Record Nr. UNISA996466124803316 Defence Applications of Multi-Agent Systems [[electronic resource]]: **Titolo** International Workshop, DAMAS 2005, Utrecht, The Netherlands, July 25, 2005, Revised and Invited Papers // edited by Simon G. Thompson. Robert Ghanea-Hercock Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, 2006 **ISBN** 3-540-32835-1 Edizione [1st ed. 2006.] Descrizione fisica 1 online resource (XII, 142 p.) Collana Lecture Notes in Artificial Intelligence;; 3890 Disciplina 006.3/3 Soggetti Artificial intelligence Computer communication systems Software engineering Computer logic Programming languages (Electronic computers) Artificial Intelligence **Computer Communication Networks** Software Engineering Logics and Meanings of Programs Programming Languages, Compilers, Interpreters Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Discussion Paper -- Autonomous Agents and Multi -agent Systems (AAMAS) for the Military - Issues and Challenges -- I: Decision Support and Simulation -- Enhanced Maritime Situation Awareness with Negotiator Agents -- Agent-Based Parsimonious Decision Support Paradigm Employing Bayesian Belief Networks -- Distributed Decision-Making and Control for Agile Military Radio Networks -- Representing Dispositions and Emotions in Simulated Combat -- II: Unmanned Aerial Vehicles -- Application of Action Selection, Information Gathering, and Information Evaluation Technologies to UAV Target Tracking -- A

Multi-agent UAV Swarm for Automatic Target Recognition -- III:

Systems and Security -- Analysis and Run-Time Verification of Dynamic

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Security Policies -- Cognitive Agents for Sense and Respond Logistics -- A Mobile Agent-Based Middleware for Opportunistic Resource Allocation and Communications -- Invited Paper -- Armed Services: Challenges for Military Distributed Systems.

Defence applications are subject to some of the world's most demanding requirements for reliability, controllability, security, flexibility, and synchronization. The evolution of defence processes towards network enabled systems and rapid deployment scenarios, is creating an urgent demand for highly adaptive and autonomous information support systems. In particular there are requirements for reduced manpower in support roles, autonomous IT infrastructures, and automated logistics and planning, all of which provide significant scope for an agent-oriented solution set. The workshop addresses the use of agent systems and agent applications applied to defence scenarios in support of these requirements. This book constitutes the thoroughly refereed post-proceedings of the International Workshop on Defence Applications of Multi-Agent Systems, DAMAS 2005, held in Utrecht, The Netherlands in July 2005 as an associated event of AAMAS 2005, the main international conference on autonomous agents and multi-agent systems. The 10 revised full papers presented together with 1 invited article are organized in topical sections on decision support and simulation, unmanned aerial vehicles, as well as on systems and security.