MEMORANDUM OF AGREEMENT

between

**Institut für Meereskunde Kiel
(IFM-K)**

and

Partner Institution X

This Memorandum of Agreement entered into this **xx.xx. 2003** by and between:

The **Institut für Meereskunde - Kiel** with offices at 20 Düsternbrooker Weg, D-2300 Kiel, Germany, herein represented by its Geschäftsführende 1-Direktor, Prof. Dr. Jürgen Willebrand, and herein known as IFM-K;

and

Partner Institution X

WITNESSETH THAT:

WHEREAS, IFM-K is an Institute associated with the University of Kiel with the mandate to conduct research on physical, chemical and biological processes in the ocean. IFM-K has a Fisheries Department that specializes in research on ichthyoplankton and fish biology in general. IFM-K hosts the coordination for the FishBase information system;

WHEREAS, **Partner Institution X is….**

WHEREAS, the IFM-K and **Partner X**, having common interest in making multi-lingual access available for biodiversity information systems in the Internet and have agreed to collaborate to meet the objectives of the Project;

WHEREAS, the specific purpose of this Agreement is to produce multi-lingual access to European biodiversity information systems in the Internet in 8 languages (English, German, Dutch, Spanish, Portuguese, French, Greek, Italian).

NOW, THEREFORE, in consideration of the aforementioned, IFM-K and **Partner X** mutually agree as follows:

I   To carry out WP 11, part of the ENBI-Project (**E**uropean **N**etwork for **B**iodiversity **I**nformation) in accordance with the attached work plan in Annex I.

II   Project Coordinators

>   **IFM-K**   Dr. Bernd Ueberschär
>   Project Coordinator ENBI WP 11

>   **Partner X**   N.N.
>   Project Leader

III   Responsibilities of IFM-K

1   IFM-K shall organize two workshops for WP-11 partners: the first workshop will be held in the beginning of October 2003 in Kiel and will provide detailed technical instructions on the implementation of the translated vocabulary into the EC-SYSTRAN machine translation system. The second workshop will take place at the end of this project, probably January 2005.

2   IFM-K is responsible to identify biodiversity terms (biology, morphology, taxonomy, geography, genetics) that need special dictionaries for proper translation. As a result, IFM-K shall compile and provide a list with major words (MS-Excel format), terms and phrases in English relevant for biodiversity information systems and subject to translation into **language X** (at the latest this listwill be delivered at the workshop in October 2003).

3   IfM-K will provide the German translation of the above mentioned list of words, terms and phrases

4   IFM-K is responsible for compiling dictionaries in 8 languages and to organize "on-the-fly" Website translation for biodiversity sites applying the EC-SYSTRAN system. The translation of FishBase will be used as a test bed for this procedure.

5   IFM-K is responsible to submit progress reports to the ENBI Coordinator and to deliver a final report of the project.

6   After completion of the whole program, IFM-K shall submit proof of expenses by a final statement of account to the Coordinator of the ENBI Project.

IV   Responsibilities of Partner X

1   **Partner X** shall participate in both workshops (with one representative).

2   **Partner X** shall provide a complete translation into **language XX** of the above mentioned list of words, terms and phrases (MS-Excel format), as provided in English by IfM-K.

3   **Partner X** shall assist the Coordinator in identifying Internet sources (dictionaries, glossaries) appropriate to support the building of customized dictionaries for EU-Systran.

4 After completion of the whole program, **Partner X** shall deliver a short technical report to IfM-K on results and constraints of the translation procedure.

V Terms

1 The Project covered under this Agreement will begin on **XX.XX 2003** and will be completed on **XX.XX 2005**
2 To support the partner activities, IFM-K will provide the sum of 10,000 Euro in total.

  Payments will be as follows:

  Upon signature of the contract in 2003   Euro 5,000
  Upon submission of the complete list of translation   Euro 5,000

  Total   Euro 10,000

3. Excess expenditure shall not be acceptable, funds not utilized shall be returned to IFM-K.

VI Other Terms

1 The research results and other benefits arising from this cooperative project will be shared by the parties contributing to this project. The EU will be acknowledged as donor in all publications resulting from this Project.
2 Disputes or disagreements relating to this Memorandum of Agreement will be resolved by negotiations between IFM-K and **Partner X**.

I**N WITNESS WHEREOF**, the parties hereto have affixed their signatures on the date first written above.

Partner X   Institut für Meereskunde Kiel
                                                                   (IFM-K)

By: By:

Partner X   Jürgen Willebrand
Director   Geschäftsführender Direktor

Date: Date:

Principal Investigators:

Rainer Froese   Bernd Ueberschär

Date: Date:

WP 11. Multi-lingual access
Start date or starting event: Month 2
Name of the partner responsible: Institute of Marine Research at the University of Kiel
N° of the partner responsible: P11
N°s of other partners involved: P1, P8, P15, P21, P31, P42, P48, P51, P62
Person-months per partner: (P11: 24)
Introduction
Multi-lingual access will be provided to European biodiversity sites through a user-friendly interface on the World Wide Web. As the working language of GBIF and ENBI is English, a precondition to wide use is translation into other European languages (Dutch, French, German, Greek, Italian, Portuguese, and Spanish). This need is explicitly recognized in the Call for Proposals under ENBI. Given the amount (several terabytes) and dynamic (constant updating) of the information foreseen for GBIF, traditional 'manual' translation is not an option. Rather, machine translation on demand has to be applied, such as is currently available, e.g. in the 'Babel Fish' tool of the AltaVista web portal (http://babel.altavista.com/tr). The quality of machine translation varies greatly depending on the language pair and on the topic. Results can be drastically improved if specialized dictionaries are available for the topic in question, and certain terms are excluded from translation.
The Translation Service of the European Commission (SDT) has developed its own machine translation system, starting in the 1970s and building on the Systran engine, currently supporting 8 European languages and 18 language pairs. The service provides machine translation of documents for registered users. SDT plans to add machine translation of web pages to its services in 2002. ENBI intends to work closely with SDT in providing multilingual access to biodiversity data.
This work package will create special biodiversity dictionaries to be integrated in the machine translation service of the European Commission. It will improve access to biodiversity information through vernacular instead of scientific names. And it will provide a glossary explaining unfamiliar biodiversity terms in 8 European languages. European biodiversity web sites can avail of this service by showing a 'Translate' button on their pages.
The activities in this work package will provide vernacular names to the GBIF Electronic Catalogue of Names and multi-lingual access and glossaries in support of the GBIF Outreach & Capacity Building sub-committee.
Objectives
 ̇ Identify biodiversity terms (biology, morphology, taxonomy, geography, genetics) that need special dictionaries for proper translation, as indicated by unsatisfactory translation by the existing service
 ̇ Translate these terms into 8 European languages in a format that can be used efficiently for machine translation
 ̇ Explore options to build a prototype biodiversity glossary that can be used by European biodiversity web sites
 ̇ Explore options to significantly improve access to biodiversity information through vernacular names
 ̇ Define recommendations on how to tackle these issues in subsequent dedicated work packages, including
finding a long-term host for the biodiversity translation service

Description of work and methodology

Year 1:

˙ Identification of biodiversity terms that need special dictionaries for proper translation

˙ Exploration of usefulness of existing public-domain glossaries

˙ Exploration of options for providing vernacular names to the GBIF Electronic Catalogue of Names

˙ A workshop will train partners in how to translate biodiversity terms and phrases and enter them into special dictionaries

˙ Small author contracts to experts to translate biodiversity terms and phrases

Year 2:

˙ Integration of dictionaries with SDT machine translation.

˙ Development of prototype of biodiversity glossary

˙ Proof of concept of providing vernacular names to GBIF

˙ Connect, test and improve machine translation of ENBI web sites

˙ Finally, a 3 day workshop to examine further efforts relating to multilingual public access to ENBI/GBIF information, and subsequent further plans/proposals

Deliverables

No. Title

Month

D11.1 Workshop on how to translate dictionaries conducted 6

D11.2 Report from workshop on how to translate dictionaries 7

D11.3 Beta version of translation service 18

D11.4 'How to proceed' workshop conducted 24

D11.5 Report from 'How to proceed' workshop 25

D11.6 Online service for quality translation of biodiversity web pages 26

D11.7 Recommendations and prototype for biodiversity glossaries 26

D11.8 Recommendations and prototype for access to biodiversity information through common names

26

D11.9 Document with recommendations on how to further develop multi-lingual access to biodiversity data

26

Corresponding milestones

No. Title

Month

M11.1 Collaboration agreement with EC Translation Service 3

M11.2 Author contracts for all languages in place 11

M11.3 Beta version of translation service available online (D11.3) 18

M11.4 Recommendations and prototype for biodiversity glossaries available (D11.7) 26

M11.5 Recommendations and prototype for access to biodiversity information through common names available (D11.8)

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M11.6 Online service for quality translation of biodiversity web pages available (D11.6) 26