

*Data Format Standards for Civilian Remote
Sensing Satellites*

May 1993

OTA-BP-ISC-114

NTIS order #PB93-192290

**Data Format Standards for Civilian
Remote Sensing Satellites**



An OTA Background Paper



**Office of Technology Assessment
Congressional Board of the 103d Congress**

EDWARD M. KENNEDY, Massachusetts, Chairman

DON SUNDQUIST, Tennessee, Vice Chairman

Senate

ERNEST F. HOLLINGS, South Carolina
CLAIBORNE PELL, Rhode Island
ORRIN G. HATCH, Utah
CHARLES E. GRASSLEY, Iowa
DAVE DURENBERGER, Minnesota

House

GEORGE E. BROWN, JR., California
JOHN D. DINGELL, Michigan
(Vacancy)
AMO HOUGHTON, New York
MICHAEL G. OXLEY, Ohio

ROGER HERDMAN
(Nonvoting)

Advisory Council

JOSHUA LEDERBERG,
Chairman
Professor, Rockefeller
University
New York, New York

HERBERT (TED) DOAN
President (Ret.), The Dow
Chemical Company
Midland, Michigan

CHASE N. PETERSON
President Emeritus and
Professor
University of Utah
Salt Lake City, Utah

NEIL E. HARL, Vice Chairman
Professor, Department of
Economics
Iowa State University
Ames, Iowa

MICHEL T. HALBOUTY
Chairman of the Board & Chief
Executive Officer
Michel T. Halbouty Energy Co.
Houston, Texas

JOSEPH E. ROSS
Director, Congressional
Research Service
The Library of Congress
Washington, D.C.

CHARLES A. BOWSER
Comptroller General of the
United States
Washington, D.C.

JAMES C. HUNT
Distinguished Professor, Health
Sciences Center
University of Tennessee
Memphis, Tennessee

JOHN F.M. SIMS
Vice President, Marketing
Usibelli Coal Mine, Inc.
Fairbanks, Alaska

LEWIS M. BRANSCOMB
Director, Science, Technology &
Public
Policy Program, Harvard
University
Cambridge, Massachusetts

MAX LENNON
President, Clemson University
Clemson, South Carolina

MARINA v.N. WHITMAN
Professor, Institute of Public
Policy Studies
University of Michigan
Ann Arbor, Michigan

Acting Director

ROGER HERDMAN

The views expressed in this background paper are not necessarily those of the Board, OTA Advisory Council, on individual members thereof.

Earth Observation Systems Advisory Panel

Rodney Nichols, *Chair*
New York Academy of Sciences
New York, NY

James G. Anderson
Professor
Department of Chemistry
Harvard University
Cambridge, MA

David Goodenough
Chief Research Scientist
Pacific Forestry Center
Forestry Canada
Victoria, BC

D. James Baker
Director
Joint Oceanographic Institutions, Inc.
Washington, DC

Donald Latham
Corporate Director
Loral Corporation
Reston, VA

William Brown
President
ERIM Corporation
Ann Arbor, MI

Cecil E. Leith
Physicist
Lawrence Livermore National
Laboratory
Livermore, CA

Ronald Brunner
Professor
Center for Public Policy Research
University of Colorado
Boulder, CO

John H. McElroy
Dean of Engineering
The University of Texas at Arlington
Arlington, TX

Joanne Gabrynowicz
Associate Professor
Department of Space Studies
University of North Dakota
Grand Forks, ND

Molly McCauley
Fellow
Resources for the Future
Washington, DC

Alexander F.H. Goetz
Director
Center for the Study of Earth from Space
University of Colorado
Boulder, CO

Earl Merritt
Vice President, Research
Earthsat Corporation
Rockville, MD

Alan Miller
Director
The Center for Global Change
University of Maryland
College Park, MD

David T. Sandwell
Geological Resources Division
Scripps Institute of Oceanography
La Jolla, CA

Raymond E. Miller
Professor
Department of Computer Science
University of Maryland
College Park, MD

Dorm Walklet
President
TerraNOVA International
Los Altos, CA

Kenneth Pederson
Research Professor of International Affairs
School of Foreign Service
Georgetown University
Washington, DC

Albert Wheelon
Consultant
Los Angeles, CA

NOTE: OTA appreciates and is **grateful** for the valuable assistance and thoughtful critiques provided by the **advisory** panel members. The panel does not, however, necessarily approve, disapprove, or endorse this background paper. OTA assumes full responsibility for the background paper and the accuracy of its contents.

OTA Project Staff—Data Format Standards for Civilian Remote Sensing Satellites

Lionel S. Johns, *Assistant Director, OTA
Energy, Materials, and International Security Division*
(through February 1993)

Peter Blair, *Acting Assistant Director, OTA
Energy, Materials, and International Security Division*
(from February 1993)

Alan Shaw, *International Security and Commerce Program Manager*

Ray A. Williamson, *Project Director*

Brian McCue

Contractor

Madeline Gross

Administrative Staff

Jacqueline R. Boykin

Louise Staley

**Workshop-Formats, Media and Standards
for Civilian Remotely Sensed Data
October 2, 1992**

Donald Artis
Director
CETEC-ZC-B
U.S. Army Topographic
Engineering Center

Jill Butler, Major, USA
Central Imagery Office

Kenneth Daugherty
Chief Scientist
Defense Mapping Agency

Jim Frey
Program Manager
NPIC
National Exploitation Laboratory

D. Brian Gordon
Chairman
Tactical & Military Multispectral
Requirements Working Group
Defense Intelligence Agency

William Kennedy
Hughes STX

Lon Naylor
NPIC
Exploitation Support Group

NOTE: OTA appreciates and is grateful for the valuable assistance and thoughtful critiques provided by the workshop participants. The panel does not, however, necessarily approve, disapprove, or endorse this background paper. OTA assumes full responsibility for the background paper and the accuracy of its contents.