INFRASTRUCTURE MANAGEMENT: DYNAMIC CONTROL OF ASSETS

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Abstract

The infrastructure in the Netherlands is crucial for economic development. Dramatic increases of transport and mobility accelerate aging of infrastructure. The GNP of the Netherlands is strongly related to transport and to the two main ports. The Netherlands is used to a high standard of infrastructure. The research focuses on existing infrastructure as well on new projects. However the economic growth and finance conditions, that gave rise to its initial development, have changed and financing of renewal and acquisition of new projects needs to be accomplished in complex dynamic circumstances. On various management levels decisions have to be made to plan all necessary activities to keep the infrastructure in shape according to societal preferences. On a tactical level planning involves the application of detailed asset management processes, procedures and standards in order to develop separate sub-plans that allocate resources (natural, physical and financial) to achieve strategic goals through meeting defined levels of service. The research is based on systems theory and conditions for effective control are developed. The result of the research is a framework to control asset management processes on tactical levels.

Key Words: Infrastructure, assets, control, process, maintenance, traffic load, depreciation, valuation, accounting standards