THE MAIN QUANTIFICATION INDICATORS OF THE IMPACT OF THE INTEGRATED DEFENSE RESOURSES MANAGEMENT UPON ACCOMPLISHMENT OF THE INTERNATIONAL MILITARY MISSIONS

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Abstract

In the current circumstances when security environment is becoming increasingly unstable, having all characteristics concentrated in the already established VUCA abbreviation (volatile, Uncertain, complex, ambiguous), and its fluidity is accentuated by the global crisis and the unfavorable evolution of conflicts (Iraq , Afghanistan) in which are engaged forces of the democratic countries, both leading to serious financial constraints, it is understood the special attention paid to efficiency and effectiveness of each military action, especially the multinationals, which in the last decades of the last century and the first in the current century became prevalent. No state, regardless of size, economic and military power, the number of international missions it takes part in, no longer affords to spend huge amounts of money and the solution is to achieve goals with minimal human and material resources and with maximum results in a short time leading to the achievement of the purpose for every action (tactical, strategic), developed within that mission. Efficiency and effectiveness are not some abstract, but two essential parameters to which it is related the very possibility of an outbreak of international military missions; in order to increase their relevance in the sense that they should be quantified using synthetic indicators, which on case by case basis have a different weight and importance but which finally manage to convey the degree to which military action is or not efficient and effective.

Security environment is in a permanent change having as main cause its fluidity very relevant concentrated in known abbreviation VUCA (volatile, uncertain, complex, ambiguous), grown by world crisis which has among its consequences serious financial difficulties which requests the increasing preoccupations regarding the efficiency and effectiveness of each military action and especially of multinational missions inside NATO or in coalitions ad-hoc made.

But for this reason is necessary a methodology for quantification efficiency and effectiveness which are not simple values, they having a great importance in scientific character of assessment and for this there are necessary a lot of indicators and its association according to some criteria, in synthetic indicators. Every responsible political and military decision-maker's attention is focused upon efficiency and effectiveness, which are two essential parameters that affect the likelihood of an international military mission occurrence, and in order to make them more relevant they have to be quantifiable due to multiple assessments made by decision-makers after highly competent synthetic indicator-based analysis. These indicators gain variable weight and importance, but eventually manage to reflect the extent to which a military mission is efficient and effective. I restate that the role, place and importance of a synthetic indicator is not rigid, but it rather evolves along with the unfolding military mission as well as with the enemy's reactions to its own troops' performance. I consider that the huge human and material losses encompass all the pre-requisites of the military action and, therefore, all other indicators.

It is clear that the above considerations are valid not only for the military system, but also for the society in general, which can be seen everywhere in today's world.

From many examples I chose three regarding different social domains:

1. Educational effectiveness and efficiency[1]

Descriptors: Cost Effectiveness; Educational Assessment; Educational Economics; Educational Indicators; Efficiency; Elementary Secondary Education; Evaluation Criteria; Evaluation Methods; Foreign Countries; Measurement Techniques; Organizational Effectiveness; School Effectiveness

This monograph identifies appropriate quantitative indicators of educational effectiveness and efficiency, and discusses how such indicators should be used to assess education at multiple levels of the system. It focuses on the practical aspects of introducing effectiveness and efficiency concepts/measures into the deliberations of educational practitioners. The first part deals with the conceptual and definitional issues related to the measurement of education effectiveness and efficiency. It reviews the appropriateness of the application of the efficiency model to education and proposes specific definitions for common terms. The second part involves indicators of educational effectiveness--the first chapter with input and process measures, and the second with output and outcome measures. The role of qualitative indicators is also discussed. The third part reviews basic cost issues and demonstrates how efficiency analysis is conducted under four alternative forms: benefit-cost, cost-effectiveness, least-cost, and cost-utility analyses. Part 4 assesses the policy relevance of indicators as they relate to the development and use of educational management information systems. It concludes with a brief review and set of recommendations to improve the practical relevance of efficiency considerations to educational systems and institutions. Thirteen tables, four figures, and an extensive bibliography are included. (LMI)

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[1] Windham, Douglas M.
http://eric.ed.gov/ERICWebPortal/custom/portlets/recordDetails/detailmini.jsp?_nfpb=true&_&ERICExtSearch_SearchValue_0=ED351784&ERICExtSearch_SearchType_0=no&accno=ED351784

2. Improving the efficiency and effectiveness of local government Australian Government activities to support local government performance improvement2

Local government service delivery has come under increased scrutiny with the ongoing process of reforms both at the State and national levels. Over the past decade, State governments across Australia have embarked on an ambitious program of local government reform aimed at enhancing efficiency in this sector.

At the national level, the Australian Government's interest in improving local government performance is related to the significant funding provided to local government through the financial assistance grants. Further, the government's microeconomic reforms, such as the National Competition Policy and its related legislation, for example, the *Trade Practices Act 1974*, are designed to enhance national economic performance. Microeconomic reforms by local government improve economic efficiency and contribute to overall national economic performance.

In February 2003, the Australian Parliament's House of Representative Inquiry into Local Government and Cost Shifting released a discussion paper 'At the Cross Roads: Inquiry into Local Government and Cost Shifting'.

This discussion paper stated that:

The Committee raises the question whether [there] is a case for closer Commonwealth scrutiny of local government systems and performance to ensure value for the very large sums of taxpayer funds spent in supporting councils.

Under the *Local Government (Financial Assistance) Act 1995* the Australian Government Minister for Local Government is required to provide to

[2] http://www.infrastructure.gov.au/local/publications/reports/2002_2003/C3.aspx

Parliament an assessment, using comparable national data, of the performance of local government including its efficiency. This chapter outlines some of the key initiatives undertaken to improve the performance of local government in 2002-03.

In relation to this requirement, in 1997 the Australian Government engaged the Industry Commission (now the Productivity Commission) to examine the feasibility of producing a nationally consistent approach to performance measurement in local government.

3. Evaluation of the different RES-E support schemes (effectiveness and economic efficiency)[3]

In reviewing and evaluating the different RES-E support schemes described above, the key question is whether each of these policy instruments has been a success. In order to assess the success of the different policy instruments, the most important criteria are:
Effectiveness: Did the RES-E support programs lead to a significant increase in deployment of capacities from RES-E (Renewable energy sources- electrics).

- In relation to the additional potential? The effectiveness indicator measures the relationship of the new generated electricity within a certain time period to the potential of the technologies.
- Economic efficiency: What was the absolute support level compared to the actual generation costs of RES-E generators, and what was the trend in support over time?

[3] http://www.wind-energy-the-facts.org/en/part-3-economics-of-wind-power/chapter-4-prices-and-support-mechanisms/evaluation-of-the-different-res-e-support-schemes-effectiveness-and-economic-efficiency.html

How is the net support level of RES-E generation consistent with the corresponding effectiveness indicator?

Other important performance criteria are the:

- credibility for investors; and
- reduction of costs over time.

However, effectiveness and economic efficiency are the two most important criteria and they are discussed in detail in the following sections.

This indicators' identification is a very difficult work, but my attempt to discover them, suggest my conviction that multinational missions in hot zones of the world must have relevant scientific tools.

My opinion regarding the indicators weight put in practice some values appreciated as a ratio between the existent (real) and the maximum performances for each domain.

My emphasis upon interoperability comes to underline its importance in stated objectives achievement.

In my paper, I tried to present the main indicators and synthetic indicators, in my opinion of course, and for each of them a very short definition and its weight.

The first indicator I consider the human and material loss, because they have a deep influence upon troops moral and simultaneously upon efficiency and effectiveness. I didn't dare to purpose a number for weight but I am sure that this must be 3-5.

Second I placed the interoperability degree with other armed forces participating in multinational missions. Here the weight is the number resulted from the required and the real level of the each troops participating in a joint mission. In my opinion, the indicators' weight becomes simple considering that it is similar to the interoperability percentage. I will not exemplify for the calculus itself can be found in other papers presented here.

An essential indicator is from my very personal point of view is logistics with its two components: asset and support; asset is inside each country and the support in operational theatre. The weight is towards 1-2.

I think the weight must be carried out with percentages of all types of materials that have to be interchangeable (not necessarily to achieve the highest level of compatibility, for no NATO member as achieved that as a result of the technological discrepancies compared to the US military). We attempt to launch a controversial opinion coming from the military logistics field, that is, during the support there is a technological transfer of technology as well as a transfer of all types of materials (ammunition, fuel, equipment, etc.) which may be seen as derivatives of the technology transferred prior to the actions themselves. This transfer takes place not only in the area of the military actions, but also from the country that owns them to the country that needs them, and also by means of own troops. In this context I would like to mention re-engineering atypical materials, that is, bringing them to the lowest acceptable standard of interoperability. The weighing is thus done according to the percentage of our equipment made interoperable compared to its counterpart from other armed forces (numerically, of course).

Another important chapter is that of funding these actions. Financial constraints led to ensuring a minimum level of the necessary, which makes me think that this indicator may be the numerical expression of the supplied out of the necessary. As information plays a critical role in today's world, the information resources is, in my opinion, one of the most important indicators that might be included in any combination resulting in relevant synthetic indicators. To answer the question "what is the weight coefficient?", I need to digress in terms of the significance of each piece of information as well as the quantity and quality of its source (HUMINT, SIGINT, IMINT, OSINT, MASINT, TECHINT). Finally, I consider that the useful information out of the total available amount is the weight indicator regarding the synthetic indicators

in which the information resource is included.the software and hardware do not need any further comments as their weight is carried out in terms of the standards met at the top of this field of activity.

Other indicators are: the quantity and quality of the human resource; the informational resource; the level of CIMIC; the intercultural and inter-linguistic compatibility among allies; the level of bureaucracy, etc.

I presented but a few of the elements which, in my opinion, pertain to indicators, particularly to the synthetic ones, in spite of knowing that I did not manage to include all of them, but only to identify the most significant ones. My scientific endeavor resulted from the fact that the world in which we live is subjected to transformations that used to occur in centuries, and now take place within decades or years. In order to ensure the social development, everything must be assessed and quantified as accurate as possible with what we have available. Most certainly, the use of synthetic indicators is one way to achieve results that are relevant in terms of efficiency and effectiveness, without which everything would be hard or even impossible to assess.

As a conclusion: in each human activity the most important are efficiency and effectiveness and for them evaluation there are necessary a lot of indicators and synthetic indicators. In our session these indicators will be analyzed in scientific papers conforming of the grant requirements.

REFERENCES

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