CCOE Online Seminar Series

Unveiling the Power of Serious Gaming

Executive Summary

Amid the rapidly evolving landscape of global security threats, innovative training and analysis solutions within a civil-military context have become essential. The NATO Civil-Military Cooperation Centre of Excellence (CCOE) recently hosted a webinar with the title *Unveiling the Power of Serious Gaming*, to delve into the transformative potential of serious gaming in military and civilian contexts. This event brought together experts, practitioners, and academics to explore how serious gaming can enhance training, analysis, and concept development.

The seminar featured distinguished speakers from the U.S. Marine Corps Warfighting Laboratory and the University of Applied Science Regensburg (Ostbayerische Technische Hochschule Regensbrug short 'OTH Regensburg'), alongside experts from CCOE who shared diverse approaches to integrating serious gaming within their respective organizations. Key contents focused on the analytical applications of serious gaming, the role of motivation, and the use of serious gaming to test and refine new concepts and innovations. The presentations highlighted how serious games bridge theoretical knowledge with practical applications, enhancing decision-making, collaboration, and adaptability in complex scenarios while providing valuable analytical insights. The seminar also underscored the potential of serious gaming to enrich Civil-Military Cooperation (CIMIC) education. Examples from CCOE's serious games demonstrated how personnel can be prepared for diverse scenarios, from civil preparedness to multi-domain operations.

A central insight emphasized the importance of well-crafted research questions in guiding game development, as meaningful outcomes rely on aligning game design with clear objectives. Another critical finding addressed the role of motivational aspects in enabling critical analytic thinking (CAT), which is essential for producing high-quality analytical outcomes but often inadequately represented in traditional game design. The framework EPAMOS (Empirische Analyse motivierender Spielelemente/Empirical analysis of motivating game elements) developed by a research group at the Technical University of Nürnberg was introduced as an actionable tool for incorporating motivational elements effectively. Additionally, within the CIMIC community, the use of serious games for concept development and experimentation remains underutilized despite its significant benefits. Recognizing this, the CCOE is actively developing capabilities to harness serious games as powerful tool for the development of CIMIC.

Concluding with an engaging discussion, experts exchanged their perspectives on terminology. Mr. Noel and Ms. Miller argued that *wargaming* is a broad term encompassing both military and non-military scenarios. Prof. Bresinsky preferred *crisis gaming* over *wargaming* to avoid military-centric perceptions and to better address non-military scenarios. Mr. Stolk viewed *serious gaming* as a broad term for all gaming with a serious purpose, while *wargaming* specifically refers to military simulations. Participants and experts furthermore shared ideas on developing a CIMIC wargaming community across NATO and integrating innovative methodologies into training programs. The event reaffirmed the value of serious gaming as a strategic tool to address today's complex challenges and drive forward-thinking solutions in military and civilian domains.