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	Nota di contenuto	1. Preliminary -- 2. M&S BOK Core Areas and the Big Picture -- 3. Simulation as Experimentation -- 4. Simulation as Experience to Enhance Three Types of Skills -- 5. Simulation Games (Simulation as Experience for Entertainment) -- 6. Infrastructure -- 7. Reliability and Quality Assurance of M&S -- 8. Ethics -- 9. Enterprise (Economics of M&S) -- 10. Maturity -- 11. Supporting Domains: Computers and Computation -- 12. Supporting Science Areas -- 13. Supporting Engineering Areas.-14. Supporting Social Science and Management Areas -- 15. Philosophy and Modelling and Simulation -- 16. History -- 17. Core Research Areas -- 18. Trends, Desirable Features, and Challenges. .
	Sommario/riassunto	Commissioned by the Society for Modeling and Simulation International (SCS), this needed, useful new 'Body of Knowledge' (BoK) collects and

organizes the common understanding of a wide collection of professionals and professional associations. Modeling and simulation (M&S) is a ubiquitous discipline that lays the computational foundation for real and virtual experimentation, clearly stating boundaries—and interactions—of systems, data, and representations. The field is well known, too, for its training support via simulations and simulators. Indeed, with computers increasingly influencing the activities of today's world, M&S is the third pillar of scientific understanding, taking its place along with theory building and empirical observation. This valuable new handbook provides intellectual support for all disciplines in analysis, design and optimization. It contributes increasingly to the growing number of computational disciplines, addressing the broad variety of contributing as well as supported disciplines and application domains. Further, each of its sections provide numerous references for further information. Highly comprehensive, the BoK represents many viewpoints and facets, captured under such topics as: Mathematical and Systems Theory Foundations Simulation Formalisms and Paradigms Synergies with Systems Engineering and Artificial Intelligence Multidisciplinary Challenges Ethics and Philosophy Historical Perspectives Examining theoretical as well as practical challenges, this unique volume addresses the many facets of M&S for scholars, students, and practitioners. As such, it affords readers from all science, engineering, and arts disciplines a comprehensive and concise representation of concepts, terms, and activities needed to explain the M&S discipline. Under the leadership of three SCS Fellows, Dr. Ören, University of Ottawa, Dr. Zeigler, The Universityof Arizona, and Dr. Tolk, The MITRE Corporation, more than 50 international scholars from 15 countries provided insights and experience to compile this initial M&S Body of Knowledge.