



CENDI

Federal STI Managers Group

*Presentation to
Board on Research Data and Information*

Ellen Herbst
*Director, NTIS
2008-10 CENDI Chair*

January 29, 2009



What is CENNDI?

- **Interagency group of senior federal STI managers who agree to cooperate by**
 - **Exchanging information and ideas**
 - **Sharing resources**
 - **Undertaking joint initiatives**
 - **From policy to standards to operations**
- **13 member agencies manage over 97% of the annual federal R&D budget**



CENDI Membership

An interagency group composed of senior STI managers:

- ◆ 13 major programs
- ◆ 4 independent agencies
- ◆ 7 cabinet departments
- ◆ 2 legislative branch agencies

CENDI began with four agencies and took it's name from the beginning letter of each member agency:

COMMERCE – National Technical Information Service (NTIS)

ENERGY – Office of Scientific and Technical Information (OSTI)

NASA – Scientific and Technical Information Program (STI)

DEFENSE – Defense Technical Information Center (DTIC)

INFORMATION



CENDI's Mission and Goals

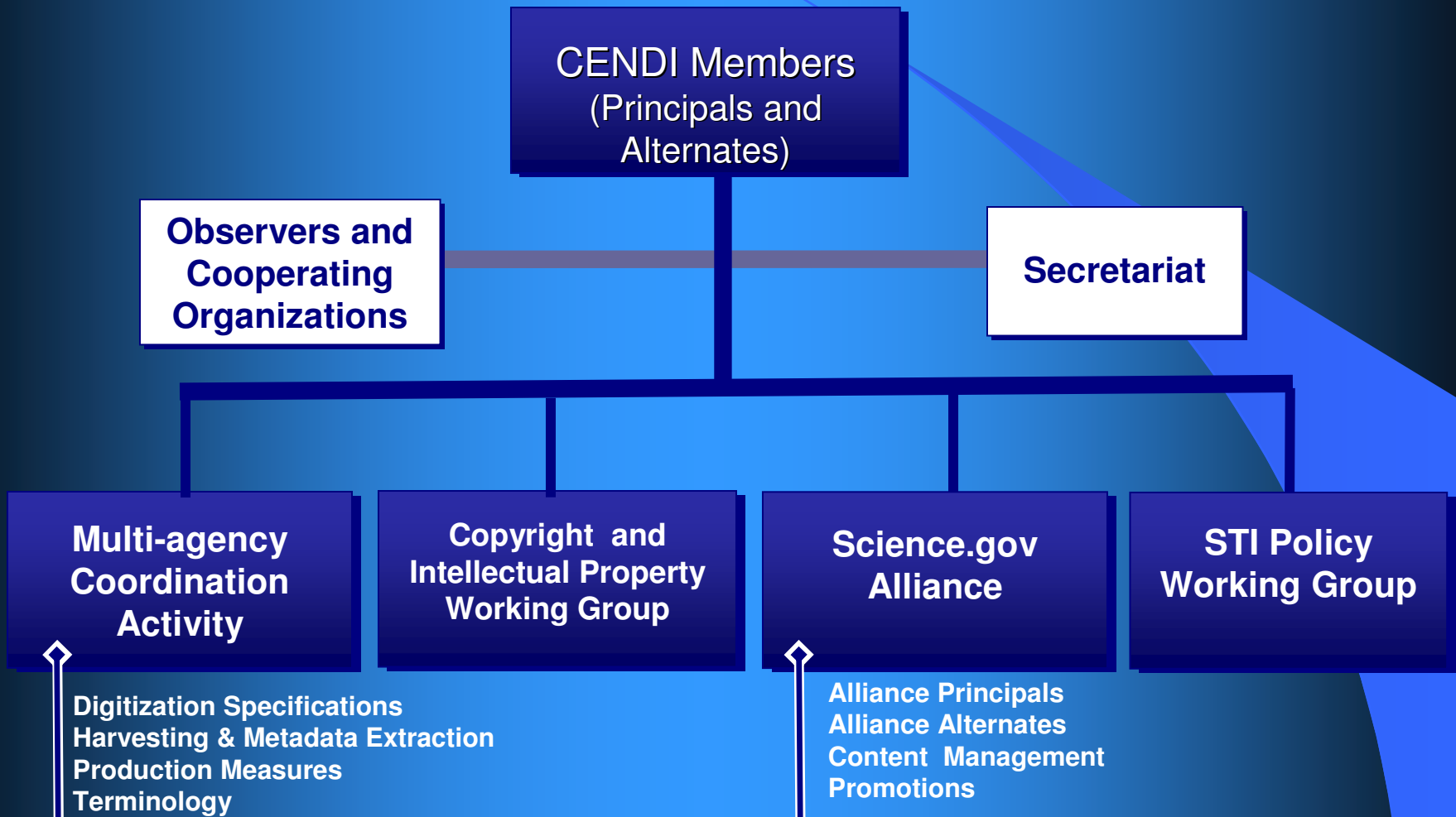
To help improve the productivity of federal science- and technology-based programs through effective scientific, technical, and related information support systems.

- 1. *STI Coordination and Leadership:*** Provide coordination and leadership for information exchange on important STI policy issues.
- 2. *Improvement of STI Systems:*** Promote the development of improved STI systems through the productive interrelationship of content and technology.
- 3. *STI Understanding:*** Promote better understanding of STI and STI management.



Missions Vary Across Programs

Functional Responsibility	NTIS	DOE	NASA	NLM	DTIC
Collect Manage and Disseminate Mission Information	X	X	X	X	X
Agency -Produced information	X	X	X	X	X
Worldwide Collection	X	X	X	X	X
Develop Agency Information Policy		X	X		X
Cover Scientific & Technical Information	X	X	X	X	X
Cover Business Information	X				X
Related Information	X		X		X
Customers Served					
Agency	X	X	X	X	X
Industry	X	X	X	X	X
Academia	X	X	X	X	X
The Public	X	X	X	X	
Perform Research and Development		X	X	X	
Provide Consultation Services				X	
Training			X	X	
Translation				X	
Information Analysis/Subject Analysis				X	X





CENDI cooperates with over 115 other organizations

<i>CATEGORY</i>	<i># Participants</i>
Legal and Policy	3
Legislative Branch	3
Judicial Branch	2
Executive Mission	40
Interagency	2
Non-gov't Organizations	19
Academia	4
Private	35
International	9

FY07-08 data



CENDI Planning Themes Set The Stage

2009 ~ Addressing National Challenges: Increasing STI Impacts

2008 ~ Complexity and Organizational Transformation

2007 ~ Federal STI: Changing Roles and Requirements

2006 ~ Knowledge Discovery and Meeting New Expectations

2005 ~ The Power of Cooperation: Collective Action for Mutual Benefit

**2004 ~ New Strategies and Operating Models for Federal STI Managers:
E-government / E-science**

2003 ~ Striking Balances: STI Requirements and Response

**2002 ~ Creating the Next Generation: How CENDI Can Have an Impact in
the New Environment**

**2001 ~ Designing an STI Architecture: Where Content and Technology
Meet**

2000 ~ 2020 Vision -- 2000 Realities



CENDI Meetings

Morning Program Agenda

July 8, 2008

Flying High and Diving Deep



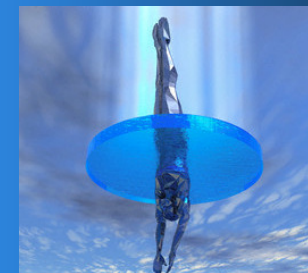
“Deep Indexing: Harnessing the Power of Data Discovery”

Mark Hyer

Vice President, Higher Education Publishing
ProQuest

“The Grid, the Cloud, and the Internet of Things -- Potential and Policy Implications”

Dr. Michael Nelson
Visiting Professor
Georgetown University





CENDI Meeting Presentations*

- **The Grid, the Cloud, and the Internet of Things.. Potential and Policy Implications**
Mike Nelson, Visiting Professor, Georgetown University
- **Deep Indexing: Harnessing the Power of Data Discovery**
Mark Hyer, Vice President, Higher Education Publishing, Pro Quest
- **Developing e-Science in Research Libraries**
Neal Rambo, Visiting Program Officer for Library Support for Research and e-Science, ARL University of Washington
- **Impacts and Changes on the Horizon for Scientific Communications and STI**
Clifford Lynch, Director Coalition for Networked Information
- **Increasing the Reach of Government Content: A Survey of Government Participation in the Web 2.0 Universe**
Michelle Springer, Project Manager, Digital Initiatives, Web Services Division, Office of Strategic Initiatives, Library of Congress
- **Fourth Mode of Science: On New Ways of Doing Science; the Interlinked Roles of Articles and Data**
Haym Hirsh, Director, Division of Information and Intelligent Systems, National Science Foundation, and Professor of Computer Science, Rutgers University

*Selected Meeting topics in 2007-08



CENDI Workshops of Interest to BRDI

- **Making the Web Work for Science: The Impact of e-Science and the Cyberinfrastructure**
- **The Search Imperative: It's Changing Nature, Continuing Impacts**
- **Visualization of Text Workshop (with NFAIS)**
- **2006 AAAS Symposium on Long-lived Data**
- **Copyright and Marking US Government Works**
- **Persistent Identifiers**
- **Managing and Preserving Electronic Resources: The OAIS Reference Model**



CENDI Projects and Publications

- **Science.gov – *celebrating launch of Version 5***
- **Copyright FAQs- *with periodic updates***
- **Multiple Persistent Identifier Resolution: An Analysis of Approaches**
- **Formats for Digital Preservation: A Review of Alternatives and Issues**
- **STI White Paper for New Administration (2009)**



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Applied Science & Technologies Biotechnology, Electronics, Engineering, Transport ...	Environment & Environmental Quality Air/Water/Noise Quality, Cleanup, Climate Change ...
Astronomy & Space Exploration, Planets, Space Technologies ...	Health & Medicine Disease, Health Care, Nutrition, Mental Health ...
Biology & Nature Animals & Plants, Ecology, Genetics, Pest Control ...	Math, Physics, & Chemistry Astrophysics, Chemicals, Mathematical Modeling ...
Computers & Communication Networks, Hardware, Software ...	Natural Resources & Conservation Ecosystems, Energy Resources, Forest Science, Mining ...
Earth & Ocean Sciences	Science Education

- 50 million pages of federal science information
- Science.gov Alliance
 - 15 U.S. science agencies
 - >30 databases; ~2000 web sites
- U.S contribution to WorldWideScience.org

Celebrating 5th Anniversary in 2008



STI Challenges and Opportunities

- Continue to build information infrastructure and Promote public access to Government-funded R&D results.
- Harness the potential of STI to support STEM education and the implementation of the America Competes Act (ACA).
- Support the role of OSTP in the STI infrastructure, including the support of the IWGDD Report Implementation.
- Use of STI in international diplomacy.



CENDI Interests in “Data”

- Technical and policy issues surrounding the management of scientific data.
- Monitor activities on new types of content
- Rewards for Scientific Data
- DHS assessment of STI clearinghouse models. (Role of Data)
- Interoperable institutional repositories outside government and their relationship with open access repositories within government



Other CENDI Areas of Interest

- Investigate/Experiment with Emerging Technologies
- Re-evaluate the role of bibliographic control and metadata given the digital environment
- Investigate user needs --Impact of the NextGen Consumer on CENDI Agencies
- Digitization of Legacy Collections
- Archiving and preservation issues and practices



“Without groups like [CENDI], the Information Infrastructure Initiative would have ended up a network looking for an application; CENDI provides the policy focus for both general STI needs and the specific applications in health, space, energy, defense, and insight into the needs of industry.”

~ Lewis M. Branscomb

Former Director of the Science, Technology, and
Public Policy Program of the JFK School of
Government at Harvard



Thank you
www.cendi.gov

Ellen Herbst
eherbst@ntis.gov
703-605-6400
www.ntis.gov