



Contribution ID: 45

Type: **not specified**

Role of Operations Research and Wargaming in Military Decision Making and Decision Support

Monday, 21 July 2025 12:45 (20 minutes)

The integration of Operations Research (OR) and Wargaming into military decision-making and decision support systems has become increasingly critical in modern defense strategy and operations. Operations Research plays the synergistic role in enhancing strategic, operational, and tactical decisions. Operations Research provides quantitative analysis and optimization techniques to evaluate complex scenarios, allocate resources efficiently, and predict outcomes. Wargaming, on the other hand, offers a dynamic and interactive environment to simulate real-world combat situations, test hypotheses, and assess the human and organizational factors affecting decisions. The combination of OR's analytical rigor and Wargaming's experiential insights creates a robust framework for military leaders to develop, test, and refine strategies in a controlled yet realistic setting. This dual approach supports decision-making by improving situational awareness, fostering adaptive thinking, and enabling proactive responses to emerging threats. Case studies and historical examples are presented to illustrate the effective application of these tools in military contexts, highlighting their contributions to successful mission planning, execution, and post-action review.

Primary author: Dr ÖZKİL, Altan (Atılım University)

Presenter: Dr ÖZKİL, Altan (Atılım University)

Session Classification: Invited Talk

Track Classification: Mathematics: Applied mathematics