## EARTH OBSERVATION SYMPOSIUM (B1) International Cooperation in Earth Observation Missions (1)

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## ADDRESSING TRANSNATIONAL SECURITY REQUIREMENTS THROUGH A COMMERCIAL SAR CONSORTIUM

## Abstract

The economic downturn has not only affected the way Americans live but how the U.S. government now does business. Most notably, on January 6, 2011, Defense Secretary Gates announced that the he would cut \$78 billion over the next five years from the Pentagon's long-term spending plan. The U.S. Department of Defense has no other option but to come up with cost effective and innovative ways of ensuring the security of its citizens and interests.

Remote sensing capabilities play an essential role in transnational security endeavors. Synthetic aperture radar (SAR) capabilities, as opposed to electro-optical systems, can produce high-resolution, weatherand daylight-independent, two-dimensional images of mapped areas. This study will examine the feasibility of using a commercial consortium of SAR imagery providers to address transnational security priorities. Three key areas will be addressed: 1) how will such a consortium be established (private vs. public; role of NGOs) and is there a business case to sustain a SAR consortium; 2) what legal and policy framework must be implemented in order to establish this consortium and enable data sharing between entities; and 3) which transnational security applications would benefit from one-meter, weather-independent SAR imagery (border security, energy security, climate change, drug trafficking and cultivation)?

In a time when defense budgets are exceedingly strained, are existing (or future) commercial SAR imagery options a viable solution to meeting transnational security requirements and increasing global coverage?