

1. Record Nr.	UNINA9910816881703321
Titolo	Comparative analysis of technological and intelligent terrorism impacts on complex technical systems // edited by Nikolay A. Makhutov, Gregory B. Baecher
Pubbl/distr/stampa	Amsterdam ; ; Washington, DC, : IOS Press, 2012
ISBN	1-299-33335-4 1-61499-131-6
Edizione	[1st ed.]
Descrizione fisica	1 online resource (204 p.)
Collana	NATO Science for Peace and Security series. E, Human and Societal Dynamics, , 1874-6276 ; ; v. 102
Altri autori (Persone)	MakhutovNikolay A BaecherGregory B
Disciplina	363.32
Soggetti	Terrorism - Technological innovations Terrorism - Prevention - Technological innovations Information warfare - International cooperation
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Proceedings of the NATO Advanced Research Workshop on Comparative Analysis of Technological and Sociological Consequences of Terrorism, Moscow, Russia, 5-7 April 2011.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	COMPARATIVE ANALYSIS OF TECHNOLOGICAL AND INTELLIGENT TERRORISM IMPACTS ON COMPLEX TECHNICAL SYSTEMS; Preface; Contents; Comparative Methods For The Assessment Of Threats Of Terrorist and Unauthorized Actions; Risk evaluation of threats to critical infrastructure; Information Support to the Three Component Dynamic Model Development for Terrorist Risk Analysis; Controlling security risks with the MMO method; Technological and Intelligent Terrorism: Specific Features and Assessment Approaches; Regional Resilience and Security for Critical Infrastructure Technical Approaches To Supply Sea And Off-Shore Oil And Gas Objects Protection From Illegal ActionsManagement for Security Processes; Individual life safety risk criteria; Principles for creating of monitoring, diagnostics and protection systems in the view of potential terrorist attacks; Methodology for Investigation and Provision of Reliability and Safety of Complex Technical Systems; Vulnerability Assessment of Complex Civil Works Systems Using Expert-Opinion

Elicitation; Prevention and Liquidation of Emergency Situations of Man-made Character; Maritime Terrorism  
Incorporation of Manmade Risk Components into General Risk Management Systems for Dams  
Innovative Aspects Of Organizational Behaviour In Interests of Counterterrorism On Complex Technical Systems; Safety & Security Assessment to Prevent Terrorism Attack in Radioactive Waste Facilities in Albania; Stability of Social System under Terrorist Impacts; Uncertain System Management: The Redundancy as a Risk Mitigation Tool in Societal Technological Systems; Societal life safety risk criteria; Antiterrorism Protection and Protective Engineering Design; Subject Index; Author Index

---

Sommario/riassunto

Insider knowledge about a complex technical system, coupled with access to its elements, has the potential to be used for triggering the most disastrous of terrorist attacks. Technological terrorism is the unauthorized impact on a complex technical system with the intention of breaking down its protection and initiating secondary catastrophic processes to cause damage and loss outside the facility. Intelligent terrorism, on the other hand, is the unauthorized purposeful interference in the processes of design, construction or maintenance of a complex technical system, and is either aimed at increasing existing vulnerabilities or creating new ones. This book is based on the NATO Advanced Research Workshop (ARW) on 'Comparative Analysis of Technological and Intelligence Terrorism Impacts on Complex Technical Systems'. It lays the foundation for a risk-informed approach to modeling, analyzing, managing and controlling complex technical systems in the face of terrorist attacks. To formulate such an approach, it is necessary to combine the insights of a spectrum of disciplines across engineering, human and social sciences, and economics. The book explains how an understanding of the vulnerabilities of complex technical systems to terrorist attack can reduce these vulnerabilities and contain or limit the impact of terrorism, and also the way in which such an understanding is crucial to the development of a set of design criteria and codes which will take such vulnerabilities into account. The book also identifies areas of further research and opportunities for future exchange and collaboration.

---