



PREINVESTMENT STUDIES IMPACT ON THE EFFECTIVENESS OF INFRASTRUCTURE PROJECTS

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Abstract: *The preinvestment studies and investment activities have tight interaction that affects and determines the effectiveness of the investment projects in transport sector. The investment projects development, submission and assessment must be done in the perspective of fullest fulfillment of public needs and requirements at highest possible efficiency of the investment.*

The paper discusses the preinvestment study as a system of procedures and sub studies that define the methodology for overall preinvestment study.

Key words: *investment projects, transport infrastructure, preinvestment studies, effectiveness.*

INTRODUCTION

The specific goals of the national transport policy aim at sustainable development of transport infrastructure of national and international significance, improvement of transport safety, integration of national transport network in European transport network, achievement of balance between different modes of transport. The improvement of the current infrastructure and the development of transport links along the trans-European transport corridors, passing through Bulgaria, are associated with the development and implementation of a series of infrastructure investment projects.

The investments in the transport system have several effects such as increased economic integration and social activity of people, and sustainable development.

THE EFFECTIVENESS OF INFRASTRUCTURE PROJECTS

Therefore, the development and implementation of infrastructure projects in transport sector are crucial for increasing accessibility, employment and efficiency. These are some of the socio-economic effects of the infrastructure investment activities.

These effects in conditions of economic crisis are crucial in the formation and development of investment policy, as they are factor in achieving an accelerated development of not only the transport sector, but also the economy in general. Indeed, more efficient utilization of resources under operational programmes that will help large-scale, national infrastructure projects to be implemented is crucial to the transport development.

The successful implementation of transport infrastructure projects is subjective to clear, transparent and long-term vision, provision of financial resources and last but not least to responsibility, control and commitment of all institutions and organizations, associated with the

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implementation of certain projects. In times of economic crisis, when the self financing of investment projects is very difficult, the development of real opportunities for utilization of substantial resources under European funds and programmes is of significant importance.

During economic crisis, the promotion of investments is one of the measures to fight with crisis. The transport sector has a key role in the investment promotional packages, as through infrastructure projects the demand of transport services is promoted. The projects are extremely expensive and require long-term intensive support, which affects the quality of the offered transport service.

If we disregard the crisis, the limitation of financial resources results in implementation of fewer projects. On the other hand, if we focus on long-term benefits and their impact on economy in general, then the investments in infrastructure are required and compulsory element that affects the economic development of the country. Therefore, it is necessary to rely on the social benefits from infrastructure projects, to determine to what extent certain project is appropriate for the society.

A prerequisite for the investment project realization is a well considered and promising idea. To turn into real investment, able to attract financing, an investment project is needed to be developed that has to be economically, financially and socially justified.

The economic crisis requires improving of the efficiency of the investment projects selection and financing and increasing the flexibility of the investment decisions when investment projects are designed.

The realization of investment infrastructure projects will assist the readiness of the transport and its adjacent infrastructure to serve the economic growth that is logical to appear after the crisis. The modernization of the transport park and the increase of the flow capacity of transport infrastructure are a prerequisite for the development of our economy and our country integration to EU.

For the socio-economical development of a certain region is essential to ensure investment resources to be invested in reasonable infrastructure projects. The infrastructure is the foundation for economic development in society and its high quality determines the possibilities for providing rapid, sustainable and balanced development. Regarding this the main task of Bulgaria is to reduce the ecological problems, to improve transport infrastructure and to decrease the risks of accidents. It is necessary to work towards achieving efficient balance of the investments and investment projects between different transport modes, as the main goal is construction, reconstruction and modernization of transport infrastructure in accordance with EU directives.

The methodology of the preinvestment study of infrastructure projects is mainly associated with the clear formulation of the main objectives and the expected project outcomes. It is also associated with measuring and evaluating the socio-economic impact effects on the project.

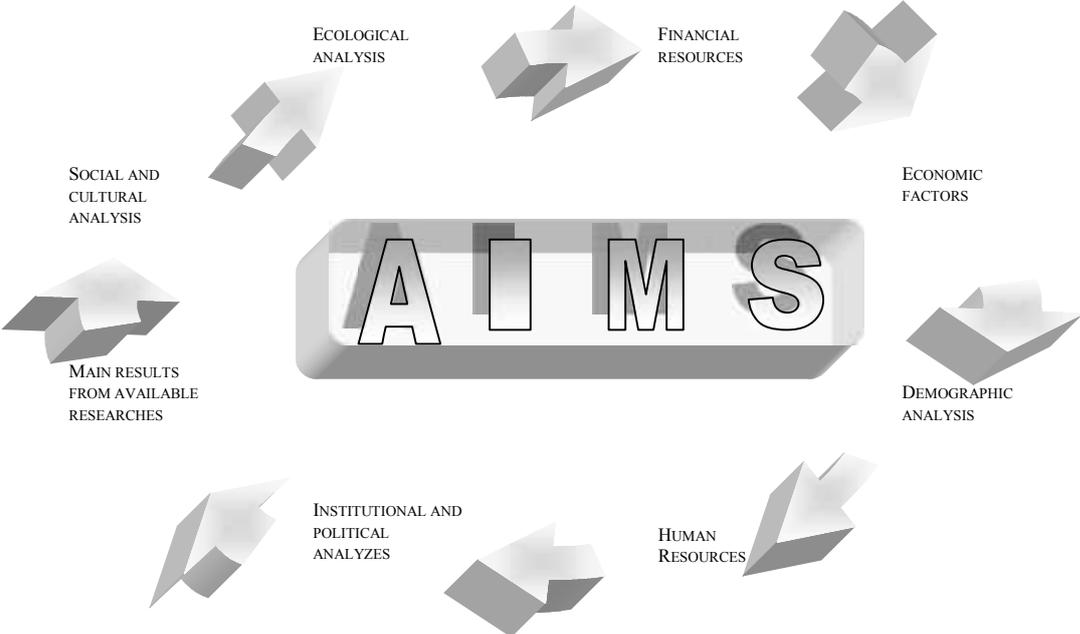


Fig. 1

The preinvestment study in transport is considered as a system of procedures and sub studies that determine the methodology of overall preinvestment study.

When evaluating the expected project outcome, it is necessary to consider the needs of financial and labor resources, as well as the expected impediments in the process of project implementation. It is important to analyze the marketing environment and to prepare marketing plan via carrying out marketing researches. The preinvestment study of a project is associated with the determination of expected number of users, forecasted sales and forecasted market share.

The technological alternatives and the expenditures, related to them are evaluated during the preinvestment study. The basis in the project management is the allocation of activities between the different players in the planning stage and the constant integration of the outcomes in implementation stage.

The most important project activities and the critical implementation path are analyzed and determined in the time, focusing on the implementation of critical stages and required resources for realization. There are prepared technical and technological analyses that are important basis for doing the financial analysis.

The financial analysis ensures the basic information regarding the incoming and outgoing resources, their prizes and the overall timely structure of the incomes and expenditures. Another important moment in the preinvestment study is the development of socio-economic analysis that evaluates the project contribution to economic prosperity of a region or country.

The risk analysis is crucial in the preinvestment study. It includes the measures for timely identification of the potential risks and the measures for control and avoiding the risk. The risk level may affect the decision for approving the project. The risk analysis determines the critical variables of the supply and demand, human resources and results. The sensitivity analysis evaluates the financial and economic variables.

The development of overall preinvestment study is a long period that comprises considerable number of researches and analysis and involves many experts.

When developing preinvestment studies, it is essential to consider several fundamental indicators through which the end product, respective outcomes, project implementation impact are characterized.

Examples of indicators for assessment of an investment infrastructure project for developing the transport infrastructure are listed in Table 1.

Table 1.

INDICATORS	END PRODUCT	OUTCOME	IMPACT
Railways	- built high-speed railways in km; - improved railways in km; - % degree of completion of overall network	- Saving in travel time of users(for transportation of passengers and freights) -Accessibility	- Increase in passenger/freight flow after one year (%) - Environmental impact (% increased/reduced) - Change in traffic noise (%) - Gross/net employment, created or maintained after a period of two years (number and % of all jobs) - Degree of satisfaction of users (%)
Highways	- built highways in km; - improved roads in km; - % degree of completion of overall network	- Saving in travel time of users(for transportation of passengers and freights) -Accessibility	- Increase in passenger/freight flow after one year (%) - Environmental impact (% increased/reduced) - Change in traffic noise (%) - Gross/net employment, created or maintained after a period of two years (number and % of all jobs) - Degree of satisfaction of users (%) - Increased safety (number of road accidents after a year)
Airports	- Number of airports	- Increased number of	- Increase of vehicles/freight flow

	built or improved	destinations, covered by regular airlines - approximate increase of the number of passengers per year	after a year (%) - Change in traffic noise (%) - Increase in passenger/freight flow after one year (%) - Gross/net employment, created or maintained after a period of two years (number and % of all jobs)
Ports	- Number of ports and wharfs, built or improved	- Annual increase of the number of containers - Reduce waiting time before unloading (%) - Reducing time for vessel manoeuvres - Reducing time for import	- Increase of passenger / vehicles / freight flow after a year (%) - Increase of vehicles/freight flow after a year (%) - Gross/net employment, created or maintained after a period of two years (number and % of all jobs)

The development of a coherent system of preinvestment study, project monitoring and control is necessary condition and prerequisite for a free of accidents development of infrastructure investment project.

The key indicators /factors/ that will be monitored must be determined, when designing such system. It is recommended the collected information to be oriented to the expenditures, time, resources and implementation as key moments in project realization and management.

The following components have to be included in the system of preinvestment study, project monitoring and control:

- list of current and planned activities
- comparison of the planned schedule with the current project development and determining of current status
- comparison of the planned budget with the actual expenditures
- existence and development of planned resources
- technical characteristic and quality indicators for each stage of project development.

CONCLUSION

The control is implemented as a system that analyze the collected information during the monitoring, aiming to extract the appropriate results for project development, to compare these results with the planned and to determine the needed corrections to be undertaken for eliminating the potential deviations of the actual development versus the planned project development.

In conclusion, it has to be stated that the information, needed for establishing such system of preinvestment study, monitoring and control, guarantees the implementation of regular monitoring and control of the project development. The complete preinvestment study directly affects the investment projects efficiency.

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