Civilian Satellite Remote Sensing: A Strategic Approach

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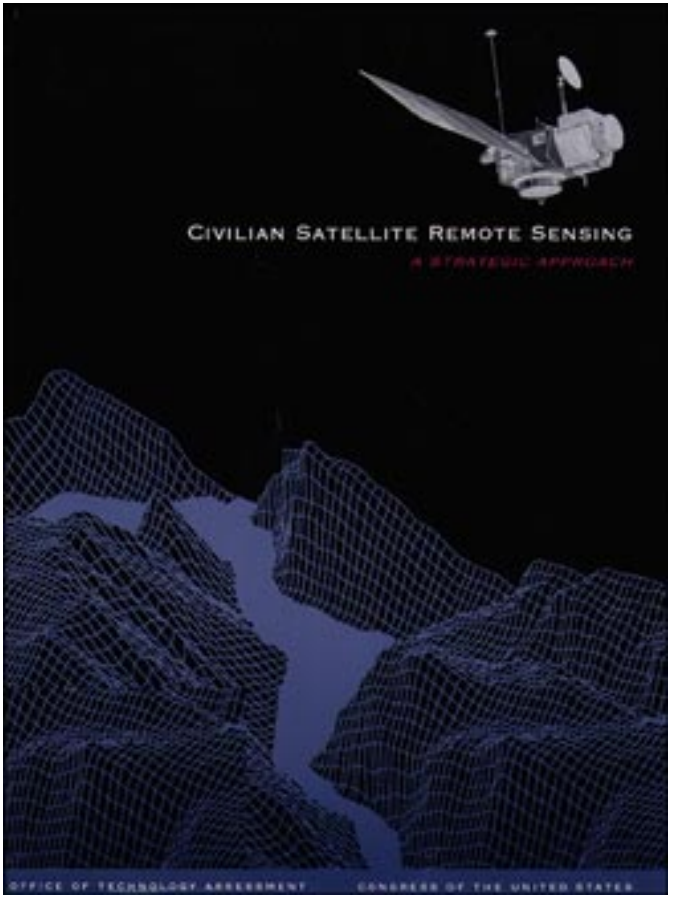

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Foreword

Over the next two decades, Earth observations from space promise to become increasingly important for predicting the weather, studying global change, and managing global resources. How the U.S. government responds to the political, economic, and technical challenges posed by the growing interest in satellite remote sensing could have a major impact on the use and management of global resources.

The United States and other countries now collect Earth data by means of several civilian remote sensing systems. These data assist federal and state agencies in carrying out their legislatively mandated programs and offer numerous additional benefits to commerce, science, and the public welfare. Existing U.S. and foreign satellite remote sensing programs often have overlapping requirements and redundant instruments and spacecraft. This report, the final one of the Office of Technology Assessment analysis of Earth Observations Systems, analyzes the case for developing a long-term, comprehensive strategic plan for civilian satellite remote sensing, and explores the elements of such a plan, if it were adopted. The report also enumerates many of the congressional decisions needed to ensure that future data needs will be satisfied.

In undertaking this effort, OTA sought the contributions of a wide spectrum of knowledgeable individuals and organizations. Some provided information; others reviewed drafts. OTA gratefully acknowledges their contributions of time and intellectual effort. OTA also appreciates the help and cooperation of officials with the Department of Defense, the National Aeronautics and Space Administration, and the National Oceanic and Atmospheric Administration.

ROGER C. HERDMAN
Director

Advisory Panel

Project Staff

Peter Blair
Assistant Director, OTA
Industry, Commerce, and
International Security Division

Alan Shaw
Director
International Security and
Space Program

Ray Williamson
Project Director

Arthur Charo

CONTRIBUTOR

Mark Suskin

CONTRACTORS

Mark Goodman

Cynthia Allen
Paul Bowersox
Leonard David
Madeline Gross
Russell Koffler
Paula Kern
Pamela L. Whitney

ADMINISTRATIVE STAFF

Jacqueline Robinson Boykin
N. Ellis Lewis

Workshop Participants

A National Strategy for Civilian Space-Based Remote Sensing

Scott Pace, Chairman
Policy Analyst
The RAND Corporation

Ghassem Asrar
EOS Program Scientist
National Aeronautics and Space Administration

Col. Bill Campbell
Office of the Undersecretary of Defense for Acquisition and Technology
Department of Defense

Gary Chesney
Director of Business Development
LORAL Corporation

Frank Eden
EOS Project Scientist
Martin Marietta Astrospace

John Hussey
Director
Office of Systems Development
National Environmental Satellite, Data, and Information Service
National Oceanic and Atmospheric Administration

Ronald G. Isaacs
Vice-President for Applied Research
Atmospheric and Environmental Research, Inc.

David Johnson
Study Director
Committee on National Weather Service Modernization
National Academy of Sciences

Russell Koffler
Consultant
Washington, DC

Berrien Moore
Director
Institute for the Study of Earth, Oceans, and Space
The University of New Hampshire

Carl Schueler
Manager
Advanced Development Programs
Hughes Santa Barbara Research Center

Chris Scolese
Office of Science and Technology Policy
Executive Office of the President

Philip Schwartz
Head
Remote Sensing Division
Naval Research Laboratory

Brent Smith
Chief
International and Interagency Affairs
National Environmental Satellite, Data, and Information Service,
National Oceanic and Atmospheric Administration

William Townsend
Deputy Assistant Administrator for Mission to Planet Earth
National Aeronautics and Space Administration

Robert Watson
Associate Director, Office of Science and Technology Policy
Executive Office of the President

Milt Whitten
Manager, DMSP/NOAA Programs
Lockheed Missiles and Space Company

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Richard Beck
National Aeronautics and Space Administration

Donald Blersch
Anser Corp.

Dixon Butler
National Aeronautics and Space Administration

Barbara Cherry
National Aeronautics and Space Administration

Lt. Col. Laura Kennedy
U.S. Air Force

Linda Moodie
National Oceanic and Atmospheric Administration

John Morgan
Eumetsat

Jeffrey Rebel
National Oceanic and Atmospheric Administration

Eric Rodenberg
World Resources Institute

Lisa Shaffer
National Aeronautics and Space Administration

Jack Sherman
National Oceanic and Atmospheric Administration

Ashbindu Singh
GRID

Milton C. Trichel
ERIM

Hassan Virji
START Secretariat

Greg Withey
National Oceanic and Atmospheric Administration