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### Sommario/riassunto

This open access book examines key aspects of international cooperation to enhance nuclear safety, security, safeguards, and non-proliferation, thereby assisting in development and maintenance of the verification regime and fostering progress toward a nuclear weapon-free world. The book opens by addressing important political, institutional, and legal dimensions. Current challenges are discussed and attempts made to identify possible solutions and future improvements. Subsequent sections consider scientific developments that have the potential to increase the effectiveness of implementation of international regimes, particularly in critical areas, technology foresight, and the ongoing evaluation of current capabilities. The closing sections examine scientific and technical challenges and discuss the role of international cooperation and actions of the scientific community in leading the world toward peace and security. The book – which celebrates 60 years of IAEA Atoms for Peace and Development and the EURATOM Treaty – comprises contributions presented at the XX Edoardo Amaldi Conference, where eminent scientists, diplomats, and policymakers were able to compare national perspectives and update international collaborations.

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