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A PROJECT REGARDING THE MANAGEMENT SYSTEM "REPRODUCTION OF FIXED FUNDS"

(Grobprojekt des Führungssystems "Grundfondsreproduktion")

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The guiding values of the fixed funds reproduction system, which is a dynamic system, are the following: the efficiency of fixed funds, the intensiveness of fixed funds, the (short-term) loading level of fixed funds, the optimal (long-term) utilization level of fixed funds, maintenance of fixed funds and the number of shifts during which machines are operated. Cybernetic computations have lead to the conclusion that in order to prevent the effects of disturbances, a control is also necessary for dynamic systems. Control requires an uninterrupted numeric comparison of some guiding values to an associated control magnitude. There are some instances when direct measurements cannot be made at the control line end and as a result, it is necessary to introduce an algorithm for the comparison to the guiding lines.

The guiding, reference or control values are settled by the management or by a higher body. Apart from these, there also occur disturbant values arising from the environment, values which do not depend on the management; however, the management must perceive them and fight them. Several classifications of disturbances are suggested: exogenous and endogenous disturbances; disturbances with effects upon manpower, upon the means of production and upon the objects of work; disturbances which can or cannot be mastered.

The basic model considers the process as a black box. The investments and the replacement of equipment are included in one system. During the debates concerning the plan, there is a feedback of information, which also continues during the achievement stage, when the principle of exception is coming into play. The model is completed by means of information referring to newly emerged disturbances, received from the lower levels.

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