

## **Management Information Systems for Electronic Warfare Command and Decision Support**

Brett van Niekerk<sup>1</sup>, Christo Cloete<sup>2</sup>  
*<sup>1</sup>School of Management, IT and Governance  
University of KwaZulu-Natal*  
Email: [brettvn@gmail.com](mailto:brettvn@gmail.com)

*<sup>2</sup>Defence, Peace, Safety and Security  
Council for Scientific and Industrial Research*  
Email: [ccloete@csir.co.za](mailto:ccloete@csir.co.za)

### **Abstract**

The electromagnetic spectrum is becoming congested with the number of available wireless communication systems; the implications are that modern battlefields will have many electromagnetic signals. Electronic warfare commanders need sufficient information to allow them to manage their own spectrum, to identify threats, and to deny adversaries' use of the spectrum. In this paper, the concepts of integrated electronic warfare and spectrum battle management are introduced, and the relevant information requirements are discussed. A high level design of an electronic warfare information system is proposed to meet these requirements. The objective of the system is to provide electronic warfare commanders with relevant information to effectively manage the complex electromagnetic battlefield.