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# Introduction

This report summarizes the results of studies completed for the Verification Research Program of External Affairs and International Trade Canada on the potential of commercially available sources of overhead imagery for monitoring related to arms control verification, peacekeeping operations or similar purposes.

The first study investigates whether commercially available satellite imagery would be useful for verification of large-scale withdrawals of conventional forces. The withdrawal of Soviet forces from Afghanistan in 1988 and 1989 is used as a case study. Imagery of Kabul, Afghanistan was acquired before and after the first phase of the Soviet withdrawal. Change detection analysis is used to assess the extent to which the withdrawal of Soviet forces could be confirmed using the imagery.

The second study uses imagery of sites in Namibia and Angola to investigate whether commercial satellite imagery could supply useful information for initial planning of peacekeeping operations. This study focuses on whether civilian satellite imagery could provide useful information regarding military and civilian infrastructure, rather than the actual military forces themselves.

In the third study, commercially available airborne imagery rather than satellite imagery is the focus of attention. This study looks at methods of improving monitoring and reconnaissance for arms control verification or peacekeeping using commercially available aerial remote sensing systems.