

„C⁴I” SYSTEM DESIGNED FOR MANAGEMENT OF EMERGENCY SITUATIONS RESULTING FROM NATURAL CATASTROPHES, TECHNOLOGICAL HAZARD, MILITARY OPERATIONS AND TERRORIST ATTACKS

Sorina COSTINAȘ¹,
Tudor CHERECHEȘ², Alin-Constantin SAVA³,
Elena IONIȚĂ⁴, Gheorghe COMĂNESCU⁵

Abstract. *This article presents an innovating product, designed, built and tested by the authors within S.C. AEROSTAR S.A Bacău. The requirements and needed facilities of a decision support system are identified and described. Depending on the end-user requirements, the system is equipped with necessary facilities in order to fulfill different task, such as command, control, communication, computer and information centers in case of emergency situations or military operations. This is a complex integrated system, which required special production and assembly operations. The main objective to limit the critical infrastructure destruction and to prevent human loses.*

Keywords: Command, Control, Communication, Computers, Intelligence

1. Introduction

The industrial development and population density growth in urban centers, from the last half century, lead to an increase in electrical power consumption (for heating, lighting, public transportation, telecommunication networks, antennas).

Another consequence of the evolution is the diversification of economic activities using, producing and trading hazardous materials.

The changes from the last two decades have shown that the society vulnerability has increase also due to critical infrastructure lack or degradation, making it susceptible to different threats and risk sources.

The definition of what constitutes an EU critical infrastructure would be determined by its cross border effect which ascertains whether an incident could have a serious impact beyond the territory where the installation is located.

¹Assoc. Prof., Ph.D. Eng., Power Engineering Faculty, University “Politehnica” of Bucharest, Romania (e-mail: sorina_costinas@yahoo.com).

²Prof. Ph.D., Eng., Faculty of Mechatronics and Armament Integrated Systems, Military Technical Academy, Bucharest, Romania (chereches@mta.ro).

³Teach. Assist., Ph.D. Student, Eng., Faculty of Mechatronics and Armament Integrated Systems, Military Technical Academy, Bucharest, Romania, (asava@mta.ro).

⁴Eng., S.C. AEROSTAR S.A., Bacău, România, (elena.ionita@yahoo.com).

⁵Prof., PhD, Eng., Power Engineering Faculty, University “Politehnica” of Bucharest, Romania.

