Diplomacy and policy making may get all the attention when it comes to non-proliferation policy-making, but one aspect of the overall effort is carried out silently and in a largely uncoordinated fashion by law enforcement, international inspections, UN sanctions, financial sector restrictions and other interventions. The initiative includes those who work in export control that ask the questions and apply the brakes to prevent, or slow the acquisition of materials and equipment that could be used in an illicit effort to build nuclear weapons.

This book is a behind-the-scenes look at a black market that trades money for nuclear equipment and the counter-effort to halt these attempts. Largely a story originating with United Nations Resolution 1540 that requires nations signing on to create effective export controls, it is also a story about how these controls affect the free trade that now dominates the world economy. The mission of the controls: prevent single and “dual-use” materials from being acquired by nations bent on covertly achieving a platform to build nuclear weapons.

Preventing Black-Market Trade in Nuclear Technology is an ensemble effort using four editors and twelve other contributors. Such a large team allows for a wide breath of coverage. Chapters review the roles of the various components of black-market control such as intelligence, sanctions, law-enforcement, and financial constraints. Introductory chapters on the intricacies of illicit trade and its present and future landscape help ease the reader into the discussion. Later chapters cover filling the gaps in the field. The reader will find information on defeating black-market networks and initiating new, innovative ideas to combat illicit procurement. The last chapter is a summary by the editors summarizing the progress in the field, the gaps that require repair and future progress necessary to improve the counter-initiatives.

Although all the contributions are thorough treatments of their subjects, there are a few standout chapters – those that in particular, indicate the wide sweep of the book. For example, Chapter 11 is an interesting review of the Russian effort to stop black market networks. Though somewhat self-promoting, it does give an assessment of past and current Russian export control programs and its associated work especially with reference to the illicit nuclear program of Iran. A Russian view of international sanctions supports the discussion. That being said, a similar chapter on Pakistan’s work in the field - assuming that was possible – could have been ever so more impactful.

Matthew Bunn, one of the co-editors contributed to three chapters, one of which focuses on strengthening nonproliferation culture. The cultures referred to are those of private sector companies including their subsidiaries, research universities, and government laboratories doing work on or with nuclear technology. Each is a unique entity requiring distinctive approaches to countering black market activities. Consider the myriad number of private firms that produce single or dual use equipment and their production of materials that go into equipment such as centrifuges. Some are large firms that have the resources to train and bake in a non-proliferation agenda into their employees. Others are much smaller and therefore will find implementation of an internal nonproliferation program daunting. Even international corporations are challenged in this area because they must
reach into foreign offices and subsidiaries where the cultures have been home grown and set in place for long periods of time.

John Park, Leonard Spector and Ian Stewart have composed an interesting chapter on new initiatives to combat the illicit procurement of nuclear technology. The analysis includes the problems associated with thwarting the North Korean and Iranian programs. Solutions include circumventing the Chinese middlemen who have facilitated North Korean acquisition of nuclear equipment by paying these middlemen monetary rewards for exposing North Korean acquisition attempts. Another is to make a robust, concerted effort to retrieve illicitly acquired equipment from violating nations. This has heretofore not been done systematically. The latter could involve the Nuclear Suppliers Group, the International Atomic Energy Agency and the United Nations through its Security Council Resolutions. The private sector supply chain alluded to above can also be turned from an apparent liability into an asset. A “Good Practices for Corporate Standards” can be found in Annex A to this chapter. Here, eight principles that companies can adopt are outlined that support nonproliferation efforts.

The editors deliver a powerful concluding chapter that reviews the counter-capabilities relevant to each area previously covered: intelligence, law-enforcement, sanctions, export controls, private sector responsibilities, financial controls, international organizations and organizational culture change. Each is assessed for accomplishments and each receives a gap analysis with proposals for improvement. Probably the most telling assessment of the current collective black market counter-effort can be found here. As the editors write, had the A.Q. Khan network reawakened after falling asleep in 2000, they would find a much different landscape in which to operate. An astonishing array of obstacles comprised of organizations, policies, rules and norms now is in place. The efforts of intelligence organizations, law enforcement and the banking system that admittedly are far from perfect, have forced black market conspirators to devise innovative means to work around these counter-operations. One concludes that progress to slow or prevent black market procurement has come very far since 2000 but because the enemy did not cease efforts, more must be done to improve the chances of interdiction. The editors do not disappoint here. They identify important gaps such as the poor communications between stakeholders with much to gain from a strong proliferation regime such as the intelligence organizations, the international financial sector and law enforcement, all of which have legitimate issues regarding the free sharing of information. Another concern discussed is the variation in the interpretation of potentially illicit procurement requests among various sectors of the counter-effort. They are to be specific, not based on a common standard. Alarm bells sounding in the banking sector do not necessarily set them off in the law enforcement regime. Such inconsistency speaks to the uncoordinated nature of the counter-effort.

Despite the recommendations for improvement made in the Park, Spector, Stewart chapter, the editors supply their own unique solutions in the finale. Their effort here is practical, concrete, and (to the untrained mind – my own) eminently possible – assuming of course, the international and national political will exists to implement them. Recommendations such as the creation of a committee of industry nonproliferation consultants to advise governments and international organizations like the IAEA on the success or failure of current export controls and updating the illicit procurement strategies being used by black market participants, does not seem that difficult to do.

This book is systematic, comprehensive, and detailed. It is well edited with little redundancy unless required to drive home a point. If it doesn’t fill a gap in the literature about non-proliferation, it surely is an exhaustive update about black market activities. Its use as a teaching tool or as a supplemental text in the classroom is advised. As a reference and self-teaching tool, it also appears to be an excellent choice.

No doubt will remain that the largely silent army fending off proliferative black market efforts – disparate, uncoordinated, and spread amongst several sectors of the economy and that do not necessarily have non-proliferation as a primary goal or even understand it properly, has despite its flaws, proven to be a deterrent to black market activity. That said, like many human endeavors, the editors and contributors make it plain that it can stand improvement. Unlike many human endeavors, ignoring the call to improve these efforts could prove catastrophic.