

Activity-ID: \_\_\_\_\_

PROPOSAL FOR *infoDev* ACTIVITY

**INTERCEPT**

**I**nteractive **C**ontextual **E**nvironmental **P**lanning **T**ool

for developing countries

Submitted to the World Bank (Industry & Energy Department)

25 March 1998  
Union of International Associations, Brussels  
Development Alternatives, Delhi



*InfoDev* Proposal for

## **INTERCEPT**

Interactive Contextual Environmental Planning Tool

### **TABLE OF CONTENTS**

<b>1. Name of Activity.....</b>	<b>1</b>
<b>2. Date of Proposal .....</b>	<b>1</b>
<b>3. Short Description of Activity.....</b>	<b>1</b>
<b>4. Proponent.....</b>	<b>1</b>
<b>5. Participating Organisations .....</b>	<b>1</b>
<b>6. <i>infoDev</i> Program Objectives .....</b>	<b>2</b>
<b>7. Category of Activity .....</b>	<b>2</b>
<b>8. Total Activity Cost .....</b>	<b>2</b>
<b>9. Funding Requested from <i>infoDev</i> .....</b>	<b>4</b>
<b>10. Abstract.....</b>	<b>5</b>
<b>11. Detailed Description.....</b>	<b>6</b>
<b>12. Evaluation Indicators .....</b>	<b>15</b>
<b>13. Geographic Scope.....</b>	<b>16</b>
<b>14. Creation and acquisition of physical or intellectual assets .....</b>	<b>17</b>
<b>15. Key Contacts.....</b>	<b>17</b>
<b>16. Staffing.....</b>	<b>18</b>
<b>17. Timetable .....</b>	<b>21</b>
<b>18. Activity Budget.....</b>	<b>23</b>
<b>19. Source of Funds.....</b>	<b>25</b>
<b>20. World Bank Staffing Support .....</b>	<b>25</b>



**ANNEXES**

*Separately bound in the hardcopy version*

**Annex 1: The Partners ..... 1**

**Annex 2: DAINET project funded by Ford Foundation ..... 1**

**Annex 3: INFO2000 Contract..... 1**

**Annex 4: Powerpoint Presentation of Prototype INFO2000 Product. 1**

**Annex 5: Products of INFO2000 Definition Phase Project ..... 1**

**Annex 6: INFO2000 Workpackages ..... 1**

**Annex 7: Information Sources and Features ..... 1**

**Annex 8: Sample of Sustainable Development Internet Sites..... 1**

**Annex 9: Key User Groups and Liaison ..... 1**

**Annex 10: Internet Marketing Strategy ..... 1**

**Annex 11: Business Plan ..... 1**

**Annex 12: Schedule of deliverables..... 1**

**Annex 13: Draft INFO2000 Consortium Agreement ..... 1**

**Annex 14: CVs of Key Personnel ..... 1**



PROPOSAL FOR *infoDev* ACTIVITY

Activity-ID: \_\_\_\_\_

**1. Name of Activity**

INTERactive Contextual Environmental Planning Tool (INTERCEPT)

**2. Date of Proposal**

26/03/1997

**3. Short Description of Activity**

This activity builds upon the existing environmental information system being created through a four-partner INFO2000 project (40% EU funded). *infoDev*'s INTERCEPT project creates a networked, interactive and multimedia planning tool for use by government, non-government and commercial agencies, notably in developing countries, who are advancing sustainable development and the creation of economically-viable environmental services.

**4. Proponent**

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**5. Participating Organisations****Funded by *infoDev*:**

- Union of International Associations, Brussels, Belgium ("UIA") <http://www.uia.org/>
- Development Alternatives, New Delhi, India ("DA") <http://www.ecouncil.ac.cr/devalt/>

**Not funded by *infoDev*:**

- World Conservation Monitoring Centre, Cambridge, UK ("WCMC")
- Nordic Innovation Centre, Norwegian School of Management, Oslo, Norway ("NSM")
- AIDEnvironment, Amsterdam, Netherlands ("AIDE")
- Institute for European Environmental Policy, Arnhem, Netherlands ("IEEP")

**Governmental funding partner:**

- European Commission (INFO2000 programme, Directorate-General XIII) ("EU")

See [Annex 1](#) for further detail on organisations and "Staffing" (page 18) for their roles.

## 6. *infoDev* Program Objectives

Three *infoDev* programme objectives are directly served by the INTERCEPT project. They are (in order of project relevance):

- Objective IV: Promoting protection of the environment and natural resources.
- Objective I: Creating market-friendly environments to accelerate global access to information and communication
- Objective V: Increasing the efficiency, accountability and transparency of governments.

## 7. Category of Activity

This project crosses and integrates several *infoDev* activity areas. The following apply, in whole or part (in no particular order):

- Category I: Consensus Building and Awareness Raising
  - Subcategory B: Specialised sectoral networks
- Category II: Information Infrastructure Strategies
  - Subcategory C: Feasibility studies for information infrastructure projects
- Category IV: Demonstration Projects
  - prototype interdisciplinary knowledge systems

## 8. Total Activity Cost

INTERCEPT will inherit a considerable legacy in terms of financial investment and accumulated expertise and data. The tables on the following page make a distinction between (i) the total cost of the “already funded” INFO2000 activity, (ii) the total cost of the proposed new INTERCEPT activity for *infoDev*, for which matching funds are sought, and (iii) the total cost of the two activities combined.

There are cost efficiencies in interfacing the two projects; the total cost of the combined activities is less than the sum of their individual costs if they were to be undertaken separately. In effect, INFO2000 is undertaking a good deal of the R & D development of the INTERCEPT information system. In this way, and also by sharing of costs for coordination and certain other tasks during 1998, INFO2000 makes significant contribution to INTERCEPT, equivalent to an estimated \$180,000 worth of matching funds.

INTERCEPT will also benefit from a sizeable Ford Foundation grant that DA has acquired to establish DAINET -- specifically to build its capacity to provide independent sector information services to the Indian subcontinent over a five year period (1997-2001) (see [Annex 2](#)). DA has estimated that by providing equipment and personnel resources, redirecting certain work priorities and creating synergy between the two activities, it will be able to contribute the equivalent of \$110,000 directly to meet INTERCEPT’s objectives.

<b>Already Funded:</b>		<b>INFO2000 Project</b>		
<b>TOTAL PROJECT COST (ECU 1,499,935):</b>		<b>Φ\$ 1,619,930</b>		
BY CONTRIBUTION:	European Union	40%	640,530	
	UIA	25%	506,430	
	Other NGO partners	35%	472,970	1,619,930
BY PHASE:	Definition Phase (1997)	16%	253,240	
	Implementation Phase (1998/99)	84%	1,367,690	1,619,930

Φ converted into \$US from ECU using Interbank rate of 08/03/98 = 1.08, rounded off to nearest tens of dollars

<b>New Funding Requirement:</b>		<b>INTERCEPT Project</b>		
<b>TOTAL PROJECT COST:</b>		<b>\$US 610,000</b>		
CONTRIBUTIONS:	INFO2000 (common activity)	30%	180,000	
	UIA (new)	11%	70,000	
	DA	18%	110,000	
	infoDev	41%	250,000	610,000

<b>Combined Projects:</b>		<b>Joint INFO2000 / INTERCEPT Activity</b>		
<b>TOTAL JOINT PROJECT COST:</b>		<b>\$US 2,049,930</b>		
CONTRIBUTIONS:	European Union	31%	640,530	
	UIA	28%	576,430	
	Other INFO2000 NGO partners	23%	472,970	
	DA	6%	110,000	
	infoDev	12%	250,000	2,049,930

## 9. Funding Requested from *infoDev*

*excluding World Bank staffing support*

<b>TOTAL REQUESTED FROM <i>infoDev</i></b>			<b>\$ 250,000</b>
<b>INDICATIVE SCHEDULE OF JOINT FUNDING (INFO2000 / INTERCEPT )</b>			
1998	INFO2000	\$ 90,000	
<b>1998 (Oct)</b>	<b><i>infoDev</i></b>	<b>\$ 30,000</b>	
1998	DA	\$ 20,000	\$ 140,000
1999	INFO2000	\$ 90,000	
<b>1999</b>	<b><i>infoDev</i></b>	<b>\$ 90,000</b>	
1999	DA	\$ 40,000	\$ 220,000
2000	INFO2000	ZERO	
<b>2000</b>	<b><i>infoDev</i></b>	<b>\$ 65,000</b>	
2000	DA	\$ 30,000	
2000	UIA (new)	\$ 35,000	\$ 130,000
2001	INFO2000	ZERO	
<b>2001</b>	<b><i>infoDev</i></b>	<b>\$ 65,000</b>	
2000	DA	\$ 20,000	
2000	UIA (new)	\$ 35,000	\$ 120,000
<b>SUMMARY OF FUNDING FOR INTERCEPT</b>			
Total contributions from	<i>infoDev</i>	\$ 250,000	41%
	Others	\$ 360,000	59 %
			\$ 610,000

### NOTES ON INTERCEPT MATCHING FUNDS

- 34% of 1998/99 INFO2000 budget contributes directly to INTERCEPT as matching funds. Total \$180,000 of matching funds.
- New contribution from UIA = 27% of INTERCEPT budget for 2000; 29% for 2001. Total \$70,000 of matching funds.
- UIA and DA provide 11% and 18%, respectively, of INTERCEPT matching funds through **direct** contribution of personnel, expertise and facilities.
- EU, UIA and its other European NGO partners provide 30% of INTERCEPT matching funds through **indirect** contribution of personnel, expertise and facilities (development of INFO2000 systems).

## 10. Abstract

The *infoDev* INTERCEPT project is the development of an Internet-based environmental planning tool for use in developing countries. The project extends the INFO2000 global biodiversity information system (under development) and in its first full year is significantly supported by INFO2000. INTERCEPT also builds on the international network relations and further electronic communications systems of key project partners (UIA / WCMC / DA), involving several thousand organisations and environmental agencies internationally.

This activity's overarching objective is to ensure the development-relevance of interactive database systems on the natural environment, environmental management, planning procedures, international standards and environmental best practice.

INTERCEPT will support (i) policy-making at the government level in developing countries (through the use of internationally-relevant information sources); (ii) programme planning at the INGO and NGO level (through contextually-oriented environmental planning support); and (iii) provide strategic information to the development of environmental service sectors (commercial) in developing countries.

The project will produce a CD / Web-based package for international distribution, networking environmental professionals and agencies in developing countries with their counterparts in other developing countries and in industrialised countries.

INTERCEPT will explore several levels of financial sustainability by (i) distinguishing between government, non-government and private sector end-users and (ii) combining sponsorship agreements (notably for national and sectoral support programmes), organisational franchise schemes (for commercial development in the private sector), and on-line transaction schemes (non-monetary and exchange) for use in the non-government sectors.

The underlying design emphasis of INTERCEPT is towards the development of internationally interactive knowledge-based information systems for environmental planning at the developing country level.

## 11. Detailed Description

### 11.1 INFO2000 project background and current status

This proposed *infoDev* project is an independent extension of a project begun under the aegis of the INFO2000 programme of the European Commission (Directorate General XIII) (<http://www2.echo.lu/info2000/infohome.html>).

The INFO2000 project – called *Information Context for Biodiversity Conservation* - has been subject to feasibility testing in 1997 (“Definition Phase”) and is now supported in its “Implementation Phase” by the European Union and four European NGO partners (“the Consortium”) (refer to [Annex 3](#) “INFMM5052-CONSERVATION 22895/0 CONTRACT”).

The “Implementation Phase” of the INFO2000 project started 1 January 1998 will complete at 31 December 1999. It entails development of the integrated information package for biodiversity conservation using a variety of software for Internet and CD-ROM delivery; search, translation, visualisation and mapping techniques; user workshops and feedback programmes; product testing and marketing; and long-term project financing and commercialisation.

The total INFO2000 activity cost is comprised of contributions from the:

- EU (approx. 40%), and from the
- five European NGO partners (UIA, WCMC, NSM, AIDE, IEEP) (approx. 60%),

**PowerPoint presentation:** A PowerPoint presentation of the prototype product of the INFO2000 project “Conservation” can be downloaded from <http://www.uia.org/projects/completx.ppt> (a printed summary is enclosed as [Annex 4](#)). This presentation is recommended for viewing as a concise yet comprehensive overview of the project as it stood at the end of the Definition Phase (July 1997).

**Definition Phase products:** Several products benefiting from work during the Definition Phase work for “Conservation” were delivered experimentally on the Web during 1997. These are detailed in [Annex 5](#).

**Public Report:** For further detail on the INFO2000 project achievements to date, see *FINAL REPORT OF DEFINITION PHASE, Information Context for Biodiversity Conservation*, INFO2000 Project No. 5052. The report is available online at <http://www.uia.org/projects/i2000rep.htm>

### 11.2 Extension of currently funded project

The INFO2000 project coordinator, the Union of International Associations (UIA), seeks *infoDev* funds to match the contribution of staff, facilities and financial support to be provided by itself, Development Alternatives (DA), the other INFO2000 partners and other cooperation partners (to be identified) to the INTERCEPT project.

The UIA, in partnership with DA, will use the additional funds to considerably broaden the scope of its work under INFO2000 ([Annex 6](#) Worksheets) to achieve the following outcomes:

1. a highly cross-referenced information package with global and contextual (field / market / sector / cross-disciplinary) content coverage of issues relating to biological conservation, including scientific data, international environmental agreements, international standards and using examples based upon current European concerns, operating procedures and best practice (the remit of INFO2000);
2. content coverage of development-related issues in government, non-government and commercial sectors relating to:
  - environmental conservation and management;
  - environmental services development (commercial);
  - project and programme planning (INGO and NGO);
  - national environmental management strategies (government planning);
  - environmental education and awareness strategies; and
  - community-based and other alternative and local / global development strategies;
3. exposure of sustainable development professionals in developing countries to emerging international information protocols (legal and commercial), operating procedures, management systems, hyperlinked tools, and new practices in the emerging global environmental services sector;
4. engagement of the widest range of users (government, non-government organisations, private and commercial sector, community and educational) and information providers (*infoDev* project partners (to be identified), international environmental agencies and bodies, NGOs and INGOs, and other development partners) in the process of product development;
5. over the project three year term (see Activities Table, page 21), the development of a three-tier financial (sustainability) operation for INTERCEPT, targeting the three distinct sectors identified for the activity:
  - national government (sponsoring partners);
  - commercial environmental services sector (sponsorship and franchise); and
  - NGO and INGO (non-monetary and exchange schemes).

### 11.3 Product description (project outputs and benefits)

INTERCEPT activity will develop an interactive information service (and products) for use by environmental professionals, policymakers and the business sector in developing countries, and everyone in the international community concerned with biological conservation (INFO2000) and sustainable development (*infoDev*).

**Information content:** The INFO2000 “product” is an integrated multimedia resource package drawing on a wide range of different organisations and sources, to provide interlinked and globally comprehensive information concerning:

- data on threatened biota and natural habitats;  
*and the links between these scientific data and:*
- generic and specific threats to conservation of biological resources, notably their root causes;

- the various responses society is making to counter genetic attrition and habitat loss; and
- the impact of both causes and responses on the conservation of species, natural communities and ecosystems, and on social and environmental health.

This information will be integrally linked to:

- associated information on relevant international organisations and agreements;
- associated information on relevant publications and other information sources; and
- other appropriate information services, particularly those on the WWW.

The information will be presented in a variety of multimedia formats: text, statistical tables, maps, graphics, and other formats as appropriate.

**Information sources and expertise:** Details on the sources of information for INFO2000, collection and processing procedures, and the unique features of the datasets are given in [Annex 7](#).

The *infoDev* project INTERCEPT will add value to the INFO2000 data stock by creating further database facilities for development-related applications of environmental and conservation information specifically relevant to end-user needs in developing countries.

#### 11.4 Comparison and relationship to other information products

**Inclusive data management framework:** The difference of this product/service from other existing information services, and hence the viability of the product/service, is highly dependent on integration of several processes, in particular:

- Information-gathering through contact with those most motivated to provide the information, usually involving free exchange of information.
- Processing of the information to ensure a quality product/service conforming to particular standards of presentation.
- Delivery of information in a manner that assists location and application of information relevant to the user, and facilitates location of other information sources.
- Marketing of information products/services to ensure that users know what information is available and where to find it.
- Programmes to update and review information regularly, working in collaboration with a wide range of other organisations.
- End-user interaction with the project to identify most appropriate source material for best use application in the target sectors of developing countries.
- Developing interfaces between the non-automated, conventional communications and automated (Internet and email) users.

**Competitive advantage:** To some extent, there will inevitably be competition with alternative information sources, including regional databases and subsidised (inter)governmental services. INTERCEPT will, nonetheless, be designed to interface effectively with other services available through the Internet. It is intended to complement and interrelate, rather than duplicate, other available information sources (for examples of complementary websites see [Annex 8](#)).

A competitive advantage of this INFO2000/INTERCEPT service is that it is less subject to the political and commercial whims which govern the production cycles, content, coverage and updating of other sources. The principal project partners have demonstrated their commitment to long-term management and improved delivery of this type of information content. It is their core business. Moreover, they do this as a public service but from a small-enterprise philosophy that is a hybrid of the “non-profit”/“for-profit” approach, and which itself models successful activity on the boundary between the traditional NGO and commercial worlds.

**Attractiveness to users:** With respect to information content, the principal advantage of the INTERCEPT package is a long-term comprehensiveness of coverage that it is difficult for competing products to match when faced with short-term policy and commercial constraints. The interactive feedback interface with end-users in the target sectors in developing countries is distinct from the style currently adopted by existing governmental and commercial information sources.

INTERCEPT will provide access to “alive” (current, relevant, responsive) information and interaction among environmental professionals and agencies in developing and developed countries, acknowledging the global market place for environmental services and promoting a global approach to project and programme planning.

Besides its activities in the three target sectors (government, non-government and commercial), *infoDev*'s INTERCEPT will provide a broad range of free-access information (publicly available) to educational, research and non-profit organisations.

## 11.5 Project objectives and discussion

### **An open and responsive information structure:**

A prime objective of this project is to offer users new ways of understanding, and interacting with, complex webs of relationships relevant to environment policy and sustainable development.

In this respect, INTERCEPT is a "demonstration project" (an *infoDev* Category IV activity) because it tests the applicability of information technology and telecommunications to the solution of vexing problems of sustainable development in developing countries. By experimenting with delivery systems sensitive to access and financial constraints, it seeks to provide the same information service across sectors. A significant outcome should be the empowerment of citizens groups, thus also "increasing the efficiency, accountability and transparency of governments" (*infoDev* Objective V).

**Information overload and information underuse:** Rapid development of Web and CD information sources has resulted in a pattern of information overload and information underuse - users are overwhelmed with information, and increasingly unable to derive useful insights from it. At the same time they have been sensitised to new ways of presenting and interacting with information, yet these approaches have not been appropriately adapted to reference information of relevance to a policy and development environment.

**Holding patterns of significance:** Electronic information technology is rarely supporting more than a "scattergun approach" to data acquisition; there are almost no examples of the medium being used to enhance the acquisition of insights through its structure and process. Data still tends to be

presented in disconnected formats, requiring the user to generate and hold any patterns of significance; alternatively, where the knowledge is organised, the arrangement is invariably too rigid to allow for application of the data outside its original domain.

**Interaction and comprehension:** This project is designed to close the gap between the volume of information available and the multitude of information technologies that offer new ways of interacting with information. The project partners are not interested in the technology for technology's sake, but are concerned to respond to user requirements for ways of interacting with information that can offer broader and more insightful comprehension.

**Information integration:** This project, therefore, puts emphasis on cross-sectoral data integration, flexible data structures and user interfaces, data visualisation and mapping on-the-fly, visualization of complex patterns of relationships and data linkage across boundaries which normally act to disassociate relevant information, be they those of disciplines, language or data formats.

**Global information infrastructure:** Through its strategy of information integration at an international level, INTERCEPT will accelerate the "interconnection of national to international information networks" concerned with sustainable development policy and practice (including the legal, financial, technical, scientific and social aspects) to help create a global information infrastructure.

**Meeting the need for access to reliable data:**

This project addresses an identified and increasing need for access to reliable data on global sustainable development. In this respect, it is an "information infrastructure strategy . . . promoting protection of the environment and natural resources" (an *infoDev* Category II activity serving Programme Objective IV).

**Practical application:** The aim is to deliver information services that are of actual and practical use for environmental professionals, for those working with development policy, programmes and projects, and for everyone wanting information on networks of environmental issues. For example, the data would be valuable for environmental assessment and audits; to support integration of environmental considerations by industry; to help local authorities to incorporate environmental considerations into regional planning; and for national agencies and governments in the development of environmental policy and action programmes. Because the principal partners in this project are acknowledged experts in this type of data gathering and handling, the cost-effectiveness of providing these benefits is very high.

In particular, this project will help organisations and individuals to build on information services that are *already being requested*, and which support *existing international activities*. For example, INTERCEPT addresses the requirement for inter-sectoral information transfer called for by *Agenda 21*, complementary regional agendas and national agendas, such as the development of *National Environmental Sustainability Plans*. It supports the implementation of commitments under international agreements concerning environmental conservation, such as the Bern, Bonn and Ramsar Conventions, the *Global Biodiversity Strategy*, *Framework Convention on Climate Change*, and the *Desertification Convention*.

**Varied delivery platforms:** The information will be available on both CD-ROM and the Web using existing in-house capabilities. Widely available technologies and low-cost (or no-cost) software are

deliberately employed to enable the widest possible access. At its lowest level of operation the INTERCEPT project will employ a printed newsletter bulletin on a quarterly basis targeting new users and key target groups: those agencies, organisations and individuals starting or about to start using the Internet.

***Developing country situations:*** Most client groups and most civil society institutions in a developing country do not have direct access to Internet. The partnership between UIA and DA will test the possibilities of delivery of certain portions of the information to users with only email access. In addition, through DA's DAINET programme, the partnership will explore cross-media opportunities for transmission of needed information in developing country settings, i.e. via interfaces between Internet, email and listservs, fax / telephone and snail mail (newsletters and personal letters). The objective is to providing a seamless link between the non-automated, conventional communications and automated users. Approaches to be explored include providing local access to highest-quality global information by both (i) stepping-down from Internet to email and snail mail and (ii) stepping up clients from snail mail and e-mail to full Internet connectivity.

**A contextual planning tool:**

The INTERCEPT project will provide end users with a knowledge management tool to handle the vast amounts of information pertaining to sustainable development issues, including the multi-sectoral and technical information necessary for realistic programme and project planning in developing countries. Specifically emphasised are interlinkages, hierarchies of issues, horizontal associations, chains of causation and response, open boundaries, keyword and subject area searches, "intelligent" query searches, visualisation tools for complex patterns and processes, graphical indexes, and 3D zoom/magnify and perspective-shifting tools. Knowledge organisation and management, both for sustainable development and in navigating the Internet, demand this contextual cross-disciplinary and multi-sectoral approach. INTERCEPT is a management tool for this environment.

**Responding to user needs and forging user partnerships:**

By linking scientific data on threatened species and habitats within its wider cultural, geographic, heritage, policy, economic and social context, INFO2000 will provide an accessible source of information to public policy makers and administrations, as well as citizens, educational institutions, public libraries, journalists, NGOs and students. INTERCEPT will track these information associations even more comprehensively into the wider fields of sustainable development. A breakdown of expected users are given in [Annex 9](#).

***User-partners:*** These processes will stress an interactive role for users as "user-partners" rather than a passive user role. In this sense INTERCEPT is designed to develop future user needs, rather than solely to respond to first-order user needs of the present. It also seeks to convert the user of information into being also a provider of information.

***Networks of partners:*** The datasets and competence in data handling and delivery of the project partners are fundamental to this project and entirely complementary. Information content accumulated over many years will be made available to INTERCEPT. However, it must be acknowledged here that the work of these organisations relies on extensive links with other organisations working in their respective fields. Through the collaborative networks of UIA, WCMC and DA, thousands of organisations and individuals are effective partners and beneficiaries

of the project; it is anticipated that a number of these will be drawn into the follow-up phase of the project, both as contributors and to test and evaluate the product.

**Building global dialogue:** Through this strategy of interactive information, INTERCEPT will both build and “support specialised sectoral networks” (an *infoDev* Category I activity) and “create market-friendly environments to accelerate global access to information and communication” (*infoDev* Objective I) with accessible, low cost communications and information services and products.

## 11.6 Innovative features

The features used in the development and delivery of the information product and its services are not new or created for this project. What *is* new is the application of these techniques to the integrated management of information of this kind.

The contextual planning methodology behind this project -- using lateral linkages, cross sectoral analysis, inter disciplinary approaches and highlighting complex patterns of relationship between issues -- is an important development in the practical application of sustainable development principles.

This project uses complex systems to explore complex issues, demonstrating the potential of the new global information systems applied to local regional development problems. It aims to expand planning and development approaches within the target sectors (government, non-government and private sector) in developing countries, utilising mixed-media and multimedia, to make available the large volumes of information required.

In particular we would draw attention to the following features of this project:

- Incorporation into text databases of extensive information on both **development pressures and responses**, these being integrally linked to databases which describe the state of species, habitats and ecosystems;
- Extensive use of **hyperlinked text** in normally unrelated datasets, and links to appropriate graphics and other information such as **clickable maps**;
- **“Soft” links** enabling query-searches into certain datasets and/or listservs, or the entire WWW.
- Identification of **“vicious cycles”** of problems and “serendipitous cycles” of strategies in the areas of environment and development;
- Use of user-generated **3D displays** (VRML) to present both problem, strategy and organisation complexes is likely to improve comprehension and access to the relational data characteristic of environmental information and policy options and institutional networks;
- Development of mechanisms which allow **user modification and annotation of data** supplied, both within their own systems, and by returning information to the data custodians and owners;
- **Active involvement of users** in the further development of both the information available and the functionality of the information services;
- Development of **interfaces between non-automated and automated communications media**.
- Through a **wide network of collaborative partners** (who are supplying information to us and interacting with the data in a manner which does not impact on the accounts), the project partners are effectively working with hundreds of organizations.

## 11.7 Marketing Plan/Communication Strategy

The INTERCEPT project has been developed as direct off-shoot from the INFO2000 programme, identifying a series of new project development options which were not originally envisioned or accounted for by INFO2000. In this respect, while the central aims of INTERCEPT have emerged from the research and development of INFO2000, building upon that body of work, INTERCEPT represents a series of clearly identified project target areas for what can be considered new commercial and project related development.

### **INTERCEPT phases and activities:**

The marketing and development plans for the INTERCEPT project are central to the long-term sustainability aims of the project. They span a long enough period to open markets in government, non-government and commercial sectors in developing countries and internationally, sufficient to provide for the project's ongoing maintenance and development costs in the longer term.

***Year 0 (Oct – Dec 1998) – Pre-Establishment Phase:*** During these first three months of the project, the focus of work will be on creating all the structures for internal and external coordination. This will include: partnership agreements, administrative systems, management tools, schedules for the technical phase, communication and reporting protocols, refinement of marketing strategy and project planning and cross-project planning with INFO2000 and DAINET.

***Year 1 (1999) - Technical Development Phase:*** In Phase One (Year 1) of the INTERCEPT project, basic information (content and interlinkages) will be elaborated largely as a result of the complementary INFO2000 activities.

A range of communication strategies will be used to build relations with identified sectors for development (government, non-government and commercial). Emphasis will be placed on end-user engagement from within each sector and the identification of strategic players in each sector (individuals and organisations). These key identifications will enable further refinement of the project delivery targets during the next two years during which the project is implemented.

For example, considerable effort will be devoted in Year 1 to identifying existing and new international development projects in the environmental sectors of developing countries. These are projects and groups with which INTERCEPT can be allied and associated, developing the practical functionality of the project with a view to INTERCEPT playing a more proactive role in project development in subsequent years. It is intended that this will involve projects in each of the three target sectors and from contrasting global regions.

Because the products and services build on ongoing activities, there is a strong case for progressive implementation, initially through selective communication of modules of the service. Progressive activation will also involve building increasing proportions of multimedia content into Web information services. Communication strategies in this technical development phase will target Internet and email users of environmental services in developing countries (see Internet Marketing Strategy – [Annex 10](#)).

***Years 2 and 3 (2000/2001) – Implementation Phase:*** Increasing amounts of basic information (content and interlinkages) will be made available during this phase, created largely as a result of infoDev-funded research and editing activities in the partner organisations.

*Increasing product exposure:* Careful market development in project Year 1, establishing project platforms in each of the identified sectors, will lead to the first in a series of major launch events for INTERCEPT at the start of Year 2, to be followed by further launch events internationally and on Internet over the two-year implementation phase. There are a number of opportunities for “launching” the product/ service, notably at relevant high-level international conferences. An international meeting suitable for the final launch of the INFO2000 components is the *World Conservation Congress*, scheduled for 2000. EXPO2000 (Hannover) will be a likely launch place for INTERFACE (Ashok Khosla, President of DA, is on the Advisory Board of EXPO2000). Other opportunities will emerge.

*Workshops, seminars and demonstrations:* During the Implementation Phase, efforts will be made to enable potential users to discover the Web version of the product/service and to develop user-partnerships with the project, further developing the system and aiding in the improvement of the service. This will particularly be achieved through the involvement of information providers and potential users in review of the service components. Where necessary, seminars and workshops will be held to review and discuss the services being developed.

*Information dissemination:* The new information products and services will be publicised by the partners and their regular collaborators through usual channels, including publication catalogues, on-line announcements, meetings, magazines, regular mailings etc). Potential users currently relying on non-automated communications, or with email access only, will be provided with strategies for improving their access to the information.

A regular series of media briefings, together with the launch of INTERCEPT’s own quarterly newsletter, along with commissioned articles in the relevant technical journals of each target sector, and feature pieces in general media, will develop over the full term of the project as a central function of the marketing and outreach plan.

The Internet provides multiple avenues for dissemination. These include *passive* posting of “what’s new” information on websites, *active* postings to news groups and listservers, submission of information to key search tools, requests that links are placed on other relevant WWW services. An Internet marketing strategy is detailed in [Annex 10](#).

Traditional information dissemination will take place through the project partners’ journals, press releases, press conferences combined with demonstrations, and submitting the products/service to review processes of the print and on-line media concerned with conservation and/or technology issues. As appropriate, a demonstration CD-ROM (or a CD-ROM with limited facilities for access to all the data) will be distributed to targeted individuals. Finally, it is likely that an affordable (sponsored) CD-ROM product will be made available.

## 11.8 Business Plan

A business plan has been prepared for the INFO2000 project ([Annex 11](#)). It will be extended and developed to interface with and integrate the INTERCEPT project. The following issues are covered (use hyperlinks):

- [Commercial success in a competitive environment](#)
  - [Doing business within a not-for-profit context](#)
  - [Cost of data](#)
  - [Professional data handling](#)
  - [Cost recovery and reinvestment](#)
  - [Building on established viability](#)
- [Business uncertainties](#)
  - [Unpredictability of market](#)
  - [Product/technology evolution](#)
  - [Determining prices and income](#)
  - [Determining investments](#)
  - [Marketing experiments](#)
- [Achieving sustainability](#)
  - [Seeking counter-funding](#)
  - [Subsidies and sponsorship](#)
  - [Financing partners](#)
  - [Non-monetary exchanges](#)
- [Risk assessment](#)
  - [Worst case scenario](#)

## 12. Evaluation Indicators

Evaluation will be a continuing working practice at each step of the project's development. Key managerial staff in each of the partner organisations will work as a joint review team, monitoring work schedules and progress reports to ensure the project remains focussed on its targets and maximum project coordination is achieved.

Technical evaluations will be carried out by in-house expert staff and further tested among associated peer groups within partners' technical networks. Technical experts (specifically in the informatics area) will be engaged when necessary for this function.

### 12.1 Ongoing progress reporting

Procedures already established for deliverables for the INFO2000 project will be continued through the INTERCEPT project. [Annex 12](#) provides a schedule of INFO2000 deliverables, extended in an indicative way beyond the end of 1999 to incorporate INTERCEPT activities.

The INTERCEPT web sites will include password-protected, in-house office sites where project reports and technical data, planning schedules, financial records and partner agreements will be lodged. Each project partner, and collaborating partners as added, will be expected to maintain their organisation's part in these inter-office sites, updating the information as required by schedule and completing regular returns to maintain the overall project integrity, coordination and continuity.

Records on this project site will be reviewed and consolidated at least every six months, more frequently where a particular activity is current.

Key staff members from the partner group are assigned to liaise with World Bank monitoring staff, who will also have access to the project's office records.

## **12.2 Occasional reports**

During the term of the project, specific reports will be produced on the results of feasibility studies, technical studies and conference/workshop outcomes. During this period, a number of face-to-face consultations, workshops and seminars will be held with potential users and user/partners. There will be periodic reports of these discussions, which will include critical external evaluations.

## **12.3 Schedules of delivery**

During the project pre-establishment phase (3 months) and continuing to the mid term of the technical development phase (Year 1), a series of project delivery schedules will be compiled establishing clear delivery dates for the range of tangible hardware, software and system configuration tasks covering the full project term. All project deliverables will be listed on these schedules with contracted and negotiated delivery dates.

## **12.4 Web statistics**

A simple and direct evaluation technique is analysis of visitor statistics of project Internet homepages. In standard form these comprise frequency of visits, patterns of use and geographic information. Over the project term new systems of end-user monitoring will be introduced, including follow-up user identification, technical user-needs assessments.

## **12.5 Marketing feedback**

The web-marketing strategy will involve information providers and potential users in review of the service components, (some of which may be conducted through online fora) to review and discuss the services being developed. At this stage, the partners will rely upon in-house and associate relations; however commercial marketing services may be engaged on a commission basis during implementation years if potential thresholds for profitability start to be reached.

## **13. Geographic Scope**

### ***Global/International***

The INTERCEPT system is conceived and designed to operate within the international environment of the Internet. However, in order to market and develop the project over its 3 year term, the project will work towards the establishment of developing country partners (starting with DA in India and using this experience to extend to all developing country regions). During the project's technical

development phase (INTERCEPT Year 1) investigations will be made to identify suitable partner relations, internationally, in each of the target sectors for staged implementation over the following two-year project implementation phase.

#### **14. Creation and acquisition of physical or intellectual assets**

Yes, the activity does involve the creation and acquisition of physical and intellectual assets.

*If yes, explain how ownership and property protection issues will be addressed.*

The participants in this project believe in the principle of open access to data, and support the increased mobilisation of policy-relevant environmental information to support the conservation and sustainable use of the world's living resources.

The participants contributing information content to the project (UIA, WCMC and DA) are not-for-profit organisations. They are committed to enabling free exchange of information, only charging for the staff time and other expenses necessary for editing and managing the data, performing services specifically requested, developing the services and products, and maintaining the currency of the information. Their concerns over intellectual property matters do not arise from an inherent commercial, or for-profit, bias. They may, however, need to reflect such concerns of others that provide them with information or commercialise their information.

Information held in the partners' databases is not "original" (in the sense that they can unconditionally claim ownership). It may be available in a wide variety of forms, some of it in the public domain, much of it as "grey literature". The participants in this project add value to the data by standardisation of presentation, quality control, regular updates, and especially by integration of the data into a broader navigable framework. In this sense they do not so much own the data elements as the hypertext structures linking those elements. Where material is incorporated into this project from external sources other than those for which the partners have existing free-use arrangements, data ownership or custodianship has been, or will be, identified.

Discussions have been held, and will continue to be held, at stages of the project where any issues of concern or potential conflict arise for any of the partners. In particular, clarification has been sought (and duly recorded) at an early stage concerning any residual copyright or intellectual property rights matters which could be relevant to the eventual production and dissemination of the product/service (see [Annex 13 Draft INFO2000 Consortium Agreement](#)).

#### **15. Key Contacts**

Nadia McLaren, INFO2000 Project Coordinator, Union of International Associations, 40 rue Washington, B-1050, Brussels, Belgium. <http://www.uia.org>, tel: +32 2 6401808, fax: +32 2 6460525, [nadia@uia.be](mailto:nadia@uia.be)

Anthony Judge, Assistant Secretary-General, Union of International Associations, 40 rue Washington, B-1050, Brussels, Belgium. <http://www.uia.org>, tel: +32 2 6401808, fax: +32 2 6460525, [judge@uia.be](mailto:judge@uia.be)

Ashok Khosla, Director, Development Alternatives, B-32, TARA Crescent, Qutab Institutional Area, New Delhi, India-110016. <http://www.ecouncil.ac.cr/devalt/>, tel: +91 11 6851158 / 6967938 / 665370, fax: +91 11 6866031, [tara@sdalt.ernet.in](mailto:tara@sdalt.ernet.in)

Jeremy Harrison, Coordinator of Regional Affairs and Capacity Building, World Conservation Monitoring Centre, 219 Huntingdon Road, Cambridge CB3 0DL, UK. <http://www.wcmc.org.uk/>, tel: +44 1223 277314, fax: +44 1223 277136, email [jerry.harrison@wcmc.org.uk](mailto:jerry.harrison@wcmc.org.uk)

Graham Bennett, Director European Affairs, AIDEnvironment and Director, Institute for European Environmental Policy, Donker Curtiusstraat 7-523, 1051 JL Amsterdam, Netherlands. <http://194.177.160.201/ieep/index.htm>, tel: +31 20 6868111, fax: +31 20 6866251, email [bennett@aidenvironment.antenna.nl](mailto:bennett@aidenvironment.antenna.nl)

Ken Friedman, Director of Nordic Centre for Innovation, Norwegian School of Management, Postbox 4676 Sofienberg, N-0506 Oslo, Norway. <http://www.bi.no>, tel: +47 22 985107, fax: +47 22 985111, email [ken.friedman@bi.no](mailto:ken.friedman@bi.no)

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Dorris Capustrino, Ford Foundation <http://www.fordfound.org/>, 55 Lodi Estate, New Delhi 110 003, tel: +91-11-461-9441, fax 91-11-462-7147, email [ford-delhi@fordfound.org](mailto:ford-delhi@fordfound.org)

## 16. Staffing

The broad roles of the partner organisations in the joint INFO2000/infoDev activities are that UIA, DA, WCMC provide the information content, communications technology and management expertise; AIDE /IEEP and NMS are advisors in their specialist areas of expertise. The project partners are all established institutions and have been in existence for a minimum of 14 years. Their regular sources of funding vary, but are reliable and reasonably predictable in the medium-term. Detailed descriptions appear in [Annex 1](#) (use hyperlinks for individual partners).

The infoDev components of the activity will be carried out by staff of the [UIA](#) and [DA](#), with necessary support (funded by other means) from the other working partners in the INFO2000 consortium ([WCMC](#), [NSM](#) and [AIDE](#)). The activities are a natural extension of both organisations' current programme areas and staff competencies; project activities will interface smoothly with their normal operations. Experienced and appropriately qualified personnel are available. The activities are coordinated by UIA, overall responsibility resting with its Assistant Secretary-General, [Anthony Judge](#). Senior staff responsible for management of work are [Nadia McLaren](#) (Environmental Consultant and Editor of *Encyclopedia of World Problems and Human Potential*) for UIA and [George Varughese](#) (Vice-President) for DA.

CVs of key personnel are attached ([Annex 14](#)). Between two to four supplementary staff will be employed, either as supervised trainees or expert consultants, for certain portions of the work. The table on the following page summarises principal staff roles/expertise and personnel.

**Non-infoDev funded partners:**

AIDE / IEEP will provide advice on environmental policy, the requirements of the project from the viewpoint of professional users, and a “professional end-user” test site for interactive editing.

NMS provides research and advice on electronic publishing, product design and marketing.

WCMC provides its substantial experience in collating and managing major databases on the conservation of species, ecosystems and protected areas.

**infoDev funded partners:**

The UIA is the initiator and coordinator of the INFO2000 project “Conservation” and will maintain this role with *infoDev*’s INTERCEPT project. It has for over two decades integrated and managed information, provided by international organisations of all concerns and colours, on global problems and the actions society is taking to alleviate these problems. Its wider competence is as a clearinghouse for information on international associations and their activities worldwide. UIA contributes these data, management expertise and further research. It also provides CD-ROM capability and its competence with virtual reality structures for complex networks.

DA fosters the new relationship between people, technology and environment interactions needed to attain the goal of sustainable development in a developing country context. DA’s specific competencies to be contributed to this project are transdisciplinary research (notably through off-site interactive editing of UIA data), technology development and application and developing country experience. Through its DAINET programme, DA is currently developing full email service provision to the independent sector in India with the following characteristics:

- Incremental upgrading of clients from snail mail and e-mail to full Internet connectivity;
- Providing hands on training to users;
- Providing a seamless link between the non automated, conventional communications and automated (Internet and e-mail) users;
- Providing facilities of search and retrieval for the databases on development and environment;
- Assisting participation on various newsgroups through the listserv hosted at DA headquarters;
- Linking to major libraries in the country.

<b>PRINCIPAL PERSONNEL</b>		
<i>italics type indicate minor contributions</i>		
Project coordination and project management, Brussels	Nadia McLaren	UIA
Project management, Delhi	George C Varughese	DA
System design and knowledge organisation	Anthony Judge Ashok Khosla	UIA DA
Content: environment and development (problems, strategies, values)	Nadia McLaren Allan Howard	UIA
Content: technology for development	Shrashtant Patara <i>Christian de Laet</i>	DA
<i>Content: organisations</i>	<i>Jacqueline Nebel</i> <i>Romuald Covalescu</i>	<i>UIA</i>
<i>Content: bibliography</i>	<i>Joel Fischer</i> <i>Marie Aeles</i>	<i>UIA</i>
Data visualisation	Anthony Judge	UIA
Hypertext editing, problem and strategy hierarchies and problem/strategy loops	Nadia McLaren	UIA
Internet delivery, design and marketing	Anthony Judge Joel Fischer	UIA
Field testing: user workshops, seminars and user feedback	Nadia McLaren Allan Howard	UIA DA
Participative editing testing	R.K. Verma	DA
Email (listserv) applications	John Borgoyary <i>Joel Fischer</i>	DA <i>UIA</i>
<i>Programming / Mathematical support (eg Java, 3-D structures)</i>	<i>Contract consultant</i>	<i>(UIA)</i>
<i>Advisor: Needs of developing countries/NGOs</i>	<i>Ashok Khosla</i> <i>Allan Howard</i>	<i>DA</i> <i>UIA</i>
<i>Language and thesaurus issues</i>	<i>Jacqueline Nebel</i>	<i>UIA</i>

## 17. Timetable

On the following page is an estimated task schedule for joint INFO2000/infoDev project activities. This [Excel chart](#) was prepared for the INFO2000 project and has been adapted to the requirements of the infoDev extension. (The numbers in the left-hand columns refer to Workpackages provided in [Annex 6](#)).

The activity funded by infoDev would ideally commence in the second half of 1998 and continue through to the end of 2001 (coincident with the completion of the DAINET development). We have scheduled it to commence in month 10 (October 1998). It would then interface with the INFO2000-funded activities, with an overlap zone of 15 months (see [Excel Chart](#), page 22).

In the period 2000/2001, following the INFO2000 product/service launch and termination of the INFO2000-funded activity, activities will be entirely funded by infoDev.

The table below lists the major activities during the 3+ years of the INTERCEPT project. Their detailed scheduling would occur in the Pre-Establishment Phase (Oct – Dec 1998).

ACTIVITIES TABLE	INTERCEPT for infoDev
1998 (Oct – Dec)	<p><b>Pre-Establishment Phase</b></p> <ul style="list-style-type: none"> <li>• Partnership agreements</li> <li>• Technical phase schedules</li> <li>• Communication / reporting protocols</li> <li>• Marketing strategy (outline)</li> <li>• Evaluation and reporting</li> </ul>
1999: Year 1	<p><b>Technical Development Phase</b></p> <ul style="list-style-type: none"> <li>• Develop and test CD-package</li> <li>• Establish and test web sites</li> <li>• Test implementation of marketing strategy</li> <li>• Start outreach and sponsorship initiatives</li> <li>• Information dissemination</li> <li>• Evaluation and reporting</li> </ul>
2000: Year 2	<p><b>Project Implementation Phase 1</b></p> <ul style="list-style-type: none"> <li>• Distribute CD package</li> <li>• Launch web sites and promote</li> <li>• Implement marketing strategy</li> <li>• Develop networking and outreach</li> <li>• Promote project in wider media</li> <li>• Evaluation and reporting</li> </ul>
2001: Year 3	<p><b>Project Implementation Phase 2</b></p> <ul style="list-style-type: none"> <li>• Maintain and develop previous year's activities</li> <li>• Stabilise operation</li> <li>• Evaluation and reporting</li> </ul>



<b>infoDev / INFO2000 PROJECT COMPLEMENTARITY BY PHASES</b>		
year	INFO2000	infoDev INTERCEPT
1997	Definition Phase	
1998	Implementation Phase	Proposal preparation Pre-establishment Phase (Oct - Dec)
1999	Implementation Phase	Technical Development Phase
2000		Implementation Phase
2001		Implementation Phase

## 18. Activity Budget

The following table provides the unit costs (in \$US equivalents) on which the budget is based.

<b>BASES FOR COSTING</b>										
<b>Budget Category</b>	<b>Unit</b>	<b>Amount in \$ US</b>								
<b>Personnel*:</b> Management Technical Support	Staff week	<table border="0"> <tr> <td>UIA</td> <td>DA</td> </tr> <tr> <td>2,940</td> <td>1,600</td> </tr> <tr> <td>2,380</td> <td>1,150</td> </tr> <tr> <td>1,470</td> <td>730</td> </tr> </table>	UIA	DA	2,940	1,600	2,380	1,150	1,470	730
UIA	DA									
2,940	1,600									
2,380	1,150									
1,470	730									
<b>Travel:</b> Air travel and public transport Accommodation and meals Private car use	Per trip Per trip Per km	At cost At cost 0.45								
<b>Contractual Services</b>	Per contract	At cost								
<b>Equipment</b>	Per item	Invoice total (including sales tax)								

\*NOTE: Rates for UIA are 175% of salary costs (including all social costs). The extra 75% covers all operational overheads for the organisation that are not project-related (with independent budgets), including its office rent and services, equipment and depreciation, communications, insurance, taxes, administration overheads and other similar items related to maintaining an office in Brussels. In the case of DA, the personnel rates include salary and related costs, overheads for running its operations in India (head office in Delhi and branch offices elsewhere) and its training, employment and civil society activities not otherwise funded.

The following table is the budget for the INTERCEPT project activities. It should be noted that these activities are new and required to meet the objectives of the INTERCEPT project; they are not covered by any other budgets of associated projects that have been mentioned in this proposal.

TOTAL ACTIVITY BUDGET		<i>infoDev</i> INTERCEPT PROJECT		
Item	Weeks		Subtotal	Total \$US
<b>Staff</b>	UIA	DA		
• Management	25	20	105,500	
• Technical	56	80	234,800	
• Support	47	64	115,080	445,860
<b>Travel</b>				
• Tickets			20,000	
• Per Diems			30,000	50,000
<b>Contract services</b>				
• Programming/maths support				22,000
<b>Equipment:</b> 3 x complete PC workstations (computer, printer, network connections, modem etc)				48,000
<b>Communications services</b> Phone, fax, courier, etc				34,000
<b>Documentation and reporting</b> Printing, binding, purchase of publications etc				10,000
<b>TOTAL ACTIVITY COST \$US</b>				<b>609,860</b>

NOTES ON THE INTERCEPT BUDGET:

1. The estimated total of the budget required by UIA and its consultants/contractors is US \$407,840 = 67%.
2. The estimated total of the budget required by DA is \$202,000 = 33%.

## 19. Source of Funds

The table below provides a break down of the sources of funds for the INTERCEPT project. The following table is a corresponding break-down for the combined INFO2000/INTERCEPT activities.

Source of Funds:		INTERCEPT Project		
<b>TOTAL PROJECT COST:</b>		<b>\$US 610,000</b>		
CONTRIBUTIONS:	INFO2000 (common activity)	30%	180,000	
	UIA (new)	11%	70,000	
	DA	18%	110,000	
	infoDev	41%	250,000	610,000

Source of joint funds funds by year <sup>Φ</sup> :		INFO2000 / INTERCEPT		
	1997	1998/99	2000/2001	Activities Total
NGO Partners				
• UIA	71,748	434,685	70,000	576,433
• WCMC	62,647	351,406	-	414,053
• NSM	7,792	17,472	-	25,264
• IEEP	7,284	0	-	7,284
• AIDE	0	26,366	-	26,366
• DA	0	60,000	50,000	110,000
Total NGO partners	149,471	889,929	120,000	1,159,400
European Commission	103,771	536,760		640,531
InfoDev	0	120,000	130,000	250,000
<b>GRAND TOTALS</b>	<b>253,242</b>	<b>1,546,689</b>	<b>250,000</b>	<b>2,049,931</b>

<sup>Φ</sup> converted into \$US from ECU using Interbank rate of 08/03/98 = 1.08, rounded off to nearest dollar

## 20. World Bank Staffing Support

Staff Category

Staff Weeks



## Annex 1: The Partners

The project partners are all established institutions, which have been in existence for a minimum of 14 years. Their regular sources of funding vary, but are reliable and reasonably predictable in the medium-term. Detailed descriptions appear below (use hyperlinks).

The project is coordinated by [UIA](#), with overall responsibility resting with Anthony Judge, its Assistant Secretary-General. The *infoDev* components of the activity will be carried out by staff of the UIA and DA, with necessary support (funded by other means) from the other working partners in the INFO2000 consortium ([WCMC](#), [NSM](#) and [AIDE](#)). Senior staff responsible for coordination of work will be Nadia McLaren for UIA (Environmental Consultant and Editor of *Encyclopedia of World Problems and Human Potential*) and George Varughese for DA (Vice-President).

The broad roles of the partner organisations in this project are that UIA, DA, WCMC provide the information content, communications technology and management expertise; AIDE /IEEP and NMS are advisors in their specialist areas of expertise.

### Non-*infoDev* funded partners:

AIDE/IEEP provides advice on environmental policy, the requirements of the project from the viewpoint of professional users, and a “professional end-user” test site for interactive editing.

NMS provides research and advice on electronic publishing, product design and marketing.

WCMC provides its substantial experience in collating and managing major databases on the conservation of species, ecosystems and protected areas. In collaboration with its other organisational partners and co-funders of this project, it aims to further extend the scope of this information, its interlinkages and accessibility, and developed significant new WWW information tools and services. It also fosters capacity building for NGO / INGO information systems, particularly in developing countries.

### *infoDev* funded partners:

UIA has for over two decades integrated and managed information, provided by international organizations of all concerns and colours, on global problems and the actions society is taking to alleviate these problems. Its wider competence is as a clearinghouse for information on international associations, their perceived concerns and activities. UIA contributes these data, enhanced in the fields relevant to sustainable development. It also provides CD-ROM capability and its developing competence with virtual reality structures for complex networks.

The UIA is the initiator and coordinator of the INFO2000 project “Conservation” and will maintain this role with *infoDev*’s INTERCEPT project.

The new partner, DA, fosters the new relationship between people, technology and environment interactions needed to attain the goal of sustainable development in a developing country context. DA’s specific competencies to be contributed to this project are transdisciplinary research, technology development and application and developing country experience.

Return to UIA: [Welcome Page](#) | [Version française](#)

## Profile

### Union of International Associations

#### -- UIA --

- |  |  |
|--|--|
| 1. <a href="#">History of the UIA</a>                                  | 8. <a href="#">External relations</a>                              |
| 2. <a href="#">Current status and Constitution</a>                     | 9. <a href="#">Meetings and Events</a>                             |
| 3. <a href="#">Aims and activities</a>                                 | 10. <a href="#">Publications</a>                                   |
| 4. <a href="#">General Assembly, Executive Council and Secretariat</a> | 11. <a href="#">President, Secretary-General, and Full Members</a> |
| 5. <a href="#">Working languages</a>                                   | 12. <a href="#">Associate Members</a>                              |
| 6. <a href="#">Staff</a>   | 13. <a href="#">Corresponding Organizations</a>                    |
| 7. <a href="#">Finance</a>   | 14. <a href="#">Contact information</a>                            |

### 1. History of the UIA

Founded 1 June 1907, Brussels, as *Central Office of International Associations*, by [Henri La Fontaine \(Nobel Peace Prize 1913\)](#) and Paul Otlet, Secretary-General of the then *International Institute of Bibliography*, which subsequently became the *International Federation for Documentation (FID)*, and with which UIA activities were closely associated. Became a federation, under the present name, at the 1st World Congress of International Organizations (Brussels, 1910). ([More early history](#)).

### 2. Current status and Constitution

The [Statutes](#) were modified in 1951 to give the UIA the character of an institute with a world focus, having individuals as full members. It is an independent, non-governmental, non-profit body which is apolitical in character. Its programmes are totally oriented toward the community of international associations whose actions they are designed to facilitate, whether through special studies or through new uses of information. The UIA is registered under the Belgian law of 25th October 1919 as an international association with scientific aims.

### 3. Aims and activities

- Facilitate the evolution of the activities of the world-wide network of nonprofit organizations, especially nongovernmental or voluntary associations;
- Promote understanding of how international bodies represent valid interests in every field of human activity or belief, whether scientific, religious, artistic, educational, trade or labour;
- Enable these initiatives to develop and counterbalance each other creatively, in response to world problems, by collecting information on these bodies and their interrelationships;
- Make such information available to them, and to others who may benefit from this network;
- Experiment with more meaningful and action-oriented ways of presenting such information as a catalyst for the emergence of more appropriate organizations;
- Promote [research](#) on the legal, administrative and other problems common to these international associations, especially in their contacts with governmental bodies.

To these ends, maintain contact with a wide variety of bodies in all parts of the world, as a foundation for better organizational networking and programme harmonization in response to networks of increasingly complex world problems.

#### 4. General Assembly, Executive Council and administration

The General Assembly elects an [Executive Council](#) of 15 to 21 members for 4-year term every two years. [Full Members](#) are limited in number to 250 individuals and subject to election by General Assembly. [Associate Members](#) are admitted as observers at meetings. The programme, under the direction of the Secretary-General is carried out by the Secretariat in Brussels. Meetings are closed.

#### 5. Working languages

The main working languages of the UIA are English and French, although information is received in many languages. Most publications are produced in English, with French versions where there is a demand. The [Yearbook of International Organizations](#) is indexed in all languages used by international organizations. The periodical [Transnational Associations](#) contains articles in both English and French.

#### 6. Staff

18 permanent; extra staff are frequently engaged on short-term project-oriented contracts.

#### 7. Finance

The UIA is more than 95 percent self-financed, through membership subscriptions, research and consultancy contracts, sale of publications and services. The balance is made up from donations and sponsorships from several governments (notably Belgium, France and Switzerland) and a number of official and private bodies. The annual budget is approximately US \$ 800,000.

#### 8. External relations

The UIA has consultative relations with UNESCO, UN/ECOSOC and ILO. It has collaborated with FAO, the Council of Europe, UNITAR, and the Commonwealth Science Council. It has acted as one of the research institutes in the network of the UN University. A special ECOSOC resolution establishes cooperation between the United Nations and the UIA for the preparation of the [Yearbook of International Organizations](#). A French edition was produced with the assistance of the Agence pour la coopération culturelle et technique (ACCT) in 1980; a new version is being produced on CD-ROM in 1996. Contact is maintained with over 25,000 international non-governmental organizations eligible for inclusion in the [Yearbook of International Organizations](#). Special links exist with UIA Corresponding Organizations, with the *Federation of International Associations established in Belgium (FAIB)*, *Union of International Nongovernmental Organizations established in France (UOIF)*, *Federation of Semi-Official and Private International Institutions established in Geneva (FIIG)* and the Conferences of NGOs in consultative status with ECOSOC and UNESCO. Work on the [Encyclopedia of World Problems and Human Potential](#) was initially undertaken in collaboration with Mankind 2000.

#### 9. Meetings and Events

General Assembly 24 up to 1973; Paris 1974, Geneva 1976, Brussels 1980, 1984, 1988, 1990, 1992, 1994. World Forum of Transnational Associations Brussels 1980. Congress of International Congress Organizers and Technicians 4 up to 1969; Barcelona 1970; Kyoto 1975. Symposium Turin (Italy) 1969, Milan 1972, Paris 1974, Geneva 1976, Brussels 1984.

## 10. Publications

More than 300 publications and publication series since 1910. Main publications available on CD-ROM.

- *Journal: Transnational Associations / Associations Transnationales* (6 per year) with articles in English or French
- *Calendar of Future International Meetings: International Congress Calendar* (quarterly)
- *Organization information: Yearbook of International Organizations* (annual): 4 volumes Also **French** edition: *Annuaire des organisations internationales* (4th edition, 1980, with 5th edition, 1996, on CD-ROM); *International Association Statutes Series* (Vol 1, 1988); *World Guide to Religious and Spiritual Organizations* (1st edition, 1996).
- *World problem information: Encyclopedia of World Problems and Human Potential* (4th edition, vol 1, 1994).
- *Organization strategies and solutions Encyclopedia of World Problems and Human Potential* (4th edition, vol 3, 1994).
- *Human development and values Encyclopedia of World Problems and Human Potential* (4th edition, vol 2, 1994).
- *Biographical information:*
  - *International Biographical Dictionary of Religion* (1st edition, 1994);
  - *Who's Who in International Organizations* (2nd edition, 1995).
- *Specialized directories; Special series; Research studies and reports .*

## 11. President, Secretary-General, and Full Members

**President:** Professor [Marcel Merle](#), 23, rue du Laos, F-75015 Paris, France

**Secretary-General:** [Jacques Raeymaeckers](#), rue Washington 40, B-1050 Bruxelles, Belgium. Tel. (32 2) 640 18 08. Telex 65080 INAC B. Fax (32 2) 646 05 25. E-mail: [iuia@uia.be](mailto:iuia@uia.be).

**Representatives to intergovernmental organizations:**

- UN (New York) [Andrew Rice](#), 6517 80th Street, Cabin John MD 20818, USA. Tel. (301) 229 3503.
- UN (Geneva) [Cyril Ritchie](#), CIC Case 20, CH-1211 Geneva 20, Switzerland. Tel. (41 22) 733 67 17.

**Full Members:** Individuals, whose total number may not exceed 250, are elected by the UIA General Assembly which they constitute. Members are elected on the basis of their interest and activity in international organizations, usually demonstrated by an active role in such a body over an extended period of time. They include diplomats, international civil servants, association executives, professors of international relations and directors of foundations. Members do not pay annual dues, but as trustees it is expected that they will further the interests of the UIA in their particular sphere of activity. Members are currently located in the following countries:

- Africa: Algeria, Benin, Madagascar, Mauritania, Morocco, Senegal, Togo.
- America: Brazil, Canada, Chile, Peru, USA, Venezuela.
- Asia/Pacific: Australia, India, Japan, Sri Lanka, Thailand.
- Europe: Belgium, Bulgaria, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Sweden, Switzerland, Turkey, UK, USSR.

## 12. Associate members

Corporate bodies or individuals interested in the aims and activities of the UIA and wishing to associate themselves with its work by payment of an annual membership fee. Members include a wide range of organizations, foundations, government agencies and commercial enterprises and are entitled to preferential use of UIA services. Membership is subject to approval by the UIA Executive Council.

## 13. Corresponding Organizations

The UIA is controlled by its individual members, although its work is almost entirely with the complete range of international organizations through publications and correspondence. For those international organizations who wish to be more closely associated with this work, without any commitment of "membership", a category of "Corresponding Organizations" is provided by the UIA Statutes. Such organizations are offered preferential access to UIA information facilities including free subscription to Transnational Associations. Their obligations are limited to payment of an annual fee, inclusion of UIA on any periodical mailing list, and transmission to UIA of a copy of their Statutes and their list of national member sections. Applications are subject to approval by the UIA Executive Council.

## 14. Contact information

Union of International Associations (UIA) Rue Washington 40, B-1050 Brussels, BELGIUM  
phone 32-2-640.18.08 - fax 32-2-646.05.25 E-mail: [uia@uia.be](mailto:uia@uia.be) Web site: <http://www.uia.org/>

## **A Brief Profile of Development Alternatives**

Development Alternatives is a global network of organisations with the objective of generating activities aimed at sustainable development.

Development Alternatives, India, is a non-profit research, development and consultancy organisation established in 1983. It fosters the new relationship in the people, technology and environment interactions needed to attain the goal of sustainable development. Development Alternatives has three main branches: Technology Systems Branch, Environment Systems Branch and Institutional Systems Branch.

The Technology Systems Branch focuses on designing and developing environmentally sound and appropriate technologies in close collaboration with the other branches. Several technology packages in Shelter, Domestic Energy, Handmade paper, Textiles, Pottery, etc. have already been disseminated and others are in various stages of development. The sister organisation, Technology and Action for Rural Advancement (TARA) undertakes production and dissemination of the technologies.

The Environment Systems Branch designs environment and development management strategies at various geographic scales and levels of detail. Experimental cum demonstration projects are also undertaken in the field.

The range of field studies and projects include Environmental Impact Assessment and Analysis, Environmental Management Plans, Environmental and Social Policies and Procedures for Corporate organisations, Community development, Food Security in tribal areas, Rehabilitation and Resettlement, Pollution Prevention, Cleaner Production, Waste Management, Natural Resources Management using GIS & Remote sensing, Income Generation through Microenterprises, and Biodiversity Conservation.

A highly competent and motivated staff of more than 160 professional and support staff in diverse fields ranging from Anthropology, Sociology, Economics, Forestry, Ecology, Geology, Engineering and Analytical Chemistry contribute to the assignments undertaken. Professionals for each assignment are carefully selected to provide trans-disciplinary inputs effectively.

Besides R & D workshops, support is also drawn from a well equipped Computer Unit, an accredited Information Unit and Geomatics Facility. DAINET, our information network, gives access world-wide to our partner NGOs throughout India and overseas. The Environmental Monitoring Facility can undertake soil, water and air analyses.

The Regional Office in Bangalore in the past seven years of its operation has built up considerable expertise in the field of low-cost construction using appropriate technologies and local materials as well as in income generation activities. The Regional Office looks after the operations in Karnataka and other southern states.

## Annex 1

The Regional Office in Jhansi looks after the operations in the Bundelkhand region. It has shown excellent results on ground during the past four years in wasteland development, natural regeneration, soil & moisture conservation, community irrigation systems and income-generation activities.

An Appropriate Technology Centre is being established in Orchha, Madhya Pradesh. This Centre is a unique experiment in design and dissemination of appropriate technologies in the Bundelkhand region.

**Contact Address:**

Development Alternatives  
B-32, TARA Crescent, Qutab Institutional Area,  
New Delhi, India-110016  
Tel: 91+11+685-1158, 696-7938, 66-5370,  
Fax: 91+11+686-6031  
E-mail : tara@sdalt.ernet.in  
URL : <http://www.ecouncil.ac.cr/devalt>

## Overview of WCMC

*WCMC provides information services on the conservation and sustainable use of species and ecosystems, and supports others in the development of their own information management systems*

WCMC is internationally recognised as a centre of excellence in the location and management of information on the conservation of biodiversity. The Centre has more than 17 years' experience in this field, during which time it has provided advice and information services not only to its three founder organisations, IUCN, WWF and UNEP, but also to development aid agencies, UN agencies, international convention secretariats, governmental and non-governmental organisations, commerce, industry, scientists and the media.

WCMC is a non-profit organisation, independent of governmental funding and public membership. Occupying a purpose-built building in Cambridge, WCMC is a highly professional organisation with full project development and management capabilities. WCMC employs some 50 professional staff, with a wide range of international experience, and has an annual turnover of more than £2 million.

Key skills include:

- Development and provision of information services
- information management on:
  - national parks and other protected areas
  - species and habitats of conservation concern
  - international agreements and programmes
- locating information from other sources worldwide
- systems analysis
- database design and management
- map based Geographical Information Systems (GIS)
- computer communications

Annually WCMC delivers more than 30 projects, as well as providing a regular information service for a wide range of clients. WCMC's project portfolio of over 100 projects in execution or development, builds on the Centre's resources and staff experience and is centred upon the main aims of the Centre, which are to provide:

- information services based on programmes of analysis, compilation and assessment
- technical assistance based on experience in information management

WCMC has significant experience in the development of information services required by users of biodiversity data, including information services on the Internet, and is working with support from the BT Community Programme to develop improved services. Examples of WCMC information services tailored to the needs of specific users include support to:

- the Convention on International Trade in Endangered Species Secretariat, and several Contracting Parties include the European Union
- IUCN and UNESCO on World Heritage
- IUCN's expert networks on species and protected areas
- UNEP and the Convention on Biological Diversity

**Annex 1**

In addition, WCMC has been collaborating with British Petroleum Company plc and International Petroleum Industry Environmental Conservation Association (IPIECA) to develop an advanced map-based information management system - the Biodiversity Map Library - using ESRI's ARC/INFO. The Biodiversity Map Library aims to facilitate access to computer maps and the databases linked to them, providing non-expert users much of the power of a computer GIS, without requiring them to be familiar with GIS software and technology. This database offers an advanced take-off point for further projects in this area.

WCMC has been very active in supporting the development of in-country information management and is the hub of a network of organisations preparing guidelines and materials for capacity building. These activities build on an earlier collaboration between WCMC and UNEP on the development of Guidelines for Country Studies on Biological Diversity. They aim to provide the support necessary for developing and implementing the national biodiversity strategies and action plans called for by the Convention on Biological Diversity. WCMC activity in this area is likely to increase significantly over the next few years.

WCMC works to a three-year programme, reviewed annually by its international management board. The programme identifies the wide range of activities being undertaken by the Centre, most of them in collaboration with a wide range of national and international organisations. The programme also charts the general direction in which the Centre is moving, while providing sufficient flexibility to encompass new services which fall within the Centre's mission. WCMC actively seeks new opportunities.

The WCMC Board comprises: Rudolph Agnew, a British businessman; Anthony Brough, former Assistant Executive Director of UNEP; Dr Claude Martin, Director of WWF International; David McDowell, Director General of IUCN – The World Conservation Union; Professor Reuben Olembo, UNEP Office of the Environment Programme; Dr Robin Pellew, Director of WWF UK; and Professor Adrian Phillips, Chairman of the IUCN Commission on National Parks and Protected Areas. Dr Mark Collins, Director of WCMC, acts as Secretary to the board.

**WCMC and the Internet**

WCMC has been using the World Wide Web (WWW) since September 1994 to deliver information services to Internet users. Currently more than 100,000 files are accessed a month, (up to 1000Mb of data), and that figure is continuing to increase.

- *WCMC Home Page*: Describes the Centre's objectives, products and services, and provides access to a range of information. <http://www.wcmc.org.uk>
- *1994 IUCN Red List of Threatened Animals*: The internationally recognised database of globally threatened animals, compiled in collaboration with the IUCN Species Survival Commission. [http://www.wcmc.org.uk/data/database/rl\\_anml\\_combo.html](http://www.wcmc.org.uk/data/database/rl_anml_combo.html)
- *1993 United Nations List of National Parks and Protected Areas*: Maintained in collaboration with the IUCN Commission on National Parks and Protected Areas, this database provides definitive information on the world's national parks and reserves. [http://www.wcmc.org.uk/data/database/un\\_combo.html](http://www.wcmc.org.uk/data/database/un_combo.html)

WCMC is actively developing new information services in collaboration with others, helping Internet users to locate the information they need more easily.

## Annex 1

- *Protected Areas Virtual Library*: A gateway to information on the world's protected areas on the Internet, developed in collaboration with the IUCN Commission on National Parks and Protected Areas.  
<http://www.wcmc.org.uk/~dynamic/pavl>
- *Desertification Information Network*: Developed in collaboration with agencies in France and Belgium to support the EU Centre for Earth Observation; including pages focusing on research, education and policy issues concerning desertification.  
<http://www.wcmc.org.uk/~dynamic/desert>
- *Global Lake and Catchment Conservation Database*: A pilot project for access to lake level and conservation data on the world's most significant lakes. Developed with the Mullard Space Science Laboratory and UNEP.  
<http://www.wcmc.org.uk/~dynamic/lcdb>
- *World Conservation Library*: A new Internet service under development by IUCN and WCMC to help locate and obtain copies of IUCN and WCMC reports and publications.
- *CITES*: Pages describing the Convention on International Trade in Endangered Species of Wild Fauna and Flora, and the data managed on the Secretariat's behalf by WCMC.  
[http://www.wcmc.org.uk/convent/cites/cn\\_cites.html](http://www.wcmc.org.uk/convent/cites/cn_cites.html)
- *World Heritage Information Network*: Collaboration with UNESCO, IUCN and ICOMOS on the development of an Internet information service for the World Heritage Convention.  
<http://www.wcmc.org.uk/whin>

WCMC is also assisting other organisations in the development and implementation of their own WWW services, some of which reside on WCMC's server, and others on servers elsewhere.

- *Convention on Migratory Species*: Multilingual pages describing the Convention and its associated agreements, developed by the Convention Secretariat, and housed on WCMC's WWW Server.  
<http://www.wcmc.org.uk/~cms>
- *Convention on Biological Diversity - Clearing House Mechanism* Collaboration with the Convention Secretariat and BIN21 in the first phase of developing the Clearing House Mechanism for the Parties to the Convention on Biological Diversity.
- *European Centre for Nature Conservation*: Provision of technical support to the ECNC in the development of their own WWW service.  
<http://www.ecnc.nl>
- *European Environment Agency*: Provision of advice on WWW policy for EIONET, and on the development of a virtual library on European Biodiversity.

**Listservers:** Listservers provide a common contact point for people interested in information, opinions and even data via e-mail on a particular subject. Subscribers to a listserv automatically receive all messages sent to that listserv. WCMC manages the following listservers:

- *CITES-L*: Established by WCMC to support the Convention on International Trade in Endangered Species of Wild Fauna and Flora. Some 5-10 messages are distributed daily to approximately 450 people.
- *DESERT-L*: Established by WCMC to support the Desertification Information Network developed for the European Union Centre for Earth Observation. Between 1-5 messages are distributed daily to approximately 80 people.

**Annex 1**

- *ECONET-L*: Established for the European Centre for Nature Conservation, to promote communication between scientists, planners and policy makers on ecological network development.

**GMS Map and Database Server:** WCMC has established a map browsing service available through the WWW. This service is based on the Geomanagement System (GMS) of da Vinci Consulting in Belgium, and allows users to use either spatial or form-based queries to access a range of WCMC managed data. These data are held in *geo-catalogues*, several of which can be viewed using WWW browsers.

*http://www.wcmc.org.uk:8000*

**Metadatabases:** WCMC has been working closely with the *Consortium for International Earth Science Information Network (CIESIN)* in the development of a system to distribute metadata (information about available datasets). The Centre has a CIESIN Catalog Server which holds metadata on a range of WCMC databases, and this information is also included in the NASA *Global Change Master Directory*. WCMC is also working closely with UNEP on the development of their metadata services for *UNEP-GRID*.

**FTP Server:** WCMC also maintains disk space which is available to other users of the Internet. This allows others to leave and retrieve computer files and is commonly used in the exchange of data between WCMC and its collaborators.

*ftp://ftp.wcmc.org.uk*

## Nordic Center for Innovation

The Nordic Center for Innovation (NCI) is a joint research and competence center of the Norwegian School of Management School of Marketing in Oslo, Norway, the University of Lund School of Architecture in Lund, Sweden, and the University of Art and Design, Helsinki UIAH Department of Environmental Design in Helsinki, Finland.

NCI encourages research and development in the fields of;

- innovation studies
- innovation research
- leadership
- change management
- problem solving
- creativity research
- transforming information into knowledge
- design for business and industry
- information design

### Organization and Structure

NCI is a non-profit scientific and educational organization acting under the authority of the Norwegian School of Management School of Marketing. The activities of the center are managed by the Director. The center is governed by a Board of Directors with consultation from the Fellows.

The Board of Directors consists of one member each appointed by each of the three schools together with the director of the center and up to five others appointed by the board. The current directors are:

- Prof. Dr. Johan Olaisen, Rektor, Norwegian School of Management NMH
- Prof. Ark. Janne Ahlin, Dekanus, Department of Theoretical and Applied Aesthetics of the School of Architecture at the University of Lund
- Assoc. Prof. Ark. Jan Verwijnen, Department of Industrial Design, University of Industrial Arts, Helsinki
- Prof. Dr. Harry Nyström, School of Economics and Management, SLU, Uppsala
- Assoc. Prof. Dr. Ken Friedman, Norwegian School of Management NMH and Director of the Center
- Siv.Øk. Olav Djupvik, Stipendiat Norwegian School of Management NMH, Doktorand University of Gothenburg and Editor of the Studies in Innovation series.

### Membership

Participation in the center is open to scholars and professionals of any nation who apply for membership as Fellows of the Nordic Center for Innovation. There is no charge for membership. Membership applications are decided by the Board of Directors. Students and research associates may be accepted as Associate Fellows.

### Publications

NCI publishes a series of essays, working papers and monographs on the subject of innovation titled Studies in Innovation. The series is distributed to participating schools, selected libraries and fellows. Texts published in the Studies in Innovation series will be made available at no cost on the

**Annex 1**

World Wide Web through the Norwegian School of Management. When NCI co-publishes documents with another publisher, the decision to publish on the Web will be made together with the publishing partner. Olav Djupvik is editor of Studies in Innovation.

NCI releases occasional monographs in the areas of our research interest. Monographs are distributed to participating schools, selected libraries and fellows. NCI monograph will be made available at no cost on the World Wide Web through the Norwegian School of Management. When NCI co-publishes documents with another publisher, the decision to publish on the Web will be made together with the publishing partner.

**Documents available on World-Wide-Web:**

- Language and Culture in the Information Age. Electronic reprint of Friedman, Ken. 1995. "Language and Culture in the Information Age." *Art and Design* (No. 45, Nov-Dec), 56-59.
- Restructuring the City: Thoughts on Urban Patterns in the Information Society. Electronic reprint of: Friedman, Ken. 1996. *Restructuring the City*.
- Thoughts on Urban Patterns in the Information Society. Stockholm: Swedish Institute for Future Studies (Institutet för Framtidsstudier).
- Books in the Age of On-line Information: Will We Read More of Fewer Books? Statistical Summary and Preliminary Conclusions - by Ken Friedman

**Innovation Quarterly**

NCI publishes *Innovation Quarterly*, a quarterly bulletin containing articles, notes, news, short papers, reports on research in progress, information on forthcoming center publications and book reviews. *Innovation Quarterly* is distributed to participating schools, selected libraries and fellows. *Innovation Quarterly* will be made available at no cost on the World Wide Web through the Norwegian School of Management. Ken Friedman is editor of *Innovation Quarterly*.

**Activities**

The center serves as a think-tank and collegium for interaction and research. The center is still beginning its work. We are still surveying the field as we develop opportunities and possibilities. We are already active as a network. We expect to become increasingly active as a working group through the projects that are taking shape.

The center funds no projects at this time. Rather, we serve as a network linking participants who are responsible for developing and funding their own research. Project funding is now organized through the respective research programs of the individual schools or under the aegis of individual researchers. And we are exploring new funding channels in both Norway and Sweden.

The center also assists in consulting and research private for industry and public agencies.

**Offices**

The Nordic Center for Innovation has a working office at the Norwegian School of Management School of Marketing. We work out of the individual offices of Ken Friedman and Olav Djupvik and we share archival and project space that has been made available to us.

For more information, contact:

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Nordic Center for Innovation  
Postbox 4676 Sofienberg  
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Phone: +47 22.11.55.60  
Fax: +47 22.11.56.20

## *The AIDEnvironment Profile*

AIDEnvironment is an independent non-profit expert organisation working globally since 1988 to promote the conservation of biological diversity, environmental protection, the wise use of natural resources and sustainable development. Its work focuses on six main themes: nature and biodiversity, European environmental policy, the marine environment, environmental assessment, forests and wetlands.

### *Making Policies Work*

AIDEnvironment's maxim is 'Making Policies Work'. This objective is achieved through building bridges between policy-makers, planners, the research community and citizens, implementing practical experience into policy and planning and searching for common ground. It involves working at local, regional, national, international and global levels, adapting solutions to the appropriate scale and promoting integrative approaches.

### *Broad Experience*

AIDEnvironment's expertise covers the fields of ecology, economics, forestry, land use, law, policy-making, capacity-building, institutional development and training. The services provided include analyses of law and policy, environmental assessment, institutional advice and training programmes. AIDEnvironment is active in the entire project cycle, from project identification through design to implementation and evaluation.

### *Major Clients, Globally Active*

AIDEnvironment has established a broad client base. Among its clients are government ministries and affiliated institutions, the European Commission, development agencies, UN organisations such as the FAO, IMO and UNDP, international financial institutions, national and international non-governmental organisations, universities and private enterprises. AIDEnvironment is active in Europe, Africa, Asia and Latin America.

### *The AIDEnvironment team*

- *Bart Romijn*, director
- *Graham Bennett*, director European affairs
- *Liesbeth Bijvoet*, environmental lawyer
- *Miranda Boland*, environmental biologist
- *Mark van Dorp*, economist
- *José Joordens*, marine ecologist
- *Jan Joost Kessler*, agro-ecologist
- *Ria Kranstauber*, secretary
- *Hugo Nijkamp*, marine biologist
- *Don Offermans*, forester
- *Marjon Reiziger*, capacity development
- *Diana Stalenhoef*, policy analyst
- *Mirjam van Urk*, secretary
- *Eric Wakker*, environmental geographer
- *Jeroen van Wetten*, ecologist
- *Piet Wit*, natural resources management
- *Harry van der Wulp*, pesticide management

### *Our Main Areas of Work*

**Nature and biodiversity** Our activities cover a wide range of conservation issues, from the protection of individual species such as rhinos, wild horses, dugongs and whales, to conservation of ecosystems, such as forests, wetlands and marine areas. Major studies include the assessment and development of national and international policies on the conservation of biological diversity and the sustainable use of biological resources. We have also contributed to the design and implementation of projects aimed at creating local, national and international ecological networks.

**Annex 1**

**European environmental policy** Our main areas of work include the environmental implications of the EU Treaty, the development and implementation of EU environmental policy and its integration into other policy sectors, the implementation of the Pan-European Biological and Landscape Diversity Strategy and environmental cooperation between Western Europe and the countries of Central and Eastern Europe.

**Marine environment** The focus of our work in this sector is the sustainable use of marine resources through the concept of integrated sea-use management. Policy analyses cover the international protection of marine species and habitats, sustainable fisheries, agreements for the protection of marine biodiversity and the management of marine protected areas. Our other main activities include process support for marine policy development, fishery management, marine ecological field studies and the development of integrated coastal area management.

**Environmental assessment**

Based on our experiences with Environmental Impact Assessment (EIA) and Environmental Profiles, we developed the Strategic Environmental Analysis (SEA) methodology. SEA is a planning tool for decision makers to integrate in a systematic way environmental concerns into human development processes. It is a 'proactive' tool that focuses on the environmental strengths and the opportunities, leading to sustainable development action plans. We facilitate and support various SEA processes and are also involved in preparing EIAs and monitoring and evaluation studies.

**Forests** A variety of studies into forest-related policies on a global, European and national scale have been carried out. Sustainable forest management is an important issue in this sector, which includes timber trade and the socio-economic role of non-timber forest products. Projects concerning forestry and watershed management have been undertaken in several countries in Southeast Asia, Africa and the Amazon region.

**Wetlands** We pursue the conservation and wise use of wetlands through a wide range of activities such as ecological assessment, integrated planning, restoration, nature development and institutional adjustment and the promotion of partnerships. Currently we are developing a world-wide series of model wetlands projects with the goal of securing a balance between multiple use and the conservation of biodiversity and incorporating an active communication strategy.

June, 1997



## Annex 2: DAINET project funded by Ford Foundation

### A. BACKGROUND

Over the past years there have been growing efforts by governments, independent sector organisations (ISOs), corporations, research institutions and others aimed at sustainable development. However, in India, like many other developing countries these efforts have been considerably hampered by the lack of timely, reliable and useful information. As a result, decision making is very often based on partial information and / or conjectures of vested interests.

The independent sector is a constituency of rapidly growing importance in the planning, execution and monitoring of sustainable national development effort. In addition to environment and development NGOs, ISOs also encompass grass roots movements, women's organisations, youth groups, indigenous peoples, scientific associations, trade unions, religious groups, etc.

Even when available, information is not easily accessible by the ISO, whose critical role has been widely recognised and endorsed in national and international policy formulations. Numerous conferences and workshops have highlighted the difficulty faced by ISOs in obtaining the information they need to provide useful inputs to decision making.

While the government, major academic bodies, and the private sector have initiated establishment of information networks using the latest technologies, these will take their own gestation periods to be fully operational. The independent sector will not have access to these networks for quite some time. Even when they become accessible, they will not cater to the specific requirements of the independent organisations. As a consequence, lack of useful information could continue to cripple the efforts of the independent sector for some time.

#### 1. Situation Analysis

More specifically the information related issues confronting the ISOs include :

##### **a. Lack of Connectivity:**

- Electronic connectivity is the lowest among ISOs when compared to other constituencies of society. A few ISOs have taken an e-mail connection from a government or a commercial network service provider. Even those with connections are unable to use it to its potential.
- There are probably about five thousand ISOs with computer and telephone connections, but not electronically connected due to non availability of modems and other support services customised to meet their requirements. This is the most important group that needs to be systematically connected as soon as possible.
- There are about thirty to one hundred thousand ISOs who are non automated, who also require more systematic information support for their environment and development activities. Of these at least five thousand have adequate working knowledge of English. They immediately require a seamless link with the automated world. The bridge with the rest can be effectively built only if multi-lingual software packages are developed.



**Annex 2**

- Currently only a couple of user networks are focusing on the requirements of ISOs. These efforts too are rather rudimentary when compared to the scale and complexity of the requirements.

***b. Lack of timely, reliable and user friendly information on environment and development issues:*** (Refer Table 1: A Preliminary Illustration of Users, their Information Needs and Gaps)

- What is available is not automated and thereby, not accessible in the time required and cannot be easily processed into user friendly formats.
- Information is often not available and therefore, efficient databases and its associated services need to be developed.
- Due to the rapid growth of Internet and associated services, ISOs are often dumped with foreign information. The information is either not inherently useful or not converted into a format in whereby it can be used effectively by most ISOs in India.
- There are some very useful discussion groups on issues of environment and development in India through informal meetings, letters and newsletters. These have virtually no links with any electronic conferences on similar themes. Most electronic conferences within India are those in which very few selected Indian groups participate in some global electronic conferences.
- Substantive query response and customised information services on environment and development themes are very few in India. Here again, they operate through conventional means of communication with virtually no use of electronic communication systems.

***c. Potential of mapping and geomatic applications for ISO activities comparatively untapped:***

- Though a very powerful tool for planning, community participation, communication and negotiations among various stakeholders in the sustainable development process, the use of this tool is limited to very few ISOs in the country.

***d. Information support services to major sustainable development support agencies and their associates in India are not adequately systematised :***

- As in the case of FORD Foundation, several other agencies in India have recognised that more systematic information support services can enhance the impact of their current activities.

**2. Scope for Strengthening Independent Sector Information Services in India**

- There is a urgent need for three to four networks in India focusing on the information support requirements of the Independent Sectors Organisations.
- In the next five years each of these can concentrate on approximately 1500 automated users and an equal number of non-automated users. These networks also need to establish links with other national and international networks focusing on the specific needs and requirements of other constituencies in society.
- DAINET has been visualised as one of these networks focusing on strengthening independent sector information services in the Indian Sub-Continent.



Table 1 : A Preliminary Illustration of Users, their Information Needs and Gaps

	USER	INFORMATION NEED	EXISTING INFO.	
			Availabilit y	Others
<b>INDIAN</b>				
1.	Government			
	a. Central	e.g. Secretary, NWDB	■	■
	b. State	e.g. CE, PWD, State HQ		
	c. District	e.g. Distt. Agric. Officer		
	d. Block	e.g. Industrial Extn. Officer	■	
	e. Panchayat	e.g. Panch		
2.	Independent Sector			
	a. National NGO			
	b. State level NGO			
	c. Grassroots NGO			
	d. Community Groups	e.g. Mahila Mandal	■	■
	e. Individuals	e.g. Freshly graduated person		
3.	Academic/Research Inst.	e.g. Research Group on Renewable Energy	■	■
4.	Private Sector			
	a. Large and Medium		■	■
	b. Small/Cottage			
<b>FOREIGN</b>				
1.	Government			
	a. Multilateral	e.g. UNEP		
	b. Bilateral	e.g. IDRC		
2.	Independent Sector	e.g. Consultant (WB)	■	
3.	Academic/Research Inst.	e.g. National Centre for Geog. Info. & Analysis, USA	■	■ ■

1 - Accessible, 2 - Reliable, 3 - Timely, 4 - Useful  1  2  3  4

Yes  No

**2. DAINET Vision**

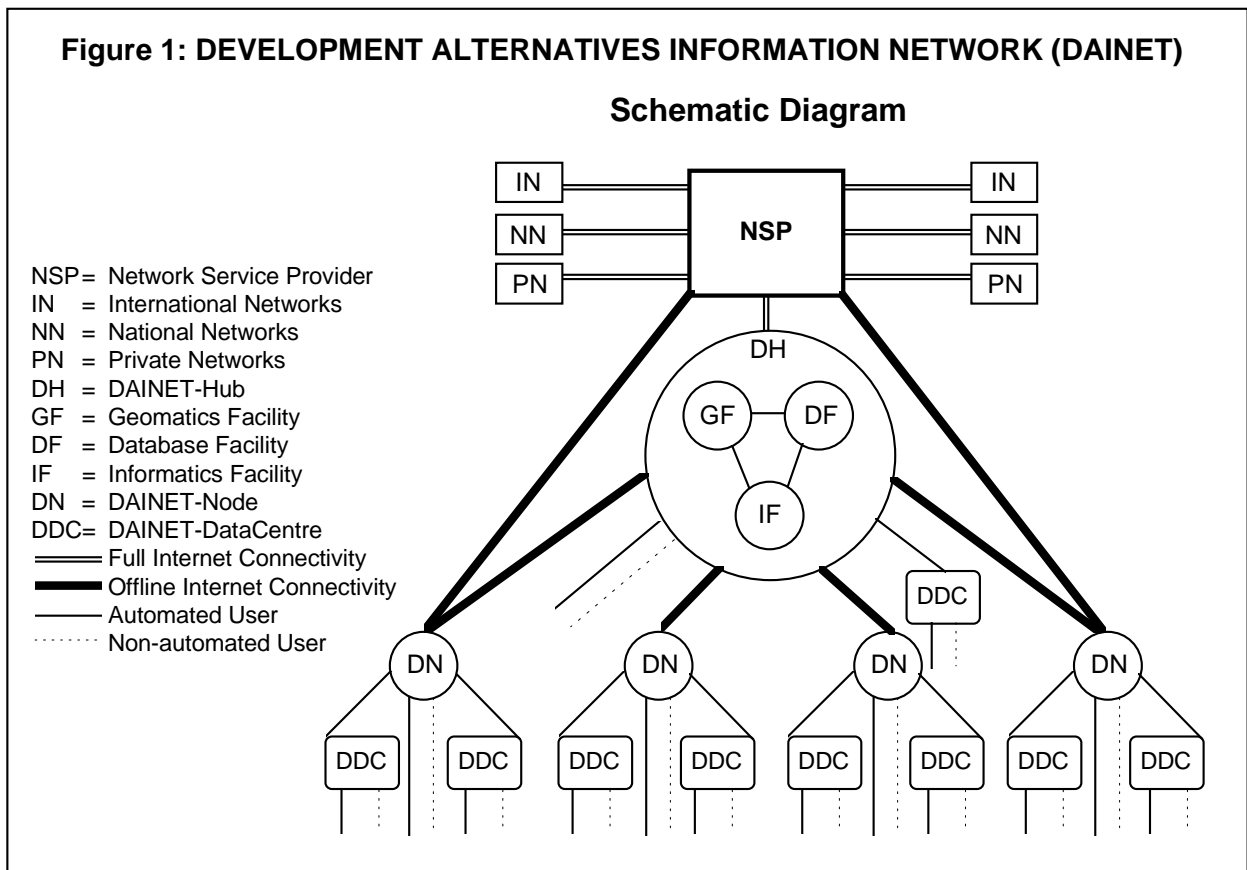
Over the next six to eight years, DAINET aims to fully service the information needs of over 1500 automated users and an equal number of non-automated users in the Indian sub-continent on a regular basis. Another 5000 random users in the region are expected to be linked to the network each year. The multipliers with Internet are expected to be enormous.

The structure of the system is envisaged as follows:

- a. One DAINET-HUB at Delhi
- b. 24 DAINET-Nodes spread across the Sub-Continent growing at the rate of six per year
- c. 30 DAINET-DataCentres spread across the Sub-Continent growing at the rate of six per year
- d. Over 50 DAINET Partners associated from with the network from time to time for specific requirements

DAINET hopes to attain this structure and reach through collaborations with about four sustainable development support agencies like the FORD Foundation.

A schematic representation of DAINET Vision is illustrated in Figure 1.



**Annex 3: INFO2000 Contract**

*bound into hardcopy version*



**Annex 4: Powerpoint Presentation of Prototype INFO2000 Product**

*bound into hardcopy version*



## Annex 5: Products of INFO2000 Definition Phase Project

### *Demo versions of UIA hyperlinked databases* <http://www.uia.org/uiademo/demohome.htm>

Samples of entries from nine UIA databases: Organizations, World Problems, Strategies – Actions – Solutions, Human Development, Human Values, Integrative Knowledge, Metaphors and Patterns, Biographical Profiles and Bibliographies. The [Strategies](#) database was modified to incorporate search query links into the WCMC databases; also added were general search query and translation options and hard links to Internet resources.

### *3-D VRML experimental structures:* <http://www.uia.org/uiademo/vrml/vrmldemo.htm>

Techniques were developed to convert clusters of hyperlinked entities from the UIA databases into various 3-D structural configurations, which can be explored, using the facilities of virtual reality (VRML) environments on the Web. The networked relationship structures displayed include problem loops and multiple loop interlocks, as well as clusters of interrelated organisations.

### *CITES-listed Species Database:* <http://www.wcmc.org.uk/CITES/english/database.htm>

This is a searchable database of CITES listed species, identifying when the species was listed, where it is found, whether any countries have taken out reservations over the listing, etc. This database is a significant development and demonstrates an interactive tool, which will be developed during the Implementation Phase for other conventions.

### *Protected Areas Database:* [http://www.wcmc.org.uk/protected\\_areas/data/new.htm](http://www.wcmc.org.uk/protected_areas/data/new.htm)

This database includes a much wider range of information on both nationally and internationally designated sites, including links to descriptions of many of the sites, relationships between internationally designated sites and the national sites they are based on, etc. Future development of this information will include improved ability to link directly to the information on each of the international agreements and programmes (building on the World Heritage example below).

### *Descriptions of natural sites:* [http://www.wcmc.org.uk/protected\\_areas/data/wh/](http://www.wcmc.org.uk/protected_areas/data/wh/)

These are the more detailed descriptions of each of the natural World Heritage sites, initially developed for UNESCO by WCMC. They have been formatted for and placed on the WWW as part of the work for the INFO2000 project, demonstrating the good descriptive information available for key protected areas. In future, links could be added to maps and images. This is also a demonstration of what could be done for other internationally designated sites.



**Annex 6: INFO2000 Workpackages**

INFO2000 PROGRAMME

*Form INF3*

**WORKPACKAGE DESCRIPTION**  
for WORKPACKAGE N°: 1

**Title:** Project coordination and administration

**Lead partner for this WP:** UIA

**Start month:** 1    **End month:** 24

**Initial state, work already done, preconditions for starting tasks, end result expected:**

This workpackage will start with the initiation of the Implementation Phase and finish with the launch of the product/service and presentation of the report. The Coordinator will extend activities to cover any outstanding or consequent arrangements with the Commission.

The objectives of this workpackage are to ensure that all the required work is planned, and the activities of the four partners in different locations are coordinated to run smoothly and in a timely fashion throughout the project.

**Tasks:**

Coordination and management of the project will comprise the following tasks:

1. Liaison with the Commission and the project team, on a regular basis;
2. Financial management of the project;
3. Scheduling of activities and ensuring adherence to schedule;
4. Preparation of progress and final reports;
5. Timely delivery of deliverables;
6. Organisation of team meetings;
7. Any other necessary coordination, administrative, financial or reporting activities.

**Estimation of labour effort required:**

UIA				WCMC				NSM				AIDE				Total mths
Man	Tech	Mark	Oth	Man	Tech	Mark	Oth	Man	Tech	Mark	Oth	Man	Tech	Mark	Oth	
6	0.5	0	0	0.5	0.5	0	0	0.25	0	0	0	0.25	0	0	0	8

INFO2000 PROGRAMME

Form INF3

**WORKPACKAGE DESCRIPTION**

**for WORKPACKAGE N°: 2**

**Title:** User needs and design

**Lead partner for this WP:** WCMC

**Start month:** 2

**End month:** 22

**Initial state, work already done, preconditions for starting tasks, end result expected:**

This workpackage focuses on the needs of users. The goal would be to identify user groups and draw them into the process of product development. These methods used would stress active interaction as user-partners rather than a passive user-role. The expected end result is a product with a high degree of user interactivity and feedback, also incorporating 'good design features'.

The prototype demonstrated possibilities for several innovative user features including: (1) exploiting Web search engine technology for multimedia retrieval in simultaneous CD-ROM and online modes; (2) interactive possibilities which allow users to "modify" and "annotate" data supplied in read-only format on CD; (3) language-related tools and data assistant which would considerably increase access possibilities via other European languages.

**Tasks:**

1. User would be identified and approached, notably where they are gathered at relevant international meetings. The consortium will also work with the existing users and cooperation partners of its information (those with a vested interest in the data), notably in online mode, to comment and review the product development. Results would be progressively collated and incorporated into product design.
2. Feedback facilities offered through the Web will be developed to enable users to point out both deficiencies in the data, to supply new information or to identify new sources of information. User filters for information will be designed. In addition, the interactive possibilities offered by software such as *Folio Views* will be explored to enable simple online transfer of selected portions of user data to the data providers as comments or data updates or supplements.
3. User search capacity will be extended by refining generated search strings, exploiting the possibilities presented by new search engine features and increasing the 'Europeanization' of search engine facilities with respect to language features.
4. Enhance multi-lingual access to the data by: (1) improving multi-lingual thesaurus and search facilities; (2) accelerating translation of important texts into other languages, particularly French, Spanish and German ; (3) investigating incorporation in the product of software packages to provide crude on-the-fly translations of web documents; (4) refining search engine query techniques to provide users with access to documents in other languages.
5. Optimise design and ergonomic features (notably from a cross-cultural perspective). This is not simply how the product looks. Good design is functionality, beginning with the design of the information datasets, their structure, the way they are logically interrelated, the simplification of complexity for the user using interfaces and other means, the attractiveness of the product, its ease of use, its flexibility for modification, its responsiveness to users, its ability to accommodate new and different forms of information, its capacity for growth, its ability to give the user what they want with relative ease, its cultural sensitivity, etc.

**Estimation of labour effort required:**

UIA				WCMC				NSM				AIDE				Total mths
Man	Tech	Mark	Oth	Man	Tech	Mark	Oth	Man	Tech	Mark	Oth	Man	Tech	Mark	Oth	
1	7.5	0	5	2	2.5	0	0	0	0	2	0	0	0	2	0	22

INFO2000 PROGRAMME

Form INF3

**WORKPACKAGE DESCRIPTION**

**for WORKPACKAGE N°: 3**

**Title: Content (Data WCMC)**

**Lead partner for this WP: WCMC**

**Start month: 5 End month: 23**

**Initial state, work already done, preconditions for starting tasks, end result expected:**

Two prototype databases were made accessible during the Definition Phase of the project, one for species (<http://www.wcmc.org.uk/species/data/species.html>), the other for protected areas ([http://www.wcmc.org.uk/protected\\_areas/data/new.htm](http://www.wcmc.org.uk/protected_areas/data/new.htm)). These will be developed further, working in collaboration with the IUCN Species Survival Commission, BirdLife International, the IUCN World Commission on Protected Areas (WCPA) and others.

During the Definition Phase, WCMC also developed an interface to information specific to the CITES Convention (<http://www.wcmc.org.uk/CITES/english/database.htm>), in particular providing interactive access to information on CITES listed species. This prototype database provides an excellent model for similar information services for other international agreements for biodiversity conservation.

**Tasks:**

- Information on threatened species will be improved in the following ways: (1) links made to information on species regarded as threatened at the national level; (2) delivery of an improved *Red List of Threatened Species* over the WWW; (3) adding information on *why* individual species are threatened, with links to the problems database managed by UIA (WP 4); (4) improving information on species listed on the annexes and appendices of international agreements; (5) adding information on species distribution and habitat, and providing opportunities for additional links to information on problems and strategies (WP 5).
- Information on protected areas will be improved in the following ways: (1) uploading more information available on protected areas than is currently incorporated within the prototype; (2) reviewing and updating the United Nations List of National Parks and Protected Areas and revising the database accordingly; (3) adding information on protected areas that are internationally recognised by international agreements and programmes, including Natura 2000, the Council of Europe Emerald Network, ASEAN heritage sites, etc.; (4) adding information on sites recognised as being in danger, including those listed as World Heritage in Danger or on the Ramsar Convention Montreux Record (recognising potential for links to the UIA problems database); and (5) improving information available on individual sites, either through delivery of information by WCMC, or linkage to other information sources.
- Interfaces for each of the major international agreements and programmes would be developed, allowing for more integrated linkage of information on strategies and biodiversity status. This would be done in collaboration with other convention secretariats, which would provide opportunities for co-financing and for synergistic support (WP 8). WCMC will also be working on a feasibility study on harmonization of information management and reporting for the convention secretariats.

**Estimation of labour effort required:**

UIA				WCMC				NSM				AIDE				Total mths
Man	Tech	Mark	Oth	Man	Tech	Mark	Oth	Man	Tech	Mark	Oth	Man	Tech	Mark	Oth	
0	0	0	0	2.5	11.5	0	9	0	0	0	0	0	0	0	0	23

INFO2000 PROGRAMME

Form INF3

**WORKPACKAGE DESCRIPTION**

**for WORKPACKAGE N°: 4**

**Title: Content (Data UIA)**

**Lead partner for this WP: UIA**

**Start month: 5 End month: 23**

**Initial state, work already done, preconditions for starting tasks, end result expected:**

The initial state, and work already done, are described in Report of Implementation Phase and have been delivered on prototype. The expected end result of further work is to: (1) augment the existing UIA databases on Problems, Strategies and Treaties (Organisations) by adding further data not yet incorporated, and in particular information on Strategies and Treaties of relevance within the European context; and (2) improve the interlinkages between these datasets, so as to increase their value in policy analysis and issue identification.

**Tasks:**

**Problems:**

- Add appropriate text and links (internal and external) to new Problem entries created during the Definition Phase, corresponding to threatened species and groups of species (13,119 entries, as well as to threatened habitats, biomes etc (303 entries).
- For species and habitats that are threatened, insert a new field label, like 'Value/Environmental Significance', under which there is text explaining what the loss of such entities implies.
- Reverse links from Strategies to Problems.
- Make query search links into WCMC's new databases and for generalized Web searches.
- Generally, review, supplement and strengthen Problems texts relating to biodiversity conservation.

**Strategies:**

- Strengthen logical structure of hierarchies within the database.
- Integrate data on relevant treaties.
- Integrate outcomes of the CSD process (Rio+5 and related activities), including international conventions associated with Agenda 21 and other major environmental plans, strategies and actions.
- Review latest materials from relevant international organisations, particularly from the Council of Europe and other European institutions, and from IUCN, WWF and other NGOs concerned with species and habitat conservation.
- Generally, review, supplement and strengthen Strategies texts relating to biodiversity conservation.

**Organisations/Treaties:**

- Supplement UIA treaties database, particularly adding relevant European Community Directives.
- Hyperlink to electronic versions of Treaties and related texts (both online and/or to files on the CD).

**Feedback loops:**

- In parallel with editing of Problems and Strategies files, progressively edit Loops file (for interface with work in WP 5 and 6 on identifying and visualizing feedback loops)

**Estimation of labour effort required:**

UIA				WCMC				NSM				AIDE				Total mths
Man	Tech	Mark	Oth	Man	Tech	Mark	Oth	Man	Tech	Mark	Oth	Man	Tech	Mark	Oth	

**Annex 6**

0.5	11	0	4	0	0	0	0	0	0	0	0	0	0	0	0	15.5
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INFO2000 PROGRAMME

Form INF3

**WORKPACKAGE DESCRIPTION**

**for WORKPACKAGE N°: 5**

**Title: Content (Integration)**

**Lead partner for this WP: UIA**

**Start month: 6**

**End month: 22**

**Initial state, work already done, preconditions for starting tasks, end result expected:**

In the Definition Phase, and for purposes of demonstrating and testing the integration between UIA and WCMC data, effort was devoted to further articulating the UIA content with respect to environmental issues. This provided a pattern of links (including query links) into WCMC data and relevant external websites. It also developed estimates of additional work required to develop more effective linkages between the databases managed by the two organisations, so as to be able to deliver integrated policy-relevant information products and services. This work will be extended.

The other objectives of this work package are to:

- Develop links to other relevant information sources, including other Internet information services and bibliographic references, and to information on organisations working in the biodiversity arena.
- Simplify the representation and improve the user accessibility of complex patterns of data and data held in different domains (eg feedback loops, habitats).
- Develop additional mechanisms to display and interpret data. The ability for users to perform such analyses themselves gives all categories of user from policy-maker to educator the ability to derive simple indicators from the available data, which can be linked to particular environmental pressures.
- Standardize, where appropriate, datasets held by different partners (eg bibliographies).

**Tasks:**

1. Exchange frequently task (content) agendas between the partners and periodically review and report on integration potentials.
2. Develop, refine and seek to dynamically display the self-sustaining, interlocking loops of conservation issues and solutions. In the event that on-the-fly generation and visualisation of loops is feasible during web server access, such dynamic displays would be developed as a means of shifting the level of analysis beyond seemingly isolated environmental problems and strategies. The visualization tools would then be adapted to assist editorial and error detection processes. The key issue here is speed of detection and generation of loops. This will be explored as a combination of machine capacity, algorithm logic and display design.
3. Establish the hyperlink relationship between UIA’s problem entries on threatened habitats and WCMC’s habitat data, other species-specific data and to any other relevant electronic datasets. Within this framework and to the extent possible, link particular species or groups of species (e.g. communities or higher taxa) with habitat entries, both within and between the respective datasets.
4. Compare data and field structures of WCMC’s and UIA’s bibliographies. Review duplications. Supplement any deficient data using resources such as *Books in Print*. Combine datasets if practicable, or else endeavour to deliver shared datasets jointly in manner not apparent to the user.
5. Review the extent to which summary information from the WCMC databases can be used to illustrate key issues; incorporate the ability to derive such information into the WWW-based information services. There is then the potential to link particular analyses to the UIA managed datasets, so that the information can be used to illustrate directly the effect of certain conservation problems or strategies.
6. Develop linkages to other relevant information sources, and *at the same time* build links with the organisations involved so that there is an ongoing relationship in the management of mutually supportive datasets. This will involved creating (hyper)linkages between various WCMC and UIA datasets, notably with respect to national organisations, protected areas and systems.

**Estimation of labour effort required:**

UIA				WCMC				NSM				AIDE				Total mths
Man	Tech	Mark	Oth	Man	Tech	Mark	Oth	Man	Tech	Mark	Oth	Man	Tech	Mark	Oth	
0.5	6	0	1	1	11	0	7	0	0	0	0	0	0	0	0	26.5

INFO2000 PROGRAMME

Form INF3

**WORKPACKAGE DESCRIPTION**

**for WORKPACKAGE N°: 6**

**Title: Graphics and visualisation**

**Lead partner for this WP: UIA**

**Start month: 3 End month: 18**

**Initial state, work already done, preconditions for starting tasks, end result expected:**

The objective is for the product to contain a balance of graphics content, pre-generated or generated on-the-fly, that genuinely enhances the value of the product and the comprehensibility of the data for the user. Priority is given to policy-relevant comprehension tools. These can include: species and protected area information distribution maps, photographs and graphics of other kinds (e.g. taxonomic relationships of species, vicious cycles of environmental problems and sustainable cycles of conservation strategies).

A feature of WCMC’s datasets is identification of the geographic location of the species or protected area in question. The UIA records the countries in which each international organisation has members, including signatories to treaties. This data has immediate potential to be converted into maps (some of which may be clickable). These may be pre-made graphics (GIF) files, or ‘flood-fill’ displays generated on-the-fly, or both. There is in-house expertise to do so and portions of certain datasets have been so developed on a prototype basis.

The Definition Phase demonstrated the considerable potential of 3-D displays (VRML) presentations both in the case of problem and organisation complexes. VRML could prove to be an ideal complementary technique for improving comprehension and access to the relational data characteristic of environmental information and institutional networks. Such presentations can be integrated into CD or Web products. Clickable features of such presentations (possibly generated on-the-fly according to user preferences) offer links back into database texts, to distant websites, or into other VRML displays. The latter features opens the possibility of interlinking hundreds of VRML displays through which users can navigate.

**Tasks:**

1. Continue work with mapped representations of UIA data , particularly feedback loops of conservation issues and strategies (see also WP 5).
2. Locate images and soundfiles via Web searches. Make arrangements with Web image and sound providers for user access, for free or at cost, as appropriate.
3. WCMC will purchase the latest ESRI mapping software in order to deliver maps over the Internet. It will continue development of mapping capability and applications, particularly on-the-fly map generation from fixed data fields in various datasets. This expertise will be shared to investigate mapping Organisation data, particularly the mapping potentials of UIA and WCMC treaty data.
4. Continue development of VRML displays of UIA data, particularly on-the-fly generation of display structures. Explore new software potentials, notably to take advantage of VRML version 2.0 and subsequent releases to introduce animation. Investigate mathematics of matrices and graph layout algorithms to assist this process. Involve potential users in a process of review and advice on the meaningfulness of the visualizations and their hyperlinks to descriptive text (see WP 2).

**Estimation of labour effort required:**

UIA				WCMC				NSM				AIDE				Total mths
Man	Tech	Mark	Oth	Man	Tech	Mark	Oth	Man	Tech	Mark	Oth	Man	Tech	Mark	Oth	
0.5	5.5	0	0	0	2	0	0	0	0	0	0	0	0	0	0	8



INFO2000 PROGRAMME

Form INF3

**WORKPACKAGE DESCRIPTION**

**for WORKPACKAGE N°: 7**

**Title: Hardware/software issues**

**Lead partner for this WP: UIA**

**Start month: 3 End month: 15**

**Initial state, work already done, preconditions for starting tasks, end result expected:**

The objectives is to enable the delivery of the UIA databases from an in-house Web server and to upgrade its current CD-ROM capability.

The UIA has a considerable amount of work to do in rationalising and consolidating its WWW capability. This will proceed over the next few years, irrespective of INFO2000. However, there are certain issues relevant to the integration of UIA databases with WCMC's (WP 5), development of special facilities (e.g. on-the-fly VRML displays WP 6) and enabling rapid Web access to relevant portions of its data. These include: selected and differential billing, authentication and security, differential discounts on information in selected domains (partially funded by sponsorship), interface development CGI scripts, feedback/forum arrangements, and static vs. dynamic arrangements.

The current release of Folio successfully employed for the prototype CD is 3.1a. This does however allow for hyperlink access to distant websites from information on the CD, as well as mailing facilities to addresses of organisations profiled on the CD. The product will have to be adapted to Folio 4.1, or some alternative. The Folio 4.1 release has not yet been fully debugged and is only available in a limited number of language versions (and not for Windows 3.x). In the 1997-98 period it will be necessary to upgrade to the newer version to take advantage of extended search facilities

This Workpackage also has implications for, and interacts with, user needs and feedback in WP 2.

**Tasks:**

1. Identify and obtain relevant Web delivery software; application development and experimental operation. In some cases this will be breaking new ground. In others, procedures have already been tested elsewhere and the concern is the degree of relevance to the proposed product/service.
2. Evaluate *OpenInsight* (produced by Revelation and compatible with current UIA and WCMC files) and Folio *siteDirector* (compatible with the current CD file organisation) and other alternatives.
3. Modify flatfile generation programs for CD-ROM creation. Interface redesign (with adaptation to other languages).
4. Evaluate alternative products which are less encumbered by US licensing restrictions whether on unit purchases (CD) or transactions (webserver).

**Estimation of labour effort required:**

UIA				WCMC				NSM				AIDE				Total mths
Man	Tech	Mark	Oth	Man	Tech	Mark	Oth	Man	Tech	Mark	Oth	Man	Tech	Mark	Oth	
1.5	3.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5

INFO2000 PROGRAMME

Form INF3

**WORKPACKAGE DESCRIPTION**

**for WORKPACKAGE N°: 8**

**Title: Marketing and launch**

**Lead partner for this WP: UIA**

**Start month: 4 End month: 24**

**Initial state, work already done, preconditions for starting tasks, end result expected:**

A PowerPoint presentation of the product was also developed for the presentation of the prototype. Using this as a basis, one objective is to produce a guided tour of the features of the product/service, available both to users of the CD and the Web. This would incidentally support the work on user feedback (WP 2).

WCMC has experience with getting subsidies and sponsorship for its information projects, but nothing has been done in relation to this project.

Charging for information services on the Web is still in its infancy. Appropriate security/authentication/billing software has only become widely available in 1996-7. It remains to be determined how these facilities respond to the distinct and common needs of WCMC and UIA in relation to their respective users. The expected outcome of this work is to demonstrate the feasibility or otherwise of using online-charging for the Web delivery of some or all of the product/service.

A preliminary marketing plan for the product/service has been developed during the Definition Phase.

**Tasks:**

1. Review script of product presentation in the light of latest and planned developments. Prepare script suitable for product/service demonstrated to user workshops. Test with a sample of different volunteer users from associated organisations of the partners. Modify script to be suitable for web demonstration of product/service, then release on the Web for wider audience use and feedback. Issue further versions of script as required for subsequent demonstration purposes, including demonstrations to potential sponsors. Make final tour designed for final product/service (as launched at end of Implementation Phase).
2. Prepare a sponsorship proposal to accompany the demonstration materials. Undertake research into likely sponsorship areas and organisations. Approach potential sponsors (companies, foundations and organisations). Follow-up approaches and negotiate deals.
3. Experiment with suitable packages and formulae using a mix of zero cost and billed access to Web information. Undertake simultaneous experiments with billing for selected portions of the data and offering facilities to sponsors to subsidise access to data in particular domains. Where WCMC's policy is different from UIA's for selected portions of the data, dialogue between the partners will be required to clarify options and their implementation, notably with respect to a CD-ROM version of the data.
4. Test and revise the Marketing Plan in response to feedback. Progressively implement the Internet component of the marketing strategy. Take into account user workshops and online feedback. As the product develops, use more conventional components of the marketing plan as part of the usual operations the partners (mailings, meetings, journals etc). Prepare for public launch.
5. Launch, both at an international event and through electronic and other media.

**Estimation of labour effort required:**

UIA				WCMC				NSM				AIDE				Total mths
Man	Tech	Mark	Oth	Man	Tech	Mark	Oth	Man	Tech	Mark	Oth	Man	Tech	Mark	Oth	
1.5	4.5	0	0	3	2.5	0	0	0	0	1.5	0	0	0	1.5	0	14.5

## Annex 7: Information Sources and Features

The source information is assembled, maintained and updated entirely within the domains of the principal INFO2000 consortium partners (UIA and WCMC) or their networks of cooperating partner organisations as part of long-established patterns of activity:

- Information on “world problems” and “organization strategies” is derived from over 40,000 international organisations for which the UIA acts as an information clearing house;
- Information on the species, ecosystems and sites is compiled by WCMC working closely with the World Conservation Union (IUCN);
- Descriptions and activities of relevant international organisations is provided by the organisations themselves and edited by the UIA;
- Associated information on relevant publications and other information sources is similarly provided by organisation partners and culled from other public domain sources;
- Library and files of appropriate and indigenous technologies held by DA at its offices in Delhi and Montreal.

The project will incorporate elements from the following databases and products developed and managed by project partners:

- UIA databases on World Problems (15,000 entries), Strategies, Actions and Solutions (29,000 entries), Human Values (3,250 entries), and Human Development (5,000 entries), last updated for the 1995 CD-ROM edition of its [Encyclopedia of World Problems and Human Potential](#) (now in its 4th edition), and containing over 1 million hyperlinks.
- UIA database on International Organizations (around 40,000 entries), maintained on a continuing basis and published annually as the [Yearbook of International Organizations](#) (now in its 35th edition) in both hardcopy and CD-ROM forms.
- The [Red List of Threatened Animals](#) (5,000 entries) and the [Red List of Threatened Plants](#) (40,000 entries) managed by WCMC on behalf of a range of organizations. Both datasets are regularly reviewed, published, and made available as interactive databases on the WWW.
- The [United Nations List of National Parks and Protected Areas](#) (10,000 entries), managed by WCMC in collaboration with the World Commission on Protected Areas. The UN List is regularly reviewed, published and made available as an interactive database on the WWW.
- The computer-based Biodiversity Map Library of WCMC which supports the development of a range of products including atlases of tropical [forests](#) and [mangroves](#), and various other publications and WWW information service.
- Databases on (for example) [Species Protected by CITES](#) (millions of records of trade transactions), [Descriptions of Natural World Heritage Properties](#), prototype [National Biodiversity Profiles](#), and other datasets which WCMC manages to provide information services that support the implementation of several international conventions and programmes.

**Annex 7**

- Other WCMC WWW-based information services, ranging from the UNESCO sponsored [World Heritage Information Network](#) to the [Protected Areas Virtual Library](#) developed in collaboration with the World Commission on Protected Areas.
- Bibliographic references held by the UIA, DA and WCMC, which together exceed 25,000 entries.

**Highest standards:** The databases of WCMC and the UIA are unique in the world and regarded as "industry-standards" for their category of information content. The clearing-house functions of both organisations are of long-standing and include well-established procedures for the management of their datasets. The information is largely compiled using expert networks or from official sources; in many cases it is managed using methods advised by those experts. The development and delivery of additional information content will conform to these established standards. The INFO2000 project, and now INTERCEPT project, will extend the presentation of the data into entirely new dimensions.

**Collection networks:** Much of the source data for this project are in the public domain, with increasing amounts already in digitised form. However, many of the sources are "grey literature" or held in unpublished, unreferenced files, making access difficult and time-consuming. The project partners use established channels and connections to efficiently integrate such data from disparate sources, and present it in simple, standardised and readily-accessible formats.

**Sophisticated interlinkage:** One unique feature of both INFO2000 and INTERCEPT projects is the interrelationship of data normally considered incommensurable. Another is the high emphasis placed on interrelationship of information across different platforms and data formats and between different datasets and objects. The objective is to produce an information domain with multiple entry points and "journey" options in order to suit different user needs, styles and enquiries.

It should be noted that the effective interlinkage of cross-disciplinary material is both time consuming and requires a high level of inter-disciplinary competence. It also requires careful design and planning to ensure that the resulting data can be delivered in meaningful ways. Between them the partners have the combination of specialist skills necessary to carry out this work effectively.

**Metadata:** To allow users of the information to assess "fitness of use", all the databases and information services which contribute to this project will have metadata associated with them. This clearly identifies who owns and manages the information and how the information was collected, frequency of collection, and the methodologies employed in its use and management. Where such information is available and appropriate, estimates of reliability will also be provided.

**User feedback:** Feedback facilities offered through the Web will enable users to comment on deficiencies in the data and to advise on new sources of information (including personal observation). Methods of accrediting suppliers of feedback are being explored to ensure that such comments are immediately available to other (Internet) users on a qualified basis. Entries will then be updated according to priorities and resources.

**Multimedia:** The product will integrate CD-ROM and WWW technology in order to allow the power and convenience of investigating the interrelationships between the different categories of information on the user's own computer, with the ability to directly relate this to regularly updated information on WWW sites managed by members of the INFO2000 consortium. The product will use multimedia in order to deliver information in flexible and interesting ways. It will not be driven by the technology, but by users and user needs.

**Annex 8: Sample of Sustainable Development Internet Sites**

<b>SAMPLE OF INTERNET SITES FOR INTERLINKAGE WITH UIA, WCMC AND DA DATA</b>	
International Institute for Sustainable Development Information Centre	<a href="http://iisd1.iisd.ca/ic/">http://iisd1.iisd.ca/ic/</a>
IISD Linkages – Commission for Sustainable Development (CSD)	<a href="http://www.iisd.ca/linkages/csd/">http://www.iisd.ca/linkages/csd/</a>
UN Department for Policy Coordination and Sustainable Development	<a href="http://www.un.org/DPCSD/">http://www.un.org/DPCSD/</a>
United Nations Division of Sustainable Development Commission for Sustainable Development (CSD)	<a href="http://www.un.org/DPCSD/dsd/">http://www.un.org/DPCSD/dsd/</a>
Search the Sustainability Publications on the WWF Global Network	<a href="http://www.un.org/DPCSD/dsd/csd.htm">http://www.un.org/DPCSD/dsd/csd.htm</a> <a href="http://www.un.org/DPCSD/dsd/csd.htm">gopher://gopher.un.org:70/11/esc/cn17</a> <a href="http://www.panda.org/cgi-bin/wwf/AT-wwf_sustainsearch.cgi">http://www.panda.org/cgi-bin/wwf/AT-wwf_sustainsearch.cgi</a>
International Development Research Centre	<a href="http://www.idrc.ca">http://www.idrc.ca</a>
The Food and Agriculture Organisation	<a href="http://www.fao.org">http://www.fao.org</a>
United Nations Development Programme Communication for Development (FAO)	<a href="http://www.undp.org/undp/comm/index.html">http://www.undp.org/undp/comm/index.html</a> <a href="http://www.fao.org/waicent/faoinfo/sustdev/CDdirect/Cdhomepg.htm">http://www.fao.org/waicent/faoinfo/sustdev/CDdirect/Cdhomepg.htm</a>
International Small Business Consortium	<a href="http://www.isbc.com/">http://www.isbc.com/</a>
TOOL	<a href="http://www.tool.nl/">http://www.tool.nl/</a>
The Earth Charter Consultation Homepage	<a href="http://www.earthcharter.org/">http://www.earthcharter.org/</a>
Sustainable Development Dimensions	<a href="http://www.fao.org/waicent/faoinfo/sustdev/Welcome_hm">http://www.fao.org/waicent/faoinfo/sustdev/Welcome_hm</a>
Biodiversity Conservation Information System	<a href="http://biodiversity.org/">http://biodiversity.org/</a>
The African Information Society Initiative (AISII)	<a href="http://www.bellanet.org/partners/aisi/">http://www.bellanet.org/partners/aisi/</a>
Bellanet	<a href="http://www.bellanet.org/index.html">http://www.bellanet.org/index.html</a>
The Acacia Initiative	<a href="http://www.idrc.ca/acacia/">http://www.idrc.ca/acacia/</a>
INET 98 Internet Summit: Networking Technology Workshops for Countries in the Early Stages of Internet Networking	<a href="http://www.isoc.org/inet98/net.shtml">http://www.isoc.org/inet98/net.shtml</a>
International Institute for Environment and Development (IIED)	<a href="http://www.oneworld.org/iied/">http://www.oneworld.org/iied/</a>
International Development Network	<a href="http://www.idn.org/">http://www.idn.org/</a>
Consortium for International Earth Science Information Network (CIESIN)	<a href="http://sedac.ciesin.org/">http://sedac.ciesin.org/</a>
TERRA	<a href="http://www.olcommerce.com/terra/">http://www.olcommerce.com/terra/</a>
The Online World	<a href="http://www.puc-rio.br/parcerias/presno/">http://www.puc-rio.br/parcerias/presno/</a>
The German Federal Environment Ministry (English Pages)	<a href="http://195.80.205.111/englisch/index.htm">http://195.80.205.111/englisch/index.htm</a>
Environmental Treaties and Resource Indicators (ENTRI)	<a href="http://sedac.ciesin.org/pidb/">http://sedac.ciesin.org/pidb/</a>
International Treaties Database	<a href="http://sedac.ciesin.org/pidb/IUCN-guide.html">http://sedac.ciesin.org/pidb/IUCN-guide.html</a>
International Year of the Ocean	<a href="http://www.yoto98.noaa.gov/ocean1.htm">http://www.yoto98.noaa.gov/ocean1.htm</a>
UNEP-HEM	<a href="http://www.gsf.de/UNEP/index.html">http://www.gsf.de/UNEP/index.html</a>
European Centre for Nature Conservation	<a href="http://www.ecnc.nl/">http://www.ecnc.nl/</a>
ERIN: Environmental Information Servers by Region	<a href="http://www.erin.gov.au/other_servers/region/server_region.html">http://www.erin.gov.au/other_servers/region/server_region.html</a>
ENVIROLINK	<a href="http://envirolink.org/">http://envirolink.org/</a>
ICONS	<a href="http://www.iucn.org/icons/">http://www.iucn.org/icons/</a>

**Annex 8**

Global Environmental Information Locator Service (GELOS) – G7 ENRM	<a href="http://enrm.ceo.org/">http://enrm.ceo.org/</a>
Global Environment Information Centre	<a href="http://www.geic.or.jp/">http://www.geic.or.jp/</a>
World Resources Institute	<a href="http://www.wri.org/wri/">http://www.wri.org/wri/</a>
Biodiversity Clearing House Mechanism	<a href="http://www.biodiv.org/">http://www.biodiv.org/</a>
START – Global Change System for Analysis Research and Training	<a href="http://www.start.org/index/index.html">http://www.start.org/index/index.html</a>
International Human Dimensions Programme on Global Environmental Change	<a href="http://ibm.rhrz.uni-bonn.de:80/iwdp/">http://ibm.rhrz.uni-bonn.de:80/iwdp/</a>
International Geosphere and Biosphere Programme IGBP	<a href="http://www.igbp.kva.se/">http://www.igbp.kva.se/</a>
sustainabledevelopment.org	<a href="http://www.sustainabledevelopment.org/">http://www.sustainabledevelopment.org/</a>

## Annex 9: Key User Groups and Liaison

**Key user groups** include:

- policy-makers, government bodies and those who support them by consolidating policy relevant information and elaborating policy options for decision-making;
- INGOs, involved (often with governments) in the creation of national conservation strategies and environmental development programmes in developing countries;
- commercial projects, in the new environmental services sector seen as a major sector of economic development potential in developing countries;
- researchers, and research agencies, internationally and in developing countries who require data on which to base research programmes;
- consultants, who require information to support their project work;
- national NGOs, ranging from small, highly specialised technical groups requiring the latest technical data to poorly resourced community groups and projects lacking any information base upon which to develop projects;
- media, including both the audio-visual and the written media, the specialised scientific media and commercial media sector
- educators and students, who will require a range of information levels from the easy-to-understand, readily digestible data to the advanced and complex contextual analysis detail necessary for development planning in environmental analysis.

The information required and the mechanisms appropriate for its delivery vary with user group. In order to meet the needs of a wide range of user groups, the approach to information management and delivery needs to be very flexible. This will apply particularly to aspects of "usability", such as user interfaces, languages, visualisation of the data, and so on.

### **Success criteria:**

Key requirements of all users will be the partners' ability to deliver:

- information relevant to the tasks they need to undertake
  - which implies a requirement for good search and filtering capabilities;
- information of known quality and source
  - which implies effective management of metadata on the databases delivered; and
- rapid access to appropriate information in appropriate formats
  - which implies very careful design work linked to review of needs.

During the course of the project, processes and procedures will be developed that ensure the maintenance of this information in the foreseeable future (moving to process rather than product orientation), including the development of appropriate relationships with information suppliers, owners and custodians.

### **Programme of liaison:**

The partners will ensure that the products and services developed meet user needs through a programme of liaison with users, which will include the following activities:

- The partners will present demonstrations of the prototype information services to a wide range of users
- As development proceeds, the partners will involve key users in review of new components of the information services as they are developed.
- Users of all information services provided by the partner organisations will be invited to provide comment on those services and how they might be developed.
- Information providers and collaborators will similarly be invited to collaborate in review of their information services.



## Annex 10: Internet Marketing Strategy

Internet technology makes it possible to reach the target users and media contacts in a simple, effective and direct manner.

This strategy has the advantage of opening channels of direct communication between the project partners and organizations or individuals who are likely to be interested in collaborating on this or related projects. Activities undertaken for the purposes of INTERCEPT will have a secondary benefit of generally improving the project partners' web sites visibility on the Internet and the sites' ease of use for their existing (expanding) constituencies.

**Prepare partner web sites:** The partner websites will further develop the existing project related content—including no-cost access to portions of the information. Relevant project details—including sales and subscription information – will be clearly presented in order to attract users interested in the full services of the project.

**Announce to discussion groups:** Announcements concerning the project and the websites will be submitted to relevant e-mail based discussion groups to attract individuals or organisation representatives likely to be interested in the project and the project partners' activities.

**Follow up with sales announcements:** Email sales announcements will be sent to relevant discussion groups and directly to parties who have expressed an interest in the project through correspondence with the partners. These announcements will be structured to focus on the specific interests of the groups. All announcements will make clear that segments of the project are available at no cost via the web—whether or not any visitor buys the for-sale data that will also be available.

**Register with Internet search engines:** Because of the nature of information search and retrieval on the Internet, project partner websites should be re-registered with the growing number of search engines in order to have the pages relevant to project properly indexed. Each feature or page, where unique from the rest of the site contents, will be registered individually. Commercial registration services will be used for this function.

**Submit sites for web awards:** As with Internet meta-indexes and search engines, it is possible to submit a URL for appraisal by a number of initiatives – essentially more heavily edited guides or meta-indexes – which present awards or certification of a website, based on certain criteria.

**Establish site links:** A special page of hyperlinks to project relevant websites (Internet initiatives, national and international organisations, etc) will be maintained, updated and developed.

**Create email discussion groups:** E-mail discussion groups will be established on the relevant subject areas and areas of project technical enquiry, biodiversity issues, for project users and participant organisations.

**Create a public relations program:** A public relations component will be an important ongoing function of INTERCEPT for directing the attention of journalists and others to the biodiversity project content of the websites and assisting them with further information needs in support of the project's strategic aims.



## Annex 11: Business Plan

**Commercial success in a competitive environment:** This project will explore a wide range of commercial activities within its general objective to promote environmental services as part of wider strategies to promote sustainable development and appropriate environmental management initiatives in developing countries. Successful sustainable development is a knowledge based imperative, requiring the realistic and economically sustainable provision of information services to government, non-government and private sector players. INTERCEPT aims to provide these services.

This project, emerging from the INFO2000 initiative, is based upon a realistic study of economic support factors in each of the target sectors, also accounting for existing economic realities in the expanding field of environmental services and for the major impact the Internet information revolution is having upon this new field. The strength of this project rests upon the experience and expertise of the project partners in the management and provision of reliable, accurate and relevant information services over many years. The emergence of the INTERCEPT initiative from the INFO2000 programme is in recognition of the importance of information for development, combining and crossing between public domain information generally available (INFO2000) and the more specialised (and commercial) needs of the three identified target sectors, each with specific commercial information needs. INTERCEPT is a project planning tool for use in these areas.

**Doing business within a not-for-profit context:** The project partners in this project are non-profit research and service organisations, who at the same time are very much involved with commercial activities and work in the information services industry. The INTERCEPT project is intended to span this threshold between commercial and non-commercial activity and to explore the market that exists there for environmental services, vital for the promotion of sustainable development practices in developing countries.

This commercial experience of the project partners is important in considering the relevant experience each organisation has for the development of INTERCEPT. Specifically, the UIA obtains a very high proportion of its income from its publishing activities and is a commercial distributor. The other principal information provider in the INFO2000 consortium, WCMC, makes a considerable portion of its income from information development and management contracts. DA derives its income from the sale of alternative technologies it has developed, its email service provision (DAINET) and its consulting work. Each partner is familiar with the market needs of developing and developed countries.

The 'commercial' strength of the partners providing information content is that the INTERCEPT project builds upon their existing and developing information systems. Each partner organisation has demonstrated success in the evolution of their own particular organisation development strategy over a number of years, successfully confronting the realities of today's fast changing commercial environment, adapting to change and maintaining the market relevance of their own particular regimes.

**Cost of data:** In general terms, the data used in this project will come from publicly available sources and hence have no attached cost. However, access to much of that data requires the specialist knowledge and organisational arrangements built up over years by the project partners. These organisational arrangements, networks of resource provision; relations with technical experts and general organisational establishment, are what equip the project partners uniquely for undertaking this project task.

**Professional data handling:** Organisation and collection of source data into meaningful, precise and relevant formats (of international standard) for the target end users in each of the identified sectors is the core aim of INTERCEPT. In instances where data is recovered from commercial sources the project partners will ensure the correct legal and proprietary pathways are created through INTERCEPT to the end users, protecting

## Annex 11

copyright and authorship of material, establishing these pathways into each of the developing countries involved with the project.

The funds sought in this proposal are to enable the necessary subsidy required for the establishment of the INTERCEPT knowledge engine and the construction of these access pathways and protocols; on the one hand, providing the key planning and contextual knowledge necessary for developing environmental response activities in developing countries; on the other hand, promoting the development of viable business and commercial pathways and protocols necessary for the development of the environmental services sectors in developing countries.

**Cost recovery and reinvestment:** The Business Plan for this project is designed in terms of ensuring cost recovery and providing reinvestment in the continued improvement of the products and services of INTERCEPT, for the development of any further combination of CD-ROM, Web or Web-CD hybrid as the market dictates or permits in the next years. In this respect the Business Plan refers largely to continuing activity by the project partners beyond the project period.

INTERCEPT has identified cost recovery strategies for each of the target sectors; governmental, non-governmental and private sector, which will be progressively established in protocols during the project's first year technical development phase. INTERCEPT has been initiated now, separately from INFO2000, because the project partners are reasonably satisfied that the project's long term economic viability, maintenance and development, can be assured from this combined sectoral approach.

**Building on established viability:** The proposed project is designed to mesh with, and enhance the existing income generating initiatives of the project partner organisations whose viability has been demonstrated over the years. For UIA, WCMC and DA, this type of work is their "core business" and they will clearly benefit in the longer term from the "commercial success" of the product. Each of the project partners is therefore prepared to provide a considerable contribution of their own research and development investment collateral, in the form of personnel, facilities and resources, into INTERCEPT.

The INTERCEPT project, emerging from the INFO2000 programme, is the first of what will be a series of commercially orientated spin-off and ancillary activities coming from the general European concern to see increased activity in environmental management programmes in developing countries. In this respect the INTERCEPT project team, including its European Union \*\*underpinning and support, is assured longer term project viability and development as further initiatives are developed and proposed, both in development of the INTERCEPT package and as new off-shoot initiatives furthering the general programme aims.

**Business uncertainties:**

**Unpredictability of market:** A major difficulty in presenting a Business Plan for this information package lies in the unpredictability of the information market, technology and emerging services over the coming years, *if not months*. This has been widely acknowledged in the financial and publishing press, notably in terms of the rate of business failures of CD-ROM and Web initiatives, even by the largest corporations. Any new undertaking is faced with the rapid and unpredictable evolution of the information society—especially when such enterprises must generate income from quality information services in a highly competitive environment. From a strategic perspective, there are few dependable "givens" in this context, other than change itself.

**Product/technology evolution:** Over the period of the Definition Phase of the INFO2000 project (1997), hardware and software opportunities evolved rapidly. This tendency is expected to continue will continually reframe any particular solution to technical problems.

**Annex 11**

The information package is therefore designed to evolve with emerging software, notably in relation to the Web and to a Web/CD hybrid product/service. It must necessarily also evolve in response to competing products and services and to the increasing availability of information on the Web, notably in specialised areas which may be an incidental focus of the product. It must also evolve in response to new opportunities for cost recovery.

***Determining prices and income:*** The greatest difficulty lies in fixing appropriate prices for services and predicting income. In the case of WCMC and UIA, this is further complicated by their need to respond creatively to a category of “user-partners” who are suppliers of their information as well as users of it. Users in developing countries and/or with restricted budgets may need special consideration (e.g. through experiments with non-monetary exchange units and microcredits). WCMC and UIA may also need to respond differently to their respective contacts in the case of particular categories of information.

***Determining investments:*** Further difficulty lies in the variety of investments, which it may, or may not, be necessary to make with respect to Web hardware and software, and, in the latter case, with respect to transaction licensing. “Industry standard” webserver software and CD-ROM software both involve royalties and licensing/transaction fees which must be passed on to the user or somehow contained by the service provider.

***Marketing experiments:*** During 1998 and beyond, the UIA for example will be implementing and experimenting with a mix of zero cost and billed access to Web information from a dedicated Web server now in process of installation. The “zero cost” formula will serve both an advertising/marketing purpose, taking full advantage of automatic Web indexing, as well as responding to needs of “user-partners”. Simultaneously, experiments will be undertaken with billing for selected portions of the data. Where WCMC’s policy is different for selected portions of the data, dialogue between the partners will be required to clarify options and their implementation, notably with respect to a CD-ROM version of the data.

It is clear that the business plan for the post-Implementation Phase will itself be a matter of experiment during the Implementation Phase.

**Achieving sustainability:**

The key question will be whether the formula chosen for relating to users and “user-partners” in the three target sectors generates sufficient income to sustain in-house editing and system maintenance for those portions of the data that relate to the information focus of the project in the longer term. During the Technical Development Phase and Implementation Phase, marketing experiments and user feedback will clarify the cost recovery potential and risks.

***Seeking counterfunding:*** The INFO2000 consortium has undertaken to seek counter-funding for this project by sponsors and others. This current proposal is an outcome of that commitment. As new areas of development are uncovered in both the INFO2000 project and the INTERCEPT project, further co-sponsors and new funders will be invited into the project thus ensuring a constant non-commercial support to the central R & D of the project.

***Subsidies and sponsorship*** for projects is an established method of financing of all the project partners. Whilst such support may be quite general (significant non-EU funding partners of WCMC during the Definition Phase being IUCN and the Dutch Government), it may also be focused on quite specific portions of the data -- an example being the sponsorship by various petroleum companies of specific portions of WCMC’s Biodiversity Map Library.

**Annex 11**

Again, in the case of the UIA, there is an interest in exploring a formula of “*user-owner*” of portions of the data, where particular users may take both financial and editorial responsibility for portions of the data. This is of course entirely consistent with the philosophy of the Web. The viability in practice in terms of data quality and economics will be a matter of continuing experimentation and evaluation particularly during the first year technical works, continuing through the following two years implementation phase towards end target operational standards for the systems ongoing maintenance and development.

***Financing partners:*** There is considerable scope for attracting funds that support further development of this project. Opportunities to present the project to a variety of potential “partners” (who could provide financial or in-kind support), including the European Environment Agency, WHO, UNICEF, UNESCO, OECD Environment Division and CIDA, will be arranged during the project’s first year technical development phase. These approaches will be made with a particular view to integrating the project with new and existing (complementary) initiatives, building joint project arrangements and having the INTERCEPT system integrated into the programme R & D activities of existing international organisations.

This integration of the INTERCEPT system into the programme development work of international and national NGOs is considered an important technical development, providing contextual planning support to single focus programmes, highlighting ancillary components for inclusion in programme planning, and supplying add-on, environmental project components. Over the full project term the INTERCEPT system will be developed through these arrangements into a system standard planning tool for environmentally related programme work.

***Non-monetary exchanges:*** A final aspect of the INTERCEPT system development that in itself may produce long term sustainability is the unique system of internal non monetary organisational arrangements, time exchange and barter currency, that will enable the project’s wide spread development through the NGO sector among grassroots and community based projects in developing countries, often unable to afford mainstream development information. Through this approach INTERCEPT will create a “field” of in-kind support in developing countries, enabling more commercial and financed initiatives to be platformed in developing countries without the commitment of INTERCEPT resources in those countries.

**Risk Assessment:**

The success of INTERCEPT is guaranteed to the extent that valuable data will be assembled, interrelated and made available to other programmes, agencies and commercial sector operations. In the process there will be significant sharing and learning concerning participatory processes for information management and delivery in a global context. Whether the information can be “made available” in a manner consistent with both the needs of potential “zero-cost” “user-partners” and of sustainable cost recovery will be a matter of continuing review. As earlier stated, the project coordinator is launching this initiative at this time primarily because feasibility works under INFO2000 indicate an assurance of success for the combination approach now presented in INTERCEPT.

In a ***worst case scenario***, the project partners will integrate the ongoing maintenance of the system – at a reduced level - into their other regular environmental service provisions. For example, if as a result of severe market dysfunctions, single partner collapse, or competing initiatives successfully controlling the potential markets, the INTERCEPT project with its knowledge base will continue to exist within the domain of the project partners, be subject to new research and development, which will form the basis for further new initiatives, programmes and projects. This will ensure the collateral of the project remains active within the development environment contributing to the continued evolution of sustainable development practice in developing countries.

**Annex 11**

The basic maintenance functioning of the INTERCEPT system has been calculated upon basic user interactions with the system, operating below contractual supply arrangements of the system within the three target sectors, and above the free-access usage of the system. Below is a table illustrating the cost recovery implications for two levels of maintenance costing. Given the existing information delivery infrastructures of the partners, from these preliminary figures a project maintenance system can be designed as financially self-sustaining during a period of growth and development following its launch.

Maintenance cost	1000 ECU / month	2000 ECU /month
Monthly transactions		
100	10 ECU per transaction	20 ECU per transaction
500	2	4
1000	1	2
5000	0.2	0.4
10000	0.1	0.2
20000	0.05	0.1



**Annex 12: Schedule of deliverables***INFO2000 PROGRAMME***Form INF4****List of Deliverables**

Unique ID No.	WP No.	Description	Status	Expected Date of Delivery*	Revised Date of Delivery	Actual Date of Delivery
5052-1	I	Progress Report No 1 on Implementation Phase	Restricted	31-08-98		
5052-2	I	Progress Report No 2 on Implementation Phase	Restricted	30-04-99		
5052-3	I	Final Report on Implementation Phase	Public	31-12-99		
	II(i)	Draft Review of User Needs	Internal	31-10-99		
5052-4	II(i)	Review of User Needs	Public	31-02-99		
	II(ii)	Recommendations for design: interactivity on the Internet	Internal	31-01-99		
	II(iii)	Recommendations for design: user searches	Internal	31-01-99		
	II(iv)	Recommendations for design: language-related issues	Internal	31-01-99		
5052-5	II(v)	Draft Report: Product Design and Development Plan	Restricted	30-06-98		
5052-6	III(i)	Web module: species of conservation concern	Public	30-11-98		
5052-7	III(ii)	Web module: national parks and reserves	Public	30-11-98		
5052-8	III(iii)	Web module: implementation of international agreements	Public	30-11-98		
5052-9	IV(i)	Web module: conservation issues, actions, treaties and feedback loops	Public	30-11-98		
	V(i)	Draft Report on integration of information	Internal	30-11-98		
5052-10	V(i)	Final Report on integration of information	Public	30-11-99		
	V(ii)	Draft Report on feedback loops	Internal	31-12-98		
5052-11	V(ii)	Final Report on feedback loops	Public	30-11-99		
	V(iii)	Draft Report on information on habitats	Internal	31-01-99		
5052-12	V(iii)	Final Report on information on habitats	Public	30-11-99		
5052-13	IV(ii)	Final Report on integration of biographies	Public	30-09-98		
5052-14	V(iv)	Final Report on interactive generation of indicators and summaries	Public	30-11-99		
	V(v)	Draft Report on links to other information services	Internal	30-09-98		
	V(v)	Final Report on links to other information services	Internal	30-04-99		
5052-15	V(v)	Final Report on links to other information services	Public	30-11-99		
	VI(I)	Draft Report on multimedia visualization	Internal	29-02-98		

## Annex 12

Unique ID No.	WP No.	Description	Status	Expected Date of Delivery*	Revised Date of Delivery	Actual Date of Delivery
5052-16	VI(I)	Final Report on multimedia visualization	Public	30-06-99		
5052-17	VI(ii)	Report on mapping national (country) information	Public	30-06-99		
	VI(iii)	Draft Report on virtual reality (VRML) 3-D displays	Internal	29-02-98		
5052-18	VI(iii)	Final Report on virtual reality (VRML) 3-D displays	Public	30-06-99		
5052-19	VII(ii)	Report on upgrading CD-ROM software	Public	31-03-98		
	VIII(I)	Guided tour of product/service using HTML facilities	Public	Renewed periodically		
5052-20	VIII(ii)	Report on subsidy and sponsorship options	Public	30-06-99		
5052-21	VIII(iii)	Report on on-line charging options	Public	30-06-99		
	VIII(iv)	Revised draft marketing plan	Internal	30-05-98		
	VIII(iv)	Revised draft marketing plan	Restricted	31-12-98		
5052-22	VIII(iv)	Marketing and launch plan	Restricted	31-10-99		

We envisage a similar schedule of deliverables will be added to the above during the Pre-establishment Phase (Year 0) of the *infoDev* project.

## Annex 13: Draft INFO2000 Consortium Agreement

# CONSORTIUM AGREEMENT

## Definitions

**Project** means the INFO2000 (European Commission: DGXIII) project No. 5052, "Contextual Information for Biodiversity Conservation", called **Conservation** for short. The project outcomes are a range of information products and services relating to biodiversity conservation.

**Consortium** means the consortium of **Partners** in the project, namely Union of International Associations (UIA), World Conservation Monitoring Centre (WCMC), Norwegian School of Management (NSM) and AIDEnvironment (AIDE).

**Content Providers** means the two partners in the consortium who are contributing data and other information content to the project, namely the Union of International Associations (UIA) and the World Conservation Monitoring Centre (WCMC). Such information may be managed in partnership with and/or with the consent of their respective collaborators.

**Collaborators** and **Collaborating Partners** means collaborating and contributing partners not in the Project Consortium.

**Non-Content Providers** means the two partners in the consortium who are not contributing data or other information content to the project, namely the Norwegian School of Management (NSM) and AIDEnvironment (AIDE).

## Introduction

This agreement is based on the WCMC Draft Data Release Policy of 7 January 1997. It is adapted at this time to clarify issues of data ownership, rights and responsibilities among the partners in the Consortium, between the Partners and their Collaborators, and between the Partners and users of the products and services.

The Consortium believes in the principle of free access to data, and supports the increased mobilisation of policy-relevant environmental information to support the conservation and sustainable use of the world's living resources.

As focal points for the compilation, management and dissemination of information, the Content Providers provide information services to a wide range of organisations and individuals. This information comes from networks of collaborators (organisations and individuals, many of who have networks and databases of their own), and a very wide range of publications and reports (including a considerable amount of "grey" literature difficult to obtain elsewhere). A good deal of the source information is in "public domain"; a principal role of the Content Providers is to edit, structure, link and redistribute it in formats which make it accessible to the widest audience.

When datasets are exchanged between collaborating organisations, questions of ownership and copyright arise. Often these may be clarified through memoranda of understanding between the organisations. UIA and WCMC independently have signed such agreements with a number of organisations. Existing

**Annex 13**

agreements may affect the ability of the Content Providers to release certain categories of data that they are holding. Such agreements guide this Consortium Agreement and take precedence over it.

**1. Accordance of Rights**

1.1 All title rights, property rights, copyright, royalties and all other rights of whatsoever nature are vested in the Content Providers (UIA and WCMC), each with respect to their own datasets, and their Collaborating Partners as specified in extant agreements or those which may be negotiated in the future.

2. The Non-Content Providers (NSM and AIDE) waive all claim to title rights, copyright, royalties and all other rights of whatsoever nature, other than their due mention wherever applicable as partners in the consortium which developed the INFO2000 product.

**2. Dataset availability****2.1 UIA**

2.1.1 UIA has contractual agreements with its publisher, K.G. Saur Verlag in respect of the current editions of hardcopy and CD-ROM publications published by Saur Verlag. As a result of such contracts, it is bound to consult with Saur concerning the release of data in any other form.

2.1.2 The data provided to the UIA by its Collaborating Partners (international organisations) are provided freely for use in describing their aims, preoccupations on the understanding that it will be disseminated widely. The disseminated organisation descriptions are submitted periodically to the bodies in question for their approval.

**2.2 WCMC**

Each dataset held by WCMC carries a distribution or release classification based on agreements with data sources:

2.2.1 Free access: Those datasets that WCMC is able to distribute.

2.2.2 Source approval: Those datasets which WCMC requires prior approval from the originating body before distribution. WCMC will usually apply to the originating body on behalf of the requester, but the requester may need to provide specific information concerning the intended application and distribution of those data.

2.2.3 In-house use only: Usually licensed products from commercial concerns, which WCMC is unable to distribute.

Availability may depend on data holding (see Annex). For example summary data may be free access while detailed data from the same origin may require source approval.

**3. Conditions of release**

The following conditions will apply to data provided by UIA and WCMC, unless otherwise specified:

**Annex 13**

- 3.1 The copyright of the data rests with the Content Provider and/or its Collaborating Partners.
- 3.2 The Content Providers reserve the right to restrict use of specific parts of the data by third parties.
- 3.3 Others will make no copies of the data for commercial purposes, nor will the datasets be placed on any other network or information medium.
- 3.4 Third parties will not publish or copy the data or any part of it without acknowledging the copyright to the data. The form that this acknowledgement should take will be based on the following:

This data is copyright. The data is made available for specific identified purposes. Any use of the data for other purposes must have permission of the copyright holder.

- 3.5 UIA, WCMC and their respective partners, as applicable, shall be appropriately acknowledged in any publication relating to the data, along with any other organisations identified by WCMC as being information sources. The form of this acknowledgement will be based on the following:

Source data compiled and provided by the World Conservation Monitoring Centre, from whom further information can be obtained.

Source information compiled and provided by the Union of International Associations, from whom further information can be obtained.

## **4. Cost recovery and sales**

- 4.1 As service-oriented organisations, the Content Providers (UIA and WCMC) aim to provide the services that users require, while covering the costs of maintaining and further developing the services.
- 4.2 The Content Providers are not-for-profit organisations. They are committed to the principle of free exchange of information, and only charge for the staff time and other expenses necessary for editing and managing the data, performing the services required, developing the services and products, and maintaining the currency of the information.
- 4.3 CD-ROM sales can be made by any Consortium partner or its agent. The cost price, and distribution of revenue shall be agreed between the Partners. The sales agency shall retain a percentage of the sales price at the point of sale to cover the costs of administration, handling, postage etc. Accounts and stocks shall be reconciled at least every year.
- 4.4 For online data delivered by the Content Providers, where the Partners can reach agreement on billing, the charge would be made at the "front door" entered by an online user; alternatively the billing site of the respective Content Provider. In the case of linked data, where through-billing meets the constraints of the data provider then that shall be done, otherwise secondary and tertiary billing protocols will be established. The precise nature of this arrangement will be a matter of experiment during the Implementation Phase of the contract.
- 4.5 In certain circumstances the Content Providers may choose to waive the costs of providing services or products, or allow discounted sales or free data access. This will occur in situations of data exchange, or ongoing collaboration with another organisation.

## 5. Disclaimer

While the Content Providers makes every effort to ensure the accuracy and currency of data within the limit of available resources, certain disclaimers need to be associated with data provided by UIA or WCMC.

### Provision of data by WCMC

*Source data compiled and provided by the World Conservation Monitoring Centre, from whom further information can be obtained.*

*These data are copyright. The data are made available for specific identified purposes. Any use of the data for other purposes must have permission of the copyright holder.*

*WCMC and its collaborators have obtained data from sources believed to be reliable and have made every reasonable effort to ensure accuracy of the data. WCMC and its collaborators cannot assume responsibility for errors and omissions in the data nor in the documentation accompanying them.*

*The designations employed and the presentation of material do not imply the expression of any opinion whatsoever by the WCMC and its collaborators concerning the legal or constitutional status of any country, territory, city; the area of its authorities; or the delineation of its frontiers or boundaries.*

*WCMC and its collaborators will not be held responsible for any consequence from the use or misuse of these data by any organisation or individual.*

### Provision of data by UIA

*Source information compiled, edited and provided by the Union of International Associations, from whom further information can be obtained.*

*This data are copyright. The data are made available for specific identified purposes. Any use of the data for other purposes must have permission of the copyright holder.*

*UIA and its collaborators have obtained data from sources believed to be reliable and have made every reasonable effort to ensure accuracy of the data. UIA and its collaborators cannot assume responsibility for errors and omissions in the data nor in the documentation accompanying them.*

*The designations employed and the presentation of material do not imply the expression of any opinion whatsoever by the UIA and its collaborators concerning the legal or constitutional status of any country, territory, city; the area of its authorities; or the delineation of its frontiers or boundaries.*

*UIA and its collaborators will not be held responsible for any consequence from the use or misuse of these data by any organisation or individual.*

5 December 1997

Jeremy Harrison / Nadia McLaren

**Annex 1: WCMC Data Holdings**

It is helpful to consider a number of different ways in which data from organisations are shared, and how such data are handled and used.

1.1 Custodian: Where WCMC is able to take full responsibility for deciding on use of the data by others (although this may be within guidelines provided by an owner).

1.2 Data manager: Where WCMC manages the data on behalf of the owner, usually under a detailed agreement or memorandum of understanding which may cover data release.

1.3 Collaborator: Where WCMC holds a copy of data being developed with another organisation. Ability to release data will depend on the nature of the collaboration, and the policies and practices of the collaborators.

1.4 Subsidiary data holding: Where WCMC holds a copy of a dataset but does not have a role in developing or enhancing it. This includes commercial products. Usually WCMC will not be able to release these datasets per se.

1.5 Summary data holding: Where WCMC holds summary data from another organisation, but not entire datasets. This can usually be made widely available, and WCMC may be able to obtain the full dataset if required.

1.6 Catalogue holding: Where WCMC holds a description of the data, but not the data itself, which needs to be obtained from the custodian or data manager (either directly or through WCMC).



## Annex 14: CVs of Key Personnel

### Nadia McLaren

*Project Coordinator, UIA*

**Professional Profile :** Applied ecologist with twelve years' experience in project management, environmental impact assessment and environmental policy as company director and consultant to both government and corporate sectors in Australia. Three subsequent years, based in Norway, concentrated on strategies for social entrepreneurship and sustainable development. Currently, for 5 years a consultant based at the UIA in Brussels, where her focus of work is strategies and activities of international organizations. Also concerned with improving dialogue and participation concerning social and environmental issues. Author of over 40 report and papers, including manual on *Participative Conferencing* (UIA, 1992). Produced interactive bulletins for several conferences, including *Intersectoral Dialogue Meeting*, (Global Forum, Rio de Janeiro 1992) and the *Parliament of the World Religions* (Chicago, 1993).

#### Employment:

1993- Editor *Encyclopedia of World Problems and Human Potential*, Brussels  
 1995 – 1996 Director of Operations, Global Action Plan International, Brussels  
 1990 – Freelance environmental consultant based in Oslo  
 1980 – 1989 Director, Social and Ecological Assessment Pty Ltd, Adelaide  
 1973 – 1977 Scientific Officer, Queen Elizabeth Hospital, Adelaide  
 1972 Secondary Science Teacher, South Australian Education Department

#### Honorary positions:

1997 – European Green Purchasing Advisory Group  
 1996 – European Water Alliance, Advisory Group  
 1991 – Director, Global Action Plan International  
 1988 – 1989 Advisory Committee, Centre for Environmental Studies, University of Adelaide.  
 1988 Chair, “Greenhouse ‘88” (pan-Australian conference, won UNEP 500 award)  
 1986 – 1989 Member, South Australian Water Resources Council  
 1985 – 1989 Advisory Board, Australian National Estate Grants Programme  
 1984 – 1989 Member and Chair, South Australian Environmental Protection Council

**Education:** Bachelor of Science, The University of Adelaide, 1972; B.Sc. Honours in Zoology (Adelaide) 1973; Master of Environmental Studies (Adelaide), 1980

### George C Varughese

*Project Coordinator, DA*

#### Position:

Vice President, Development Alternatives, New Delhi

**Areas of Expertise/ Experience:**

Programme Planning & Management; Regional Environmental Planning; Environment Impact Assessment; Natural Resources Management; Information Systems Management; Policy Formulation; Construction Management

Responsible for building up and managing a trans-disciplinary group of twenty professionals addressing issues of environment and sustainable development.

Faculty at the School of Planning and Architecture, New Delhi.

Worked as Construction Manager.

**Additional Responsibilities:**

Member, Commission on Environmental Strategy & Planning, IUCN Committee; Member, International Association for Impact Assessment; Member, Working Group on Application of Electronics for Social & Rural Development, Department of Electronics, Government of India; Member, Study Group on Technology & Development Strategies for Rural Labour, National Commission for Rural Labour, Government of India; Member, National Expert Committee on Health and Drinking Water, Department of Science and Technology, Government of India

**Education:**

Masters in Urban & Regional Planning, School of Planning & Architecture, Delhi, Bachelors in Civil Engineering, Regional Engineering College, Rourkela. Trained in Digital Image Analysis at Regional Remote Sensing Service Centre, Nagpur, Government of India.

**Anthony Judge**

*Director of Communications and Research, UIA*

**Position, 1968 - present:**

Union of International Associations (Brussels, Belgium). Initially as a consultant on a temporary contract, subsequently as Special Assistant to the Secretary-General, and from June 1969 as Assistant Secretary-General.

**Current functions:** Responsibility for the continuing development of the 20-station local area network (started 1984) through which various editorial teams (mixing skills and languages) maintain a variety of interlinked databases (currently containing over 30,000 international bodies, 25,000 international meetings, 13,000 world problems, and other types of information: strategies, concepts of human development, human values, etc). Data is used to generate major reference publications (with CD-Rom and web page versions). These include: *Yearbook of International Organisations* (35rd ed. 1998-9); *Encyclopedia of World Problems and Human Potential* (4th ed. 1994-5).

Responsibility for research on current and future uses of the information held in the computer database and on the implications of the development of the network of international organisations, especially in terms of the future challenges to knowledge dissemination, visualisation of knowledge structures, and the design of organisational forms more appropriate to the complexity of the network of world problems. Some of this research has been conducted under contract as part of various programmes of the United Nations University (Tokyo).

**Annex 14**

Production of research papers relevant to the strategic position of international organisations and the organised response to world problems. This currently includes work on transformative conferencing, information system design, relevance of metaphor for governance and communication, transdisciplinarity, and concepts of human development. An extensive bibliography, as well as copies of a number of these papers, is available on the UIA website:

<http://www.uia.org/uiadocs/aadocndx.htm>.

**Consulting and related activities:** These have included: UN Institute for Training and Research (UNITAR); UN Educational, Scientific and Cultural Organization (UNESCO); UN Environment Programme (UNEP); UN University (Tokyo); Commonwealth Science Council.

Continuing research interests include innovation in international meeting processes, especially in conferences with special problems. Has recently played advisory and facilitatory roles in the following: Inter-Sectoral Dialogue (Rio de Janeiro, 1992), World Congress towards Spiritual Concord (Alma Ata, 1992), World Futures Studies Conference (Turku, 1993), Parliament of the World's Religions (Chicago, 1993).

**Educational background:** Schooling in England, Australia and Zimbabwe; Imperial College of Science and Technology (University of London) 1958-1961: B.Sc. Engineering (Chemical Engineering) programme, not completed; Graduate School of Business (University of Cape Town) 1967-1968: Master of Business Administration programme.

**Ashok Khosla**

*Principal Project Advisor, DA*

**Position:**

1983 – President, Society for Development Alternatives, New Delhi  
Responsible for the establishment of the organisation, and developing the innovation, production, research and technology transfer operations of the Society, which are aimed at achieving widespread deployment of technologies and products for low income groups. Managing the environmental systems operations of the Society

1976-82 Director, INFOTERRA, the United Nations Environment Programme, Nairobi.

1972-76 Director, Environment Division, Department of Science and Technology, Government of India, New Delhi. Member of several Government boards and committees on environment, information systems, S&T policy.

1963-71 Harvard University, Lectured in Physical Astronomy “Man, Resources and the Environment.”

**Also:**

- President of the Society for Technology and Action for Rural Advancement.
- Managing Trustee, People First, New Delhi
- Secretary General, Peoples Commission on Environment and Development.
- Chairman, NGO Global Forum, Rio Earth Summit.

**Governing Bodies:**

- International Union for Conservation of Nature and Natural Resources (IUCN), Gland, Switzerland
- World Wide Fund for Nature, Gland, Switzerland
- Center for our Common Future, Geneva - (*Chair*)
  - WETV, Global Access Television, Ottawa - (*Chair*)
- ICSU/SCOPE Project on Scientific Information, Paris
- UNEP International Environment Technology Center, Osaka
- Earth Council, Costa Rica
- IFC/92 Global Forum, Earth Summit, Rio de Janeiro - *Chairman*
- Stockholm Environment Institute, Stockholm - *Member*
- International Institute for Sustainable Development, Winnipeg - *Trustee*
- International Environment Technology Centre, Osaka - *Member*
- Club of Rome - *Member*
- National Council on Environment, New Delhi - *Member*

**Advisory Bodies:**

- The World Bank, Washington
- UNEP, Nairobi
- WCED, Geneva
- UNDP, New York
- I.D.R.C., Ottawa
- Expo 2000, Hannover, Germany

**Education:**

Peterhouse, Cambridge University - B.A. in Natural Sciences  
 Harvard University - A.M., Ph.D. in Experimental Physics

**Allan Howard**

*Research and Project Management Staff, UIA*

**Areas of Expertise:**

Community development, permaculture, job creation and rural employment projects, youth work, small-scale business development, community radio, film, project management.

**Positions:**

- 1996 - 1998 Independent Project Consultant, Middle East
- 1992 - 1996 Project Development Officer, Palestine
- 1991 - 1992 Independent Project Consultant, Scotland
- 1987 - 1991 Co-operative Development Officer, Scotland
- 1985 - 1987 Unemployment Project Development Officer, Scotland
- 1983 - 1985 Youth Project Development Officer, Scotland
- 1978 - 1983 Police Officer, Scotland
- 1974 - 1978 Painter & Decorator, Scotland

**John Borgoyary**

*Business Development Executive - DAINET*

**Areas of Expertise/Experience:**

Business Development and Marketing of Information Technology and its Services; Participatory Planning; Participatory Rural Appraisal; Planning and Management of Rural Development Projects

**Education:**

Masters in Social Science, Tata Institute of Social Science, Bombay; Bachelor degree in Economics, NEHU, Shillong.

**Shrashtant Patara**

*Manager, Technology System, DA*

**Areas of Expertise/Experience:**

More than ten years of experience in appropriate technology, particularly in shelter. Was in charge of the development and mass dissemination of sustainable building technology packages. He is committed to process based innovations that lead to improvement in habitat conditions. He was also the leader of the SDC funded project on large scale dissemination of Micro Concrete Roofing technology for the last four years. He is now entrusted with the responsibility of heading the Project Facilitation Unit of a comprehensive DA - SDC Programme on Construction Materials.

**Education:**

B.Arch., School of Planning and Architecture, New Delhi.

**Joel D Fischer**

*Editorial and Research Staff, UIA*

**Areas of Expertise:**

General research and editorial work. Evaluation and implementation of electronic information management tools and processes -- including use of the internet from an organisational standpoint and from an information resource standpoint.

**Education:**

BA in *Peace & Global Studies*; Earlham College, Richmond IN (USA) 1990.

**Christian de Laet**

*Advisor and President, Development Alternatives Canada*

**General expertise:** Insights and concepts generator; strategies in human and applied sciences; planner of low entropy synergistic systems, Socratic approach to learning and teaching; eidetic visualisations and graphic metaphors; specialist in technological diversification and mutation.

**Positions:**

CHANGE, The International Technology Newspaper, London (Editorial Board)

SUSTAINABLE DEVELOPMENT, New Delhi (Editorial Board)

Union of International Associations (Member of Board)

Canadian Association for Future Studies (Member of Board)

The Natural Step, Canada (Member of Board)

Commission on Environmental Strategy and Planning, IUCN, formerly Commission on Sustainable Development (Member)

1977 – 1982 Secretary, Commonwealth Science Council and Science Advisor to the Commonwealth Secretary-General, London

1964 – 1973 Secretary-General, Canadian Council of Resource and Environment Ministers

**R.K. Verma**

*Management, Systems and Administration, DA*

**Areas of Expertise/Experience:**

Software Development, Systems Administration and Systems support to end users. Hardware maintenance and installation of hardware related products.

**Education:**

P.G. Diploma in Computer Programming and S.A.D. from D.I.M.S., New Delhi and short term certificate courses from STG, IDP on RDBMS and Main Frames.

**Jacqueline Nebel**

*Senior editor, Yearbook of International Associations, UIA*

**Areas of Expertise:** Over 15 years research and editing profiles of international organisations. Development of in-house thesaurus. Computer programming and management of production schedules and computer upload of information for publication.

**Romuald Covalescu**

*Senior editor, Yearbook of International Associations, UIA*

**General expertise:** Over 20 years research and editing profiles of international organisations. Translation from over eight languages.

**Marie Aeles**

*Assistant editor, Yearbook of International Associations, UIA*

**General expertise:** Librarian, research on international organisations and their publications.