CRITICAL INFRASTRUCTURE PROTECTION SPECIFICATIONS IN THE TRANSPORT SECTOR

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Abstract

Contemporary society is more sensitive for new threats than 20 years ago. More than 15 years modern democratic countries developed support for the most important objects and services as are named critical infrastructure elements. Critical Infrastructure (CI) and Critical Infrastructure Protection (CIP) have become a phenomenon of this era. The countries and their governments are preparing different measures to improve the security level of critical infrastructure networks. According to the current level of knowledge, the most important (critical or key) infrastructure networks include drinking water resources and water infrastructure, electric power generation sources, large power stations and high voltage transmission lines, gasholders and gas distribution systems, oil pipelines, refineries and pipeline network, important transport junctions and transit European corridors in road, rail, water and air transport. These infrastructure networks were originally built several decades’ ago and are being gradually upgraded. The New Critical Infrastructure networks include computer networks, telecommunication nodes and large data centres. At present, these major infrastructure networks are mostly threatened by natural and anthropogenic threats. The natural

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threats include especially all kinds of floods and extreme storms. The anthropogenic threats include especially intentional or unintentional attacks by employees, less frequently failures of technical and technological origin. Terrorist attacks on infrastructure networks are exceptional. According to the latest scenarios, the consequences of threats are critical, particularly from the point of view of further development of the society and are important for environmental, economic and social impacts. The paper presents some results of current research activities. At the time of writing this publication, the authors worked at two faculties. In the Slovak Republic it was the Faculty of Security Engineering of the University of Žilina and in the Czech Republic it was the Faculty of Safety Engineering of VŠB - the Technical University of Ostrava.

Keywords: Best practices, central and eastern Europe, infrastructure, risk.

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Project documentation OKI. 2010. APVV-0471-10 - Ochrana kritickej infraštruktúry v sektore doprava


STN 74 6481, 2000
