

MILITARY COMMUNICATIONS SYSTEMS MODERNIZATION ACCORDING TO NEW OPERATIONAL, INFORMATIONAL AND TECHNICAL REQUIREMENTS OF THE BATTLESPACE

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Abstract: *The paper highlights, briefly, new developments and approaches, experiments in the modernization of tactical communication systems, the field most requested in theaters of operations. In the second place, the preparatory measures for the transition from analog to digital technology concomitant with the implementation of the new data-centricity concept. The results obtained in scientific research and new and various revolutionary technical products have a strong impact, many of them already requested and purchased. These are presented in the documents developed by specialized bodies at the end of 2023.*

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1. Introduction

Modern military communications systems will be based on rapid installation, sheltering and masking, electronic protection measures against discovery by detection in any area of the electromagnetic spectrum. Anyway, the discovery must be accepted as a risk and the physical protection of the units in the device against direct and indirect fire executed with different categories of weaponry is necessary. Likewise, those arising from attacks carried out with special or non-conventional forces behind the contact alignment, in the tactical and operational depth, modern military communications must resist acts of sabotage or the destruction of some of their parts, continuing to function with reduced capacity for processing and transmitting information.

2. The electronic actions of potential adversaries

The communication systems must be designed, made and used in such a way as to resist or reduce the effects of physical actions such as the following¹:

- anti-radiation missiles that are directed at the electromagnetic beam;

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¹ Timofte, Gr., *Concepte si cerinte privind sistemele de comunicatii militare*, AISM Publishing House, Bucharest, 1999.