

Electronic Government Agency (Public Organization) (EGA) สำนักงานรัฐบาลอิเล็กทรอนิกส์ (องค์การมหาชน) (สรอ.)



Congratulations

Thank you

2016 Asia Pacific Open Data Summit
Peter Arzberger
UCSD







Open, Accessible, and Discoverable Data

Critical to Government and Science Opportunity for Collaboration



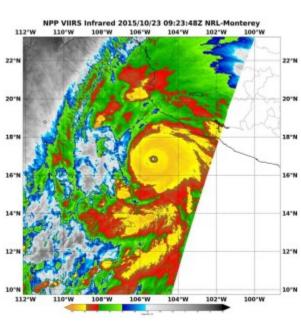
Smart & Connected Communities



Biodiversity and Habitat



Environmental Quality



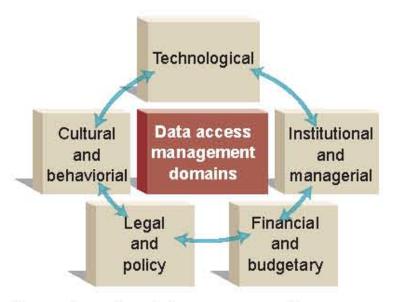
Disaster Management



Agriculture



Open Access / Public Access Policy, Technology, People



Domains of a data access regime.

Science 2004 March 19,



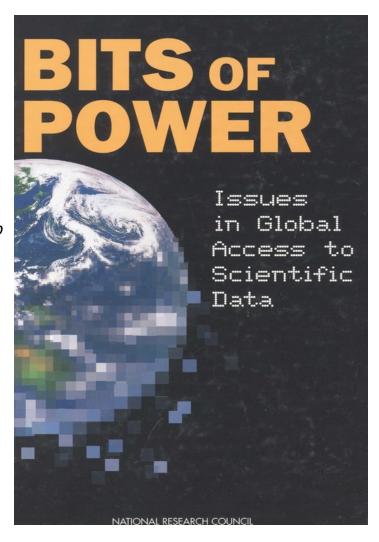
- build the social, technical bridges that enable open sharing of data
- "grass roots", "bottom-up" community effort towards global data sharing
- NSF funding

[NSF] "continues its commitment to expand public access to the results of its funded research. Public access is intended to accelerate the dissemination of fundamental research results that will advance the frontiers of knowledge and help ensure the nation's future prosperity" F. Cordova, Director, NSF, 3/18/15

"The value of data lie in their use."

Bits of Power: Issues in Global Access to Scientific Data. NAP. 1997

- Full and open access to scientific data should be adopted as the international norm for the exchange of scientific data derived from publicly funded research.
 - The public good interests in the full and open access to and use of scientific data need to be balanced against legitimate concerns for the protection of national security, individual privacy, and intellectual property.
- An integrative research, infrastructure, education, policy and governance approach is required
 - All components!
 - Internationally!



PRAGMA: A Community of Practice

Enabling the Long Tail of *Team* **Science**



Virtual Scientific Expeditions





Scientific Expeditions

Students and Strategic Partners

After Students and Strategic Partners

After Students and Strategic Partners

After Students Studen



APPLICATION VIII

OTHER NETWORKS

Trust Envelop



PRAGMA Students

PRAGMA Member Sites

PRAGMA Community

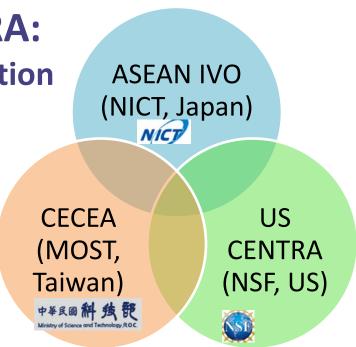
PRAGMA and CENTRA:

Frameworks for Collaboration

 CENTRA: <u>C</u>ollaborations to <u>En</u>able <u>Transnational Cyberinfrastructure</u> <u>Applications</u>



- Promotes scientific advances at the intersection of
 - Applications: smart and connected communities, environmental monitoring, disaster management
 - Cyberinfrastructure: software-defined systems for datasharing, middleware interoperability, coordination ...
- Build next generation of collaboration networks of people





PRAGMA and CENTRA: Marketplaces of Ideas

We Welcome
Your Participation in and
Collaboration with
PRAGMA 31!

Thank You







EXTRA SLIDES

NSF Public Access



US Office of Science and Technology Policy:

directs federal agencies to develop plans to make *publicly* available to the "greatest extent and with the fewest constraints possible and consistent with law" the "direct results of federally funded scientific research." (2013)

NSF'S PUBLIC ACCESS PLAN:

NSF15052

Today's Data, Tomorrow's Discoveries

Increasing Access to the Results of Research Funded by the

National Science Foundation

March 18 2015

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F. Cordova, Director, NSF, 3/18/15

NSF Provides the Foundation of Knowledge for Smart & Connected Communities

Human-Technology Interaction

Data analytics

Sociotechnical Sys

Urban Science

Cyber-Physical Systems

Resource

imization Resiliency

Security and Privacy

Smart Health

Advanced Networking

Cyber Learning

Education and Workforce Training

Why smart & connected communities, environment and disaster management?

- Inherently international and dependent on IT
- Technically challenging with dynamic requirements
- Intersecting and important to huge populations

