself. Could be some reluctance to share experiences between different departments, especially where there is some competition for local budgets and bonuses or incentives for good performance.

As regards external benchmarking your issue may be crucial to choosing a partner. Problems of comparability and adaptability should also be considered good when the looming criteria for selecting partners (Ghereș, 2008). Information that can be used to search for partners is increasing, for example, number and best performance in practice, databases or the number of environmental reports of the authorities. However, in comparison with existing professional networks benchmarking at company level, exchange of information between authorities on the environment is only just beginning in Romania. Local authorities often do not have the resources to help search extensive partners network and benchmarking process must rely on available information. Such partners might find benchmarking not provide a very large contribution to improved performance.

7. CONCLUSIONS AND RECOMMENDATIONS

As a first conclusion of everything that was said above, we can say that benchmarking is not limited to carrying out comparisons between local institution and competitor analysis, but rather aims to overcome competition and achieve excellence even in the same branch. Benchmarking is directed towards

identifying gaps and to develop new objectives based on the implementation of proposed solutions, to identify opportunities to improve the situation⁵.

If properly applied benchmarking processes can lead to major improvements in public organizations (Serebrian, 2006). However, there are several pitfalls that can undermine their efforts and make benchmarking process expensive one which does not yield the expected benefits.

Communities should establish clear objectives, performance measures, and adequate information systems to monitor performance in significant areas. Benchmarking should be seen as one of the tools to improve the quality of life itself, which in cross-current economic crisis has become an imperative, a battle for survival for each individual.

Efforts should be linked to strategic objectives of the organization or the municipality. Before external benchmarking should be an analysis of their processes. It should be noted processes behind the figures. Benchmarking for process, data collection should be limited. The process must be involved stakeholders who understand and have the necessary authority to implement the proposed changes. The study must focus on areas too large and targets and deadlines should be realistic. Benchmarking partners should be chosen carefully because they must follow a protocol on exchange of data and information between partners.

REFERENCES

- Andersen, B. and Pettersen, P.G. (1996). *The benchmarking handbook*. Step-by-step instructions, Chapman & Hall, London.
- Barker, J. (1999). *Contour environmental benchmarking, published in "Environmental benchmarking for performance improvement*, IBC UK Conference Limited, London.
- Cowper, J. and Samuels, M. (1997). *Performance Benchmarking in the public sector: The United Kingdom Experience*, Next Steps Team, Office of Public Services Cabinet Office, United Kingdom,
- Ghereș, M. (2008). *Economia mediului*, Editura Resoprint, 2008 Cluj-Napoca.
- Godeanu, S. (1997). *Elemente de monitoring ecologic / integrat*, Edit. Bucura Mond, București.
- Popescu, I., Scurtu, V. and Russu, C. (2006). *Benchmarking, teorii și aplicații*, Editura Economică.
- Serebrian, O. (2006). *Dicționar de geopolitică*, Editura Polirom, Iași.

⁵ <http://www.em.doe.gov/bch/survrpt.html>