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ITS Safety Ensuring Through Situational Management Methods

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Abstract

© ICST Institute for Computer Sciences, Social Informatics and Telecommunications Engineering 2018. The paper is devoted to solving the problem of complex organizational and technical systems' (COTS) safety improvement with the use of methods of situational management. The possibility to manage COTS with the use of decision support system, the intelligent core of which contains the object model of the precedent describing unwanted processes in the COTS, is considered. The object-oriented hierarchy model of the vehicle as a complex dynamical system is developed. To improve reliability and safety of the COTS the database of precedents is established. Precedents in this database are presented according to the developed model by which the analogues search procedure is performed and the best managerial decision is chosen.

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Keywords

Autonomous vehicle, Intelligent transport system, Road safety, Road transport, Situational management

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