Jarosław Moczarski: Modeling of Signaling Systems Technical States

Ageing and wear of elements, as well as realization of exploitation activities lead to technical state changes of signaling systems devices. Negative changes generate decision problems in device operation system. Effectiveness of these problems solutions, and efficiency of counteracting destructive processes depend on operator's knowledge of devices technical state changes and their characteristics. In practice, limited access to information may mean that exploitation manager must solve open decision problems, which with large number of devices do not allow to achieve effective solutions in short time. There is a need to define methods and algorithms of practice that allow bringing open decisions to close decisions and quick identification of effective solutions. Proposed in hereby monograph signaling devices technical states evaluation and classification method, as well as defined procedures supporting making exploitation decisions, facilitates managing device maintenance proc- ess. At the same time it has universal character and may be applied to different technological areas.

Keywords: exploitation of signaling systems, maintenance process organization, modeling of technical states