Federation of Earth Science Information Partners
Partnership Application

Please complete all sections to the fullest extent possible and forward completed application to: Carol Meyer, carol.meyer@earthsciencefoundation.org. If you have any questions, please contact her at 877.870.3747.

I. CONTACT INFORMATION

A. Primary Contact/Principal Investigator

Name: Kerstin Lehnert

Address: Lamont-Doherty Earth Observatory of Columbia University, 61 Route 9W, Palisades, NY, 10964

Phone: (845) 365-8506

Fax: (845) 365-8162

Email: lehnert@ldeo.columbia.edu

B. Designated Assembly Representative (could be same as above)

Name: Kerstin Lehnert

Address: See above

Phone:

Fax:

Email:

C. Other Contacts

Name:

Address:

Phone:

Fax:

Email:

Name:

Address:

Phone:

Fax:

Email:

Name:

Address:

Phone:

Fax:

Email:

II. ABOUT YOUR ORGANIZATION

   A.   ORGANIZATION/DIVISION/PROJECT NAME:

   Integrated Earth Data Applications (IEDA)

   B.   OVERVIEW OF YOUR PRIMARY ACTIVITIES in regards to the Earth Sciences Community (200 words or less)

   IEDA (Integrated Earth Data Applications) is a data facility that is based on a partnership between the Marine Geoscience Data System (MGDS, www.marine-geo.org) and the Geoinformatics for Geochemistry Program (GfG, www.geoinfogeochem.org) and funded by the US National Science Foundation under a Cooperative Agreement to ensure access and preservation of observational data from the Ocean, Earth, and Polar Sciences. IEDA's goal is to maximize the return on research investments, while enabling verification of research results and contributing to new science initiatives.

   MGDS and GfG evolved and grew over more than a decade, gaining broad community support for data services that have been developed in close partnership with the respective disciplinary user communities, based on an active understanding of practices, needs, and concerns pertaining to data acquisition and data use, and engaging investigators in the design of the systems, seeking their feedback, and educating the community about responsibilities and benefits of scientific data management and sharing. The close community liaison has provided the basis for success that has lead to a substantially improved level of sustainability as a data facility.

   IEDA works with funding agencies, editors, publishers, professional societies, and researchers, proactively driving the development of community standards and best practices for data submission, data publication, data documentation, and data archiving, and to advance implementation.

   C.   Please list and briefly describe the primary product(s) or service(s) that your organization provides (will provide) to the Earth Sciences community.

   IEDA provides data services that support the preservation, discovery, retrieval, and analysis of a wide range of observational field and analytical data types from the marine and terrestrial environments. These services include

Data Repositories & Registries:	Marine Geoscience Data System, Mediabank, Geochemical Resource Library, System for Earth Sample Registration, US Antarctic Program – Data Coordination Center
Data Access Applications & Portals:	GeoMapApp, Virtual Ocean, Earth Observer, EarthChem, PetDB, SedDB, Web services, GeoPrisms, Academic Seismic Portal, Ridge2000 Portal, Antarctic & Southern Ocean Data System
Data Syntheses:	Global Multi Resolution Topography, PetDB, SedDB, Deep Lithosphere Dataset, Geochron, NAVDAT
Community standards:	Cruise/sample/seismic/multi-beam metadata, geochemical data models, vocabularies, International Geo Sample Number, EarthChemXML
Community Services:	Data publication, data compliance support, science community outreach, educational modules

   IEDA guarantees long-term availability of its data holdings through partnerships with institutions and projects such as the National Geophysical Data Center and Columbia University Libraries. An IEDA data publication service has been implemented for scientists to publish their datasets with citable universal identifiers (DOIs).

   Governance of the International Geo Sample Number as a unique identifier for Earth Science samples is currently moved to an international implementation organization (IGSN eV). IEDA will operate the sample metadata clearinghouse and continue to provide sample registration and metadata management services

D. Please give a main website address for the proposed Partnership:

Web Address: http://www.iedadata.org

III. HOW YOUR ORGANIZATION WILL BENEFIT FROM/CONTRIBUTE TO THE EARTH SCIENCE INFORMATION PARTNERS (ESIP) FEDERATION

A.   Describe current or anticipated users of your products and services and how you think the Federation can help you better serve this population. (200 words or less)

IEDA data services are used by a global audience, primarily researchers, educators, and students from the marine solid earth sciences. Over the past year (Sept 2010 to Sept 2011), the Marine Geoscience Data System had approximately 20,000 unique users and the geochemical data systems between 1,000 and 4,500 unique users. The GeoMapApp tool was accessed by ca. 2,000 unique users per months. While most usage is from the US and Europe, significant usage comes from developing countries including India, Indonesia, and China.
Through membership in the ESIP Federation, IEDA hopes to improve its services to users by (a) extending cross-disciplinary linkages and data exchange with other data initiatives, center, or projects; (b) improving standardization of services and best practices to better integrate with other data, tools, and services; (c) advancing its technological infrastructure through information exchange with a broader Earth Science informatics community of practice

B.   Describe any Earth science technologies that you have developed and are willing to bring to the Federation's efforts to provide best-practices. (200 words or less)

IEDA has developed, implemented, and promoted data models, metadata schemas, vocabularies, and best practices for scientific cruises, multi-beam seismic data, sample-based data such as geochemical data, and samples themselves. Among these developments are the International Geo Sample Number as a global unique identifier for Earth Science samples, EarthChemXML as a data exchange protocol for geochemical data, and standards for geochemical data reporting in publications that were developed together with editors and publishers.

C.   Describe how your proposed membership would contribute to the efforts and the mission of one or more standing committees, working groups and/or clusters. See Page 3 for descriptions of the different activities of the various standing committees, working groups, and clusters. (200 words or less)

IEDA team members will actively participate in ESIP Federation activities, governance entities, and working groups, contributing and sharing expertise, technological developments, and community liaison for our particular disciplinary domains. We plan to regularly attend ESIP annual meetings, contribute to sessions and discussions, and organize special activities, events, or workgroups as opportunities as necessary or beneficial.

D.   Describe your own use of Earth science information and data and how you would see this use enhanced by your partnership in the Federation. (200 words or less)

We use Earth science information and data to support the research and education of the geoscience user community. Besides compiling and managing data in our data collections, we link to remote repositories within and outside our disciplines to enhance data discovery, data access, and data analysis for our users and to broaden discovery and access for our data holdings. We envision that partnership in the ESIP Federation will further these objectives through growing collaborations and partnership within the ESIP membership. We also hope that through the partnership in the Federation we will be able to advance standards and interoperability for our systems and within the community to support data exchange and the broader development of a sustainable Earth Science information and data infrastructure.

IV. YOUR CHOICE OF MEMBERSHIP TYPE. PLEASE PICK ONE.

ESIP-I (primarily a data center/archive)   ☐x

ESIP-II (primarily a research center)   ☐

ESIP-III (primarily applications and education)   ☐

ESIP-IV (primarily a sponsoring member) ☐

V. Any other comments about your proposed membership and its relation to the Federation that you wish to provide.

Thank you for your application for partnership in the ESIP Federation.

List of Federation Committees and Clusters

Administrative Committees

Executive Committee: Comprised of all standing and administrative committee chairs, ESIP Type Representatives, the President and Vice President of the Federation. Oversight body for most day-to-day activities of the Federation, acts on behalf of the Assembly between meetings.

Constitution and Bylaws: Provides counsel on matters related to the constitution and bylaws and other related issues (e.g. amendments to government documents)

Finance and Appropriations: Oversees financial resources of the Federation, including the annual budgeting process.

Partnership: Reviews and processes all applications for membership before making applications available for review by members of the Federation. Deals with other membership-related issues.

Standing Committees:

Commercial Development: Promotes a forum wherein commercial development of Earth science information can be fostered. (inactive)

Community Engagement: Provides a forum for the Federation to promote partner products and to engage new users for data products and services. (inactive)

Education: Provides a forum to make accessible to educators and learners at all levels in both formal and informal educational contexts the Earth science data, information, tools, and curricula available within the ESIP Federation.

Information Technology and Interoperability: Provides a forum for discussing information technology and interoperability issues of the Earth science community and serves as a central point for activities in this realm.

*Products and Service*s: Provides a forum for defining best practices and defining requirements for earth science products and services. Currently is involved in developing an inventory of partner products and services.

Clusters (presently active, April 2009):

Web Services
Semantic Web
Data Preservation and Stewardship
Decisions
Air Quality
Federated Search
Water