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Theoretical Background of Analysing the Performance of National Economy in Qualified Periods and Possible Ways of Modernising Economy Mobilisation Planning

PhD dissertation summary by the author

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Theoretical Background of Analysing the Performance of National Economy in Qualified Periods and Possible Ways of Modernising Economy Mobilisation Planning

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Definition of the academic problem

Economy mobilisation had dealt with the tasks of national economy to be performed in qualified periods¹ – previously in times of war, especially. It was aimed to specify what type of goods to produce and services to provide in order to most effectively support armed forces and law enforcement and defence bodies², those principally responsible for the fulfilment of tasks emerging in extraordinary periods, and how to mobilise the economy to provide the material background for the performance of military and other law enforcement functions. Such activity – of organisational and executional nature in qualified periods, whereas of planning and preparing in times of peace – had been referred to in one word as economy mobilisation. The meaning of the concept had changed significantly by the end of the cold war and by the change in the political system and has been changing ever since.

In the course of continuous planning activity plans are prepared anually by the responsible bodies. Those taking part in the execution of tasks in qualified periods that are to define requirements (requirement setting bodies – RSBs) draw up plans on their neccesities in qualified periods, while the competent executive bodies revise and confirm the theoretical and practical feasibility of fulfilment, then prepare plans on meeting the needs. This step is followed by budgetary calculation: what portion of expenses of the extra recources can be provided for by the planning bodies themselves and what portion remains for the central budget. My macro-level research of the performance of national economy in qualified periods focuses, among others, on the latter question, namely where such expences can be appropriated within the central budget.

The main scientific problem of the dissertation is the verification of the hypothesis outlined below. By comparing the aggregated necessities of RSBs in qualified periods, the so-called demand of defence economy (DDE), to the projected annual GDP, the ministry in charge assesses the performance of the national economy in qualified periods in each year. Such assessments in the government reports have been based on the following reasoning: provided that the aggregated demands for extra resources in qualified periods do not exceed 3-5 % of the annual GDP projected for the year in question, then the operation of the economy in qualified period circumstances is presumably sustainable, therefore the preparedness of the economy shall be deemed satisfactory. Such reasoning was always accepted during professional negotiations within the

¹ In the present Summary, the term 'qualified periods' refers to the state of war (hereinafter extraordinary state), state of emergency, danger situation, and unexpected attack as defined by paragraph 19/E – the events regulated by Act XX of 1949 on the Constitution of the Hungarian Republic.

² The term 'law enforcement and defence bodies' comprises the following authorities: police, civil defence, financial police, immigration office, national security service, criminal enforcement, defence against catastrophe, etc.

public administration between 1996 and 2003; this thesis, although empirically correct, has never been verified scientifically.

Meanwhile the political and economic circumstances of the country have significantly changed, as has the international situation of security policy. Realignment has taken place among the types of security risks. Hungary has become member of the NATO and joined the European Union. Our national economy has developed to a great extent. These changes concerning economy mobilisation have continuously required the revision and modernisation of legal conditions and planning methods of the activity.

Goal definition

For my research activity I have defined the following goals:

- 1. Review of the terminology, principles and legal regulation of economy mobilisation with respect to the altered environment of international security politics, domestic politics and national economy.
- 2. Scientific verification of the applied methodology of examining the performance of national economy in qualified periods as a hypothesis, and if required, modernisation of the methodology.
- 3. Examination of the intensity and time scale of the different economy mobilisation situations in order to achieve optimal level of resource provision planning.
- 4. Scientific establishment of certain methodology issues of economy preparation planning.
- 5. Modernisation of information technology and statistical support of economy preparation planning.

Research methods

In order to achieve the above research goals, I have applied a great variety of research methods. In many cases I used the method of comparison, e.g. when examining the legislative practices of different countries concerning the defence sector.

Among the special (partial) methods, I have applied observation – as the simplest tool of empiric research – and analysis to examine the resource consumption during the defence campaign against flood in the Bereg region in 2001, as well as when utilising the experiences of the different defence administration trainings.

For the examination of the time scale of other economy mobilisation situations and for the elaboration of the methodology of economy preparation planning I have made use of certain methods of mathematical statistics and modelling.

When planning the economy mobilisation activities in hypothetical qualified periods, I could largely rely on assumptions, and I started the verification of the methodology of examining the performance of national economy in qualified periods with setting the hypothesis.

Summary of accomplishments

I have accomplished the review of the terminology, principles and legal regulation of economy mobilisation for the period starting from the change of the political system until nowadays. Due to the altered environment of international security policy, domestic politics and national economy I have proposed and initiated several modifications in respect of the concept of economy mobilisation, as well as to the formulation of its principles and legal regulation. I edited the proposal on the new concepts of economy planning in 1999-2000. In 2003 the Ministry of Economy and Transport (GKM) drafted and tabled a Government Decree proposal on the fulfilment of the tasks of preparation and mobilisation of national economy for defence at my initiative and in my edition.

I have verified the validity of the hypothesis – set up on the basis of accepted practice – concerning the evaluation of the performance of national economy in qualified periods. I have justified the adequacy of the evaluation, however, I have made proposal for fine tuning the evaluation of the preparedness of national economy.

I examined the different economy mobilisation situations with respect to the time scale of the consumption of economic resources. Based on the maximum values of the intensity functions applied for the examination – as intensity parameter of crisis effect –, I propose a classification of the different economy mobilisation situations.

I have revised the 1994 Methodology Guide and edited the compilation of methodology rules contained in the annex of the Government Decree. I have become acquainted with our allies' methodology of planning of resource provision within the framework of Host Nation Support (HNS) and have assessed the similarities and differences with our economy preparation planning. I have worked out further proposals for the possible directions of modernising the methodology of economy preparation planning. From the beginning of the development of the economy mobilisation informatics system (EMIS) I have supervised – on the users' side – the planning, setting up, maintenance and further development of the system. Despite the "continuous" change in the governmental division of labour I have managed to ensure that the centre of the system and the computers are operational and are available for the planning bodies.

Under my governance – since 1996 – in each 2 years we have accomplished the collection of data for economy mobilisation, with continuously updating the scope of data-providing agents and of observed services. I have coordinated the preparation of the three-aggregation-level catalogue of the observed products/services, and I have initiated the compilation of a unified nomenclature for RSBs (UN RSB), which has become finalised by 2004.

Final conclusions

1. Based on the review of the terminology, principles and legal regulation of economy mobilisation

- I have made the public administration accept that the relevant legal regulation³ should contain different terms for economy preparation activity carried out in times of peace and economy mobilisation typical for qualified periods;
- I have initiated and achieved that the relevant legal regulation⁴ contains a new definition, the so-called 'economy mobilisation situation'. Due to the introduction of this definition the scope of observation of economy preparation activity can be extended to other risk situations that do not require the introduction of the qualified period regulation;
- I have accomplished the modernisation of the economy mobilisation system and have drawn up the model of this system as a regulating element of the national economy.

³ 131/2003. (VIII. 22.) Government Decree on the regulation of fulfilment of the tasks in preparation and mobilisation of national economy for defence

⁴ 131/2003. (VIII. 22.) Government Decree on the regulation of fulfilment of the tasks in preparation and mobilisation of national economy for defence

- I have found that the principles of economy mobilisation set forth following the change of the political system are still valid, however, I have proposed that some of these principles be modified.
- I have come to the conclusion that while the classical defence functions are diminishing there still remains need to maintain the system of economy preparation, and also to prepare for unforeseen qualified periods. I have, however, found that among the probable economy mobilisation situations, the preparation for various military and other types of emergency situations shall be the ones that will give the majority of tasks for the above activity in the future.
- I had to establish that the frequent organisational changes have detrimental effect on the direction and co-ordination of economy preparation and of economy mobilisation activity.

2. In the course of verifying the hypothesis set up for the evaluation of the performance of national economy in qualified periods

- I have confirmed that the hypothesis set up on the basis of accepted practice to evaluate the performance of national economy in qualified periods has proved valid; still, for the maximum extent of satisfactory extra resource DDE planned for times of peace I propose to apply for the appropriate evaluation of the performance in qualified periods a value amounting to 3 % of the GDP, on macro level;
- In order to fine tune the method of evaluating the performance of national economy in qualified periods I consider it useful to investigate the sectoral distribution of extra resource DDE and the assessment of regional performance, and in order to be able to draft the macro-level evaulation in numerical terms, to introduce the terms of qualified period satisfaction coefficient of the 'economic potential' or of the GDP;
- I have established that by omitting the "dynamic elements" of economic potential and relating the value components to the main feature of the economy, to the GDP the appromximate value of the economic potential corresponding the year in question can be calculated mathematically; which approximate value will determine the bases of the actual defence potential that, if needed, could be realised within one year.

3. In the course of evaluating the intensity and the time scale of the different economy mobilisation situations

- I have concluded that the intensity parameter of crisis effect for the different situations and the time scale of such effect can be characterized by an intensity function proportional to the consumption of resources; where the intensity function of the flood emergency situations can be described with approximation by linear segments;
- with respect to intensity I have classified the different economy mobilisation situations having been assessed with regard to economy preparation planning;

4. In the course of revising the order of economy preparation planning as defined in the Methodology Guide and of modernising the methodology of planning

- I have established that the enlisted principles of planning and methodology handbooks were correct and applicable in general; the planning system operated well, basically;
- I propose for consideration that the methodology of planning for war as for the event with maximum level of demand, although maintained, should not be applied in the course of annual planning. In case of certain resources I recommend that planning for critical economy mobilisation situations be introduced, thus – with enhanced information technology support – the planning of demand meeting can be made more realistic and the defence planning more cost efficient.
- I have established that the planning of HNS demand meeting can also be carried out by using the methodology of economy preparation planning; however, as we have to comply with the rules and documents prescribed in the NATO Methodology, therefore I suggest that a separate methodology guide be compiled for the complete process of HNS planning;
- I have modernised the model of economy preparation planning;

• I have proposed that all planning bodies prepare action plans for crisis management for each typically possible economy mobilisation situation. Having done the budgetary calculations, they should draw up their proposals for the necessary budgetary rearrangements with regard to the financially critical cases.

5. In the course of evaluating the information technology support for economy preparation planning

- I have established that system of regular data collecting for economy mobilisation is to be maintained and technically developed;
- I have elaborated the UN RSB and proposed its introduction in the processes of economy preparation planning;
- I have made a proposal for the derivation of the unique identifier of UN RSB;
- I have established the necessity for the continuous development of EMIS;
- I have compiled a package of proposals for the development stages of information technology support that are considered as most important in the current situation;
- I deem it useful in respect of defence administration as a whole to initiate the elaboration of a comon informatics strategy and database;

Recommendations

I hereunder summarise those proposals contained in the dissertation that I consider the most significant; a part of these recommendations is already introduced, others are in the stage of fulfilment and the realisation of some others – in my opinion – is worth considering, as a possible direction for development.

I reccommend that in public administration 'economy preparation' and 'economy mobilisation' are regarded as separate terms;

I propose for general use the term economy mobilisation situation for cases of emergency requiring the use of economic resources that occur within the scope of state responsibilities regarding national mobilisation (national defence)

I recommend for test planning the use of methodology rules set forth in the annex of the Government Decree and the harmonised UN RSB nomenclature.

For the macro-level assessment of the performance of the economy, and in order to define the actual part of the defence economy potential I propose that the method for calculating approximate value of economic potential be used.

For verifying in times of peace the performance of national economy in qualified periods, on a macro level, I recommend that the 3 % Maastricht criterium be used, that is, for the maximum of extra resource DDE planned in times of peace, the 3 % GDP value be applied as the upper limit of 'satisfactory' rating. On mezo level, I deem it useful to carry out a comparative investigation of extra burden on sectors in qualified periods.

Although upholding the methodology of planning for maximum demand for war situations, based on my findings I consider it expedient to devise a methodology guide for planning for critical economy mobilisation situations in times of peace.

For the HNS planning, the average requirements of the demands to be presumably announced by the allies – and deemed practically satisfiable – must be determined; furthermore, for the entire process of HNS planning I recommend that a separate methodology guide be compiled.

I deem it necessary that the planning bodies prepare action plans for crisis management for each typically possible economy mobilisation situation and carry out the budgetary calculations related thereto; thus they can facilitate their preparation work and acquire more precise information.

In order to have the EMIS continuously developed, I put forward that the proposals incorporated in the present dissertation be approved of and provided that the uncertainty factors present in the environment of the economy mobilisation system finally come to a standstill, the development strategy of the

system will need to be revised or – if possible – a new concept can be recommended for elaboration that would be less bound to organisational structure.

I suggest that a uniform information technology strategy – also harmonised with the EMIS – and a common defence database be devised for defence administration.

I consider the following as the new scientific accomplishments of the present dissertation:

1. I have improved the terminology of economy mobilisation, have defined the term 'economy mobilisation situation' and have modernised the model of economy preparation planning.

2. I have verified the validity of the control method used hitherto for evaluating the performance of national economy in qualified periods and have devised a calculation method for determining the approximate value of economy potential.

3. I have developed an analysis-instrument for determining the crisis effect of economy mobilisation situations by means of graphs representing intensity functions proportional to resource consumption.

4. I have elaborated the points for consideration of compiling the UN RSB necessary for economy preparation planning and information technology support and have developed the derivation method of UN RSB identifiers suitable for the unique identification of the products/services.

Utilizability and practical gains of the dissertation

I have managed to accumulate the knowledge assembled in the dissertation during the course of almost 15 years spent at various authorities, but working allways in the same special field of knowledge – the field of economy mobilisation in defence administration. Thus some of the accomplishments described in the dissertation have already been given acceptance – for instance, in the accepted practice of economy preparation planning, in the organisation activity of the related data collection and information technology support, or in the approved legal regulation of the activity. In the main part, nevertheless, the dissertation contains yet proposals for the detailed elaboration and practical introduction of the planning

methodology that is being reformed these days. The information technology development conceptions denote the new perspectives of planning. The recommended methods and proposals can be applied as chapters of a planning guide for the colleagues working for the central, sectoral, and regional planning bodies concerned with economy preparation. Some of the establishments may serve as starting points for further defence economy research.

The modernisation of the theoretical bases of economy preparation and mobilisation may serve as curriculum for professional defence administration courses at universities, colleges and the public administration.