

EXECUTIVE SUMMARY

The small arms and light weapons (SALW) issue currently being addressed by various governments, international organizations, NGO groups and individuals is not a new phenomenon. It took years to recognize this problem and it may take more years to even partially redress it. Much of what is being done at present amounts to little more than damage control. However, preventing a disease is always preferable to curing it. In this vein, this paper addresses developing trends in SALW, including non-lethal weapons and the potential of directed energy weapons (DEW) in an anti-personnel role. Its goal is to determine their possible impact and to suggest practical methods for ameliorating potential issues of concern (primarily within an arms control context). It also provides a general overview of new developments in this area and offers policy makers some suggestions in formulating strategies to address this issue.

New developments in small arms are generally evolutionary in nature. Those small arms currently entering inventories are not dramatically more effective than their predecessors. However, they are for more the most part lighter, easier to use and maintain. They are also capable of more discriminate fire, a development due in large part to their enhanced sights and target acquisition capabilities. New ammunition developments have further enhanced their lethality and/or effectiveness. Similar improvements have been made with regard to the capabilities of various light weapons. The most significant improvements can be found in the digitization of weapons systems, something which improves hit probability under all conditions. Small arms currently under research and development (R&D) are more complex and expensive largely because they are replacing two systems – the rifle and the grenade launcher, and because they are heavily reliant on a built-in digitized target acquisition and fire control system. These small arms systems are unlikely to be used in large numbers by non-state actors due to the potentially restricted availability, complexity and cost of these weapons.

Newer non-lethal weapons are presently being considered by numerous militaries and law enforcement agencies. Such weapons have not been an SALW issue to date; still, they could be, given the substances used and the policies under which they would be applied. DEW figure most prominently here, given the potential for the use of lasers in a blinding role. Continued examination of this development (including the application of appropriate constraints) is required.

The implementation of reasonable international and national constraints on most of these new systems is something well within the capability of most governments – if they chose to rigorously enforce existing treaties, agreements, codes and regulations. However, many of these arrangements must be updated so as to address the potential impact of DEW and other non-lethal weapons. As new SALW enter military and police inventories, the primary or secondary weapons being replaced should be destroyed. In other words, for every new SALW acquired somewhere a similar weapon should be destroyed. The only exception to this might be a provision for mobilization or expansion which could not be accommodated through the use of war reserves. Significant acquisitions of new small arms systems currently under R&D should