

Section IV: Emerging International Policy Issues

Access to satellite images, particularly high-resolution images, was once confined to a relatively small number of countries. Within these countries, the use of satellite imagery was largely dominated by highly trained experts working at defense and intelligence organizations, scientific projects, natural resource agencies, or in narrow commercial sectors, such as industries focused on exploring for energy resources. The advent of dedicated commercial observation satellites in 1999, along with a new generation of civilian imaging satellites and information systems, signals a fundamental expansion in international and public access to satellite imagery data. Section IV presents chapters that explore various aspects of this basic change in the degree of international and domestic access to satellite imagery. Some chapters focus on the international dimensions of proliferating imaging satellite technologies and expertise. Others assess the policy implications of having new types of imagery users, such as the news media and nongovernmental organizations (NGOs), with unprecedented interest in making use of higher resolution satellite imagery to support their activities.

In Chapter 20, Ann Florini and Yahya Dehqanzada conclude that greater transparency is inevitable as the barriers for countries to acquire their own earth-observation satellites diminish with the growing availability and affordability of satellite imaging

technologies. While recognizing that some countries can exploit this new source of information to support their military operations, the authors contend that—on balance—commercial observation satellites will enhance international security by contributing to growing global transparency. Broader access to data from higher-resolution imagery satellites will help the international community anticipate and document aggressive international behavior or even large-scale internal atrocities.

Taking a somewhat different perspective on the potential influence of commercial satellite imagery, Mark Gabriele offers a conceptual analysis of the international and domestic implications of transparency in Chapter 21. He accepts the notion the transparency—or open skies—is both inevitable and desirable in the long run as high-resolution imagery becomes readily available to all nations. Yet, Gabriele cautions, a destabilizing asymmetric international situation could arise between rival countries, such as India and Pakistan, if either side enjoys “unilateral transparency” by having an unequal advantage in access to high-resolution imagery of the other country. The author extends his exploration of the risks that asymmetrical access to information creates by considering the domestic implications of the effects of commercial satellite imagery on privacy rights.

Two chapters in Section IV assess how nonstate actors are likely to take advantage of their unprecedented access to commercial satellite imagery. In Chapter 22, Karen Litfin explores the role that arms control and nonproliferation activists, environmental groups, and NGOs concerned with human rights or humanitarian relief activities have in using satellite imagery to press for their agendas. She distinguishes among the potential capabilities of different types of NGOs to make effective use of imagery data in their work.

In comparison, Steven Livingston in Chapter 23 assesses the news media’s interest in taking advantage of high-resolution commercial satellite imagery within the context of other cutting edge information technologies, such as portable satellite uplinks and the increasingly ubiquitous camcorders, that have already greatly expanded the global reach of news organizations to remote areas and conflict zones. Livingston also discusses the challenges that news organizations, which are driven by relatively short turnaround times in acquiring and presenting information, face in acquiring timely satellite imagery and taking time for accurate imagery interpretation and sound analysis.

In Chapter 24, Bob Preston analyzes the regulatory landscape that shapes the legal and policy environment for the operations of U.S. commercial observation satellites. This chapter offers a detailed review of the legal basis for imposing restrictions on the operating practices of U.S. commercial remote

sensing firms. Preston gives particular attention to assessing the controversy concerning the government's authority to impose the so-called "shutter controls" on the collection and dissemination of commercial satellite imagery data for a particular region in the interests of national security, international obligations, or foreign-policy concerns, as defined by the Executive branch of the U.S. government.

Finally, John Baker explores in Chapter 25 the issue of imagery credibility that could arise as new users, such as NGOs and news media organizations, seek to take advantage of high-resolution commercial satellite imagery. Although these new "imagery activists" possess relatively limited expertise and experience in image interpretation and analysis, their use of overhead imagery is likely to attract much public attention. Baker analyzes the types of deliberate and inadvertent errors that could arise with greatly expanded access to commercial satellite imagery. He proposes various ways to improve the imagery-handling expertise of new users, including greater cooperation with the more-experienced imagery analysts found in government, industry, academia, and professional organizations concerned with remote sensing.