

Name of the Partnership/Initiative

The Encyclopedia of Life Support Systems (EOLSS) – the world biggest web-based archive as a transdisciplinary knowledge base of sustainable development .

Date of initiation: January 1996

Expected date of completion: The Inaugural Edition of EOLSS online will be officially released at the Johannesburg Summit in August 2002. It will start with a size of about 25 million words (equivalent to more than 40 printed volumes) and will mature during the year 2003 to its full size (around 120 million words) through regular updates to render the EOLSS as a living Encyclopedia. The training curricula for teachers and decision makers at all levels dealing with the problems of sustainable development will be prepared by the UNESCO-EOLSS Chairs during 2003.

Partners Involved:

For the preparatory work the following partners have been involved:

- A. Organisers: The EOLSS Publishers Ltd. (private organization), UNESCO
- B. Advisory Panels: Regional scientific panels from Asia, Africa and Latin America, National scientific panels from Russia, China, Japan, France, USA, the International Editorial Council with more than 200 distinguished personalities from all over the world.

For the operational phase : UNESCO-EOLSS Joint Committee was established in 1997 with the objectives of seeking, selecting, inviting and appointing more than 200 Theme Leaders for each Theme and monitoring the Themes development and the text quality.

A. Intergovernmental organizations: UNESCO

B. Major groups:

It mobilized a great number world's foremost scholars, experts, and policy-makers in all major fields, representing a broad spectrum of well-known leading academic and research institutions, professional organizations, government agencies, private enterprises, and policy planning bodies spread throughout the world, contributing to 'state-of-the art information and expert opinion on sustainable development.

C. Scientific organizations: UNESCO-EOLSS Chairs in the Universities from Poland, China, Peru, Jordan.

Leading Partner: UNESCO-EOLSS Joint Committee

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Main objectives of the Partnership/Initiative

BACKGROUND:

With the advent of the Rio Summit in 1992, the importance of holistic knowledge to support policies and decisions towards the goal of sustainable development is increasingly stressed in several quarters.

Knowledge bases in the various disciplines are both wide and deep and they do provide useful understanding of issues falling within the respective domains. But, due to the linear thinking on which they have grown in isolation, the knowledge provided by such disciplinary bases is very often inadequate for approaches to the resolution of major contemporary issues that require integrated knowledge of the complex behaviour of systems that range from individual organisms to the largest economic, technical, social, and political organizations. The prevailing trends toward increasing fragmentation, compartmentalization, and specialization in most academic disciplines run counter to the major need for knowledge integration or transdisciplinarity into a common pathway. The challenge is to transform piles of building materials stored in a host of isolated disciplinary warehouses into a coherent edifice of understanding, such that decision makers at all levels move from piecemeal insights about individual components and processes to a coherent vision of the system as a whole, a major project has been organized under the auspices of UNESCO to meet this challenge. The Encyclopedia of Life Support Systems (EOLSS) is being developed as a result of an unprecedented global effort.

FEATURES OF EOLSS:

It is, in fact, a global partnership among thousands of scholars aimed at creating an integrated knowledge base in support of sustainable development efforts. Thus, the EOLSS Project is a project in support of all other projects related to sustainable development irrespective at the level they have been carried out: local, governmental, regional or global.

- It addresses the issue of knowledge and education for sustainability
- It is a unique archive created as a valuable source of knowledge to help other projects related to sustainable development.
- It provides a basis for inspiration. In the words of Leon M. Lederman, Nobel Laureate in Physics, the EOLSS is “*the theme of humanity, embedded in nature and constrained to find ways of maintaining a relationship with nature based on understanding and respect*”. The EOLSS will be regularly updated to be a living encyclopedia, not merely a replicated publication.
- It is innovative project- a global effort towards the creation of an integrated knowledge base in support of sustainable development. It need not be replicated but it should be continued to enhance and update the knowledge base it develops. It is first to inform decisions in the process of development and to inspire leadership. It is innovative in the sense that it is aimed at developing a base of integrated knowledge that addresses the contemporary issues of the world.

Relationship with the objectives of Agenda 21:

The following are the categories of subjects covered in EOLSS:

- NATURAL, BIOLOGICAL, MEDICAL, SOCIAL, ECONOMIC SCIENCES AND HUMANITIES
- ENGINEERING AND TECHNOLOGY RESOURCES

- WATER SCIENCE AND ENGINEERING RESOURCES
- ENERGY SCIENCE AND ENGINEERING RESOURCES
- ENVIRONMENTAL, ECOLOGICAL SCIENCES AND ENGINEERING RESOURCES
- AGRICULTURAL SCIENCES AND RESOURCES
- HUMAN AND NATURAL RESOURCES POLICY AND MANAGEMENT
- DEVELOPMENT AND ECONOMIC RESOURCES
- INSTITUTIONAL AND INFRASTRUCTURAL RESOURCES
- TECHNOLOGY, INFORMATION, AND SYSTEMS MANAGEMENT RESOURCES
- REGIONAL SUSTAINABLE DEVELOPMENT REVIEWS

Each category covers subjects in units called themes. There are around 200 Themes in the EOLSS. Each theme is on average equivalent to one print volume of 500 standard pages. All of these subjects have relevance to the Agenda 21

Relationship to the UN Millennium Declaration:

EOLSS conforms with the Values and Principles of the UN Millennium Declaration, and, in particular with following clauses related to Peace, security and disarmament, Development and poverty eradication, Protecting our common environment, Human rights, democracy and good governance . All these subjects are covered in depth by the EOLSS.

Expected results:

In accordance with UNESCO's commitment for transfer and sharing of knowledge, **free access to eolsonline** will be provided for those universities in the least developed countries which have a demonstrated commitment to sustainable development and for disadvantaged individuals worldwide.

The curricula for the training of teachers and decision makers at all levels will be produced in different subject areas related to sustainable development.

Specific targets of the Partnership/Initiative and timeframe for their achievement

The Encyclopedia is designed to appeal to a wide spectrum of users.

- **University/College students** (undergraduates and graduates) who wish to introduce themselves to a particular subject in the life support systems.
- **Educators** interested in the subject areas of the EOLSS and who may wish to prepare a comprehensive coverage of these subjects for lecture and seminar presentations.
- **Professional practitioners and informed specialists** who wish to refresh and update their knowledge, and to relate their knowledge to applications and subjects transcending their own specialization.
- **Research personnel** who wish to inform themselves about innovations and new approaches to problem solving.
- **Policy analysts, managers, and decision makers** in the public and private sectors, including development officials and non-governmental organizations, who wish to equip themselves with the technical and systems management knowledge required to better incorporate science and technology in their decision-making.

The Encyclopedia starts with its Inaugural Edition (about 150 Themes) realised at Johannesburg during the World Summit on Sustainable Development (September 2002) and will mature to its full size(more 200 Themes) through regular updates during the year 2003. The UNESCO-EOLSS Chairs will prepare the training curricula during 2003.

Coordination and Implementation mechanism

Please provide a brief description of expected coordination/implementation mechanism of the Partnership/Initiative.

UNESCO-EOLSS Joint Committee is a coordinating mechanism for this Project

Core secretariat: A lean core secretariat manned by 3-4 persons with the ability to maintain an organizational, analytical and evaluation function with links to research capacity in other institutions and organizations. It is also be responsible for the functions of Joint Committee and other operations as the EOLSS publications, participation in the international activities, etc.

Network: EOLSS have a decentralised set up with functional nodes in different countries and regions—like “Knowledge Centres”, UNESCO-EOLSS Chairs, and a network of more than 6.000 leading experts, who are the contributors to the EOLSS.

Arrangements for funding

Please describe available and/or expected sources of funding for the implementation of the Partnership/Initiative (e.g. donor government(s); international organization(s)/financial institution(s); foundation(s); private sector; other major groups, etc.)

1. Funding for the development of EOLSS and functioning of the UNESCO-EOLSS Joint Committee and its Secretariat will necessary come from combination of sources:
 - core funding: from EOLSS Publishers, Ltd. under an existing Agreement with UNESCO
 - UNESCO contribution for functioning of Secretariat under an existing Agreements with the EOLSS Publishers.Ltd
2. Funding for the establishment of training curricula
 - budgets of the UNESCO-EOLSS Chairs

Arrangements for capacity building and technology transfer

Please include information if the Partnership/Initiative provides for training, informational support, institutional strengthening and/or other capacity building measures:

EOLSS objectives is the creation of an integrated base as a source of knowledge for Sustainable development and global security to lead to fulfilment of human needs through simultaneous socio-economic and technological progress and conservation of the Earth's natural systems.

In accordance with UNESCO's commitment for transfer and sharing of knowledge, **free access to eolssonline** will be provided for those universities in the least developed countries which have a demonstrated commitment to sustainable development and for disadvantaged individuals worldwide.

An EOLSS knowledge base will be used for preparing curricula and for training of teachers and decision makers at all levels, who concern with the problems of sustainable development .

Please also provide here a brief description of expected arrangements for technology transfer (if applicable).

The project is dealing with the transfer of knowledge

Links of Partnership/Initiative with on-going sustainable development activities at the international and/or regional level (if any)

- The national and regional sustainable development reviews, carried out by scientific organizations of corresponding regions or countries constitute the part of the EOLSS

For example: in May 2001 the forerunner to the Encyclopedia of Life Support Systems, the publication *OUR FRAGILE WORLD: Challenges and Opportunities for Sustainable Development* was published in two hardback volumes of about 2300 pages, with an accompanying CD-ROM. It presents the vision and thinking of over 200 eminent personalities related to the state of: Earth's natural resources, social resources, institutional resources, and economic and financial resources. It also includes Regional and National Sustainable Development Analyses of the regions: North America, Latin America and the

Caribbean, Africa , European Union, the German State of Baden -Wurttenmberg, and the countries, like China, Switzerland, Slovak Republic and Latvia.

The **eolssonline** will include other Sustainable Development Reviews.

Monitoring Arrangements

Please describe expected arrangements for monitoring of progress in the implementation of Partnerships/Initiative after it will be launched at the WSSD:

(e.g. frequency/modalities of preparation of progress reports; electronic updates, newsletters, etc)

Arrangements for monitoring of progress will include:

- UNESCO-EOLSS Joint Committee –a yearly sessions
- Regular Meetings of Bureau of Joint Committee
- Internal progress reports
- Reports on the EOLSS activities in the quarterly publication: Terra Curanda, magazine of Tilburg University, the Netherlands

Other relevant information:

Web-site (if available):

A websites dedicated to EOLSS : www.eolss.org, www.eolss.net

Name and contact information of the person filling in this table:

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