## REPORT ON IMPLEMENTATION OF PROGRAMME OF WORK FOR THE GLOBAL TAXONOMY INITIATIVE

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Please provide summary information on the process by which this report has been prepared, including information on the types of stakeholders who have been actively involved in its preparation and on material which was used as a basis for the report.

This report has been prepared by the German National Focal Point for the Global Taxonomy Initiative with assistance of the Federal Agency for Nature Conservation (www.bfn.de/en/index.htm)

Base for this report are the national reports and websites by relevant agencies, as stated in the text.

## REPORT ON IMPLEMENTATION OF PROGRAMME OF WORK FOR THE GLOBAL TAXONOMY INITIATIVE

## Programme of Work for the Global Taxonomy Initiative Annex to Decision VI/8

Operational Objective 1. Assess taxonomic needs and capacities at national, regional and global levels for the implementation of the Convention

1. Has your country undertaken any taxonomic needs assessments and	identified
priorities in this regard?	
a) no (please specify the reasons)	X
b) no, but assessment is under way	
c) yes, some needs assessments made (please provide details)	
d) yes, comprehensive assessments made (please provide details)	
Further comments on country-based taxonomic needs assessments and	
identification of priorities	
racinetification of priorities	
2. Has your country worked with other countries in the region to u	
regional taxonomic needs assessments and identify priorities in th	is regard?
a) no (please specify the reasons)	X
b) no, but some collaborative projects are being considered or	
planned	
c) yes, some activities undertaken (please provide details)	
d) yes, many activities undertaken (please provide details)	
Further comments on regional taxonomic needs assessment and identi	fication of
priorities	
3. Is your country involved in any activities as part of a global	taxonomic
needs assessment?	
a) no	X
b) yes (please provide details)	
Further comments on the involvement in the activities for the glob	al
taxonomic needs assessment	
4. Is your country undertaking any activities of public education	and
awareness to promote the implementation of the programme of work f	
a) no	
b) yes, some programmes developed and some activities	X
undertaken (please provide details)	
c) yes, comprehensive programmes developed and many activities	
undertaken (please provide details)	
Further comments on public education and awareness programmes and	

The GTI National Focal Point is increasing the awareness in public and scientific community for the PoW. Conferences of learned societies are visited in order to disseminate knowledge of the GTI process in the scientific community. Furthermore, the NFPs website (<a href="www.gti-kontaktstelle.de">www.gti-kontaktstelle.de</a>) gives current information on GTI topics.

The Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU,  $\underline{www.bmu.de}$ ) and the Federal Agency for Nature Conservation ( $\underline{www.bfn.de}$ ) have developed the educational programme "Naturdetektive" ("Nature

detective", <a href="www.naturdetektive.de">www.naturdetektive.de</a>) which stimulates pupils, teachers and parents to observe nature and communicate their finding with others. The necessary software was translated to Russian for a joint Russian \* German project. In cooperation with Russia, an international pilot-platform was established called "BioDets" <a href="www.biodets.net">www.biodets.net</a> to test the usability of global internet-based nature observation project.

Moreover most of the websites mentioned under the following points of this questionnaire are held in a simple language, which makes then suitable for wide public use. Public education is supported by the ministries and state agencies in providing their reports on international conventions, legal aspects, Red Lists and conservation free of charge either as file or website, or, for a minimum price, as printed version. So, most if not all information is available at minimum costs to the public.

Complementing this is effort, a large number of natural history books, local and national guides to fauna and flora, is available from commercial publishers.

Operational objective 2. Provide focus to help build and maintain the systems and infrastructure needed to obtain, collate and curate the biological specimens that are the basis for taxonomic knowledge

5. Is your country working to strengthen global and regional cap	acity	
building to support access to and generation of taxonomic information1?		
a) no (please specify the reasons)		
b) no, but some programmes under development		
c) yes, limited capacity building (please provide details)	X	
d) yes, significant capacity building (please provide		
details)		

Further comments on global and regional capacity building to support access to and generation of taxonomic information

Through a variety of measure, Germany build capacities related to taxonomy:

Germany is member of GBIF (Global Biodiversity Information Facility, <a href="www.gbif.org">www.gbif.org</a>) and has seven national nodes which coordinate the digitisation of specimens data and the internet access to these data (<a href="www.gbif.de">www.gbif.de</a>); Two German institution (both in Berlin) are represented in the EU's SYNTHESYS programme (<a href="www.synthesys.info">www.synthesys.info</a>) providing short term grants to visit their collections;

Moreover, many German natural history museums are active members in relevant scientific organisations, such as CETAF and ENBI, and German scientist participate in regional and international programmes, such as Fauna Europaea.

6. Is your country working with other countries to create and/or strengthen

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<sup>&</sup>lt;sup>1</sup> Responses to question 5 are expected to focus on, but not limited to (a) human capacity building; (b) infrastructure capacity building.

the networks for regional cooperation in taxonomy?	
a) no	
b) no, but consultation is under way	
c) no, but some plans and programmes are under development	
d) yes, some activities undertaken for this purpose (please	X
provide details)	
e) yes, comprehensive activities undertaken for this purpose	
(please provide details)	

Further comments on strengthening of existing networks for regional cooperation in taxonomy

A regional workshop on the "Capacity Building for the GTI in a larger Europe" was held on the International Academy for Nature Conservation Isle of Vilm, Germany, the 20-24 June 2004 with 16 representatives from 13 countries (Belgium, Croatia, Czech Republic, Denmark, Estonia, France, Germany, Lithuania, Poland, Spain, Sweden, Switzerland, Ukraine) and the European institutions: CETAF (<a href="www.cetaf.org">www.cetaf.org</a>), FaunaEuropaea (<a href="www.faunaeur.org">www.faunaeur.org</a>), FishBase (<a href="www.fishbase.org">www.fishbase.org</a>), GBIF (<a href="www.gbif.org">www.gbif.org</a>). The workshop discussed ways of closer European networking in implementing the GTI and in taxonomic institutions.

Moreover German universities and museums initiated and actively participate in a great number of European, bi- and multilateral research programmes, such as SHIFT (<a href="www.mpil-ploen.mpg.de/mpiltsg.htm">www.mpil-ploen.mpg.de/mpiltsg.htm</a>), BIOTA (<a href="www.biota-africa.org">www.biota-africa.org</a>) and CeDAMar (DIVA, ANDEEP), which include capacity building elements and networking in taxonomy. Furthermore, two German institutions are represented in the EU's SYNTHESYS programme (<a href="www.synthesys.info">www.synthesys.info</a>) providing short term grants enabling European colleagues to visit facilities and collections.

Operational objective 3. Facilitate an improved and effective infrastructure/system for access to taxonomic information, with priority on ensuring that countries of origin gain access to information concerning elements of their biodiversity

7. Is your country involved in the development of a coordinated	global
taxonomy information system, in particular the infrastructure to	access
digitized data/information?	
a) no	
b) no, but some plans are being considered	
c) yes, to a limited extent (please provide details)	
d) yes, to a significant extent (please provide details)	X
Further comments on involvement in the development of a coordinated global	
taxonomy information system	

Germany provides a wide range of taxonomic information which can be accessed digitally, and so only portals and other major sources are mentioned here. Germany has seven national GBIF nodes which coordinate the digitisation of specimens' data and the internet access to taxonomic data (see <a href="www.gbif.de">www.gbif.de</a>). Beyond that, several taxon specific databases are supported by German institutions, such as the IPK - Institute for Plant Genetics and Crop Plant Research Gatersleben (<a href="www.ipk-gatersleben.de/en">www.ipk-gatersleben.de/en</a>) on a number of agricultural important plants (Oil and Fodder, Potato, Poa).

GENRES, the Information System Genetic Resources (<a href="www.genres.de/genres-e.htm">www.genres.de/genres-e.htm</a>

GENRES, the Information System Genetic Resources (<a href="www.genres.de/genres-e.htm">www.genres.de/genres-e.htm</a>) holds a wide range of databases on agricultural biodiversity (e.g. BIG and XGRDEU, see following point in this questionnaire), and SYSTAX (a Database System for Systematics and Taxonomy, <a href="www.biologie.uni-ulm.de/systax/index.html">www.biologie.uni-ulm.de/systax/index.html</a>) provides taxonomic information on botanical and

<u>ulm.de/systax/index.html</u>) provides taxonomic information on botanical and zoological collection objects.

The DSMZ (German Collection of Micro-organisms and Cell Cultures, <a href="www.dsmz.de">www.dsmz.de</a>) provides, apart from other databases on cell cultures, similar taxonomic service for micro-organisms.

FloraWeb ( $\underline{www.floraweb.de}$ ) is an online database on plants, plant societies and vegetation in Germany, including information on conservation status according to Natura2000 and other national legislation. The Federal Information System Genetic Resources (BIG) ( $\underline{www.big-flora.de}$ ) provides information on wild and cultivated plants in Germany.

German museums and universities are active and driving members in European and other international programmes such as BioCASE (<a href="www.biocase.org">www.biocase.org</a>), CETAF (<a href="www.cetaf.org">www.cetaf.org</a>), ENBI (<a href="www.enbi.info">www.enbi.info</a>), Fauna Europaea (<a href="www.faunaeur.org">www.faunaeur.org</a>) and SYNTHESYS (<a href="www.synthesys.info">www.synthesys.info</a>), providing significant amount of data from their collections. These data a freely available to internet users. The taxonomic infrastructure, the museums, collections and their curators, has been surveyed by ZEFOD - Inventory of biological research collections in Germany (<a href="www.genres.de/CF/zefod/projekt\_e.cfm">www.genres.de/CF/zefod/projekt\_e.cfm</a>), providing in addition to other metadata, the kind of the collection (entomological, herbarium, botanic gardens etc), its size in specimens, the curator responsible and complete

The European Dictionary of Domesticated and Utilized Animals (EDDA) provides taxon-based information on domesticated animals. (A protype of EDDA is under development.)

address.

Operational objective 4. Within the major thematic work programmes of the Convention include key taxonomic objectives to generate information needed for decision-making in conservation and sustainable use of biological diversity and its components

8. Has your country made any taxonomic studies and inventories at	the
national level, which provide a basic assessment of forest biolog	gical
diversity, in particular in areas under current threat for habita	at
conversion, or of high conservation value?	
a) no (please provide the reasons)	
b) no, but some programmes are under development	
c) yes, some studies and inventories made (please provide	Х
details)	
d) yes, comprehensive studies and inventories made (please	
provide details)	
Further comments on taxonomic studies and inventories made for a	basic
assessment of forest biological diversity	

Germany published a national inventory with 48.000 species of animals, the Biodiversity - Fauna of Germany ("Artenvielfalt - Fauna in Deutschland" www.bfn.de/08/index.htm/), which also includes forest animals.

Following National Inventories on genetic resources are availabe:

FGRDEU: Holdings of Forest Genetic Resources in Germany
A large number of trees and shrubs are in the centre of conservation measures
for forest genetic resources in Germany (www.genres.de/genres-e.htm).

Forests habitats are also addressed by the Natura2000 programme, which has been implemented, and the aforementioned faunal and floral databases (BIG-Flora, FloraWeb etc).

- 9. Has your country undertaken any taxonomy-related activities relating to marine and coastal biodiversity, in particular taxonomic work related to identification of ballast water organisms and monitoring health of mangrove systems through their invertebrate fauna?
- a) no
  b) not applicable
  c) no, but some programmes are under development
- d) yes, some activities undertaken (please provide details) X
- e) yes, many measures undertaken (please provide details)

Further comments on taxonomy-related activities identified in the programme of work on marine and coastal biodiversity

Compared to other countries, Germany has only a short coastline. However, a special research programme, the Habitat Mare Natura2000 (<a href="www.habitatmarenatura2000.de">www.habitatmarenatura2000.de</a>) was initiated to provide information needed to establish marine and costal protected areas. This is a part of the European Commission's Natura2000 policy, which is explained at point 14) of this questionnaire.

The recently published national checklist of animals, Biodiversity - Fauna of Germany ("Artenvielfalt - Fauna in Deutschland"), with 48.000 species also includes marine organisms (see <a href="https://www.bfn.de/08/index.htm">www.bfn.de/08/index.htm</a>).

In addition to the Red Lists for Habitats, Animal and Plants, a "Red List for marine and costal biotopes and biotope complexes of the Baltic Sea" was published in collaboration with the countries on the Baltic Sea, addressing the situation of this area (<a href="www.helcom.fi/proceedings/bsep75.pdf">www.helcom.fi/proceedings/bsep75.pdf</a>). A similar Red List exists for the Wadden and North Sea are.

There are no mangroves on German coasts.

- 10. Has your country developed taxonomic support for implementing relevant actions identified in the programme of work on dry and subhumid lands biodiversity, in particular identification of key indicator taxa like lichens?
- a) no (please provide reasons and plans for improvement)
- b) not applicable
- c) no, but some programmes are under development
- d) yes, some activities undertaken(please provide details)
- e) yes, many activities undertaken (please provide details)

Further comments on taxonomic support for implementing the programme of work on dry and subhumid lands biodiversity

X

Although there are no deserts in Germany, it is Party of the UNCCD (www.unccd.int) framework and supports relevant research in a number of regions (e.g. Sahel and Aral Sea) by the DesertNet German Competence Network for Research to Combat Desertification (www.desertnet.de). 11. Has your country developed taxonomic support for implementing relevant actions identified in the programme of work on inland waters biodiversity, in particular regional guides to freshwater fish and invertebrates as an input to ecosystem monitoring for river and lake health? a) no b) no, but some programmes are under development c) yes, some activities undertaken(please provide details) d) yes, many activities undertaken (please provide details) Further comments on taxonomic support for the implementation of the programme of work on inland waters biodiversity Germany has done significant activities in this field. A databases on the holdings of aquatic genetic resources (fish, crayfish and mussels) was made available by GENRES, the Information System Genetic Resources, on www.genres.de/agrdeu/ A complete list of the fresh water organisms (with prokaryotes, fungi, plants, "worms" (rotators, annelids etc), arthropods and vertebrates) has been published and is available online. The purpose of this list is to provide uniform criteria for establishing water quality and mapping of organisms. (see www.bayern.de/lfw/technik/gkd/lmn/fliessgewaesser\_seen/taxa/). The available Red List of Threatened Habitats, Animals and Plants (www.bfn.de/en/03/0301.htm) include the freshwater environment. Germany is furthermore a Party of the Ramsar Convention on Wetlands and supports relevant research. (AGRDEU: Holdings of Aquatic Genetic Resources In its momentary state of development, the on-line database provides information about the existing freshwater fish of Germany based on the fish registries of the Laender as well as on the German red list.) 12. Has your country undertaken any taxonomy-related activities identified in the programme of work on agricultural biodiversity as well as relevant activities identified in the International Pollinator Initiative and the International Soil Biodiversity Initiative? b) no, but some activities are being planned c) yes, some activities undertaken (please provide details)

Further comments on taxonomy-related activities for the implementation of the programme of work on agricultural biodiversity

d) yes, comprehensive activities undertaken (please provide

details)

Comprehensive activities are undertaken in agricultural biodiversity by a number of institutions and initiatives.

GENRES, the Information System Genetic Resources (<a href="www.genres.de/genres-e.htm">www.genres.de/genres-e.htm</a>) holds a wide range of information on agricultural biodiversity. Federal Information System Genetic Resources (BIG) (<a href="www.big-flora.de">www.big-flora.de</a>) provides information on wild and cultivated plant. The nationale inventories XGRDEU provides information on Holdings and Collections of Genetic Resources for Plants, Micro-organisms, Agriculture, Forestry and Fisheries in Germany (<a href="www.genres.de/xgrdeu-en.htm">www.genres.de/xgrdeu-en.htm</a>).

The IPK - Institute for Plant Genetics and Crop Plant Research Gatersleben (Agriculture,  $\frac{www.ipk-gatersleben.de/en}{}$ ) holds a number of taxonomic databases for agricultural important plants (Poa, Potato, Oil and Fodder Plants).

Additionally following National Inventories on genetic resources are availabe:

PGRDEU: Collections of Plant Genetic Resources in Germany
The database contains data on the genebank collections of the two major
institutions IPK and BAZ and information on other ex-situ holdings of plant
genetic resources for food and agriculture.

TGRDEU: Holdings of Animal Genetic Resources in Germany
The central documentation concerns species of horses, cattle, pigs, sheep,
goats and poultry. Information is collected on in-situ conservation, ex-situ
conservation, subsidies, passport and characterisation data.

ZGRDEU: Ex Situ Collections of Ornamental Crops in Germany The documentation of ex-situ collections of ornamental crops in Germany, ZGRDEU, contains at the moment data of over 8.200 accession of roses and rhododendrons from the Europa-Rosariums Sangerhausen and the Lehr- und Versuchsanstalt für Gartenbau der Landwirtschaftskammer Weser-Ems.

13. Is your country developing any taxonomic support for the implementation of the programme of work on mountain biodiversity, in particular identification of biodiversity components unique to mountain ecosystems?

a) no	
b) no, but some programmes are under development	
c) yes, limited support (please provide details)	X
d) yes, significant support (please provide details)	
Further comments on taxonomic support for the implementation of th	e programme

Further comments on taxonomic support for the implementation of the programme of work on mountain biodiversity

The state of the mountain ecosystem has also been dealt with in detail in Germany's Thematic Report on the Mountain Ecosystems to the CBD (www.biodiv.org/doc/world/de/de-nr-me-en.pdf).

As for other areas, the Natura2000 implementation also considers mountain areas and species as important, and these are also included in the Red List data and aforementioned species lists and databases (freshwater species, animals, floras).

The "Red List of Threatened Habitat Types" also includes mountain areas.

The German study area of the LACOPE project ( $\frac{\text{http://144.41.253.33/lacope/}}{\text{large scale pasture in the Bavarian prealps and alps.}$ 

14. Has your country developed taxonomic support for the implementation of the programme of work on protected areas?

a) no	
b) no, but some programmes are under development	
c) yes, some programmes in place and are being implemented (please provide details)	
d) yes, comprehensive programmes are being implemented (please provide details)	Х

Further comments on taxonomic support provided to the implementation of the programme of work on protected areas

Germany is implementing the European Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (the 'Habitats Directive'), which became after additions and transposition into national law, known as "Natura2000" and "FFH-Richtlinie".

The objective of the Habitats Directive is to protect and sustain biological diversity in the territory of the European Union through a system of protected areas designated according to uniform criteria.

To this end, annexes to the Directive list habitat types (Annex I) and species (Annex II) the range and presence of which are to be taken as criteria when selecting appropriate protected areas. As not all species and habitats mentioned in the Habitat Directive, occur in Germany, a modified list has been prepared and is available under <a href="www.bfn.de/en/03/030301.htm">www.bfn.de/en/03/030301.htm</a>. Currently about 7 % (increasing) of Germany's area is considered to be Natura2000 site. Single states ("Länder") have made their Natura2000 data available online, for Bavaria see

http://gisportal-umwelt.bayern.de/ffh/finweb/finindex.htm .

The WISIA database (German only,  $\underline{www.s2you.com/wisia/}$ ) provides detailed information on the on the conservation status of species protected under international and national regulations.

Germany has, in addition, 14 regions protected in the UNESCO's Man and Biosphere Programme (MAB,  $\frac{\text{www.bfn.de}}{05/0506.\text{htm}}$ ).

Operational objective 5. Within the work on cross-cutting issues of the Convention include key taxonomic objectives to generate information needed for decision-making in conservation and sustainable use of biological diversity and its components

15. Has your country taken any measures to strengthen capacity for inventory and classification of biodiversity and its components in development of a national strategy on access and benefit-sharing?	
a) no	
b) no, but some programmes are under development	
c) yes, some measures taken (please provide details)	Х
d) yes, comprehensive measures taken (please provide details)	
Further comments on the measures to strengthen capacity for the i and classification of biodiversity and its components in the devel national strategy on access and benefit-sharing	
The International Plant Exchange Network (IPEN, <a href="https://www.bgci.org.uk/abs/ipen.html">www.bgci.org.uk/abs/ipen.html</a> ) has been developed by the Verband Gaerten (an association of botanic gardens in German speaking coun <a href="https://www.biologie.uni-ulm.de/verband/cbd/">www.biologie.uni-ulm.de/verband/cbd/</a> ). This network has developed Conduct to ensure that the exchange of seeds complies with CBD and Benefit sharing regulations. Germany held the intergovernmental meeting in 2001 that lead to the Draft of the "Bonn Guideline" on Access and Benefit Sharing adopted in The Hague in 2002. The Bonn Guidelines operationalize the CBD pron ABS.	atries, a Code of l Access and le first ed by COP6 provisions
<pre>16. Has your country developed taxonomic support to address the is invasive alien species? a) no</pre>	ssues of
b) no, but relevant policy and programme under development	
c) yes, some policies and programmes in place (please provide details)	X
<ul><li>d) yes, comprehensive policies and programmes in place (please provide details)</li></ul>	
Further comments on taxonomic support to address the issues of invespecies	rasive alien
The issue of invasive alien species is addressed by relevant conservation the health/protection policy and information. The nature conservation coordinated by the Federal Agency for Nature Conservation (www.bfn.de/en/index.htm), the plant health/protection sector by the Biological Research Centre (e.g.  www.bba.de/english/pub_eng/document/ar2003/07-AG_web.pdf/ and www.bba.de/english/bbaeng.htm).  A summary of the conservation policy is available on www.neophytem based on the CBD decisions, CITES and other international conventionare implemented to prevent introduction of ecologically dangerous (www.bfn.de/en/04/index.htm for CITES implementation in Germany).  17. Has your country developed taxonomic information system to supplementation of the conservation of the conservation of the conservation of ecologically dangerous (www.bfn.de/en/04/index.htm for CITES implementation in Germany).	the Federal  i.de. It is cons, which organisms
maintenance, preservation and protection of traditional knowledge, innovations and practices of indigenous and local communities in a with Article 8(j) and related provisions?	
a) no b) not applicable	
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c) no, but some programmes are under development	
d) yes, some activities undertaken but a system is not in place yet (please provide details)	X
e) yes, a taxonomic information system in place (please provide details)	

Further comments on the taxonomic information system to support the maintenance, preservation and protection of traditional knowledge, innovations and practices of indigenous and local communities

Traditional knowledge is protected in a number of ways.

A bi-lateral Chinese-German project "CBIK" (<a href="www.cbik.ac.cn/cbik-en/index.htm">www.cbik.ac.cn/cbik-en/index.htm</a> and <a href="www.gtz.de/biodiv/deutsch/china-yunnan2.html">www.gtz.de/biodiv/deutsch/china-yunnan2.html</a>) is developed by the GTZ (Gesellschaft für technische Zusammenarbeit, German Agency for Technical Cooperation) to preserve the traditional knowledge in a Yunnan, a Chinese region.

Moreover, most online databases, such as the Federal Information System Genetic Resources (BIG) ( $\underline{www.big-flora.de}$ ), SYSTAX ( $\underline{www.biologie.uni-ulm.de/systax/}$ ), FloraWeb ( $\underline{www.floraweb.de}$ ), and WISIA database on protected species ( $\underline{www.s2you.com/wisia/}$ ) provide German vernacular names in addition to scientific names.

18. Has your country undertaken any taxonomy-related activities that support the implementation of the ecosystem approach and the work in the field of assessments, monitoring and indicators?

a) no	
b) no, but some programmes are under development	
c) yes, some programmes in place (please provide details)	X
d) yes, comprehensive programmes in place (please provide	
details)	

Further comments on programmes and activities to support the implementation of the ecosystem approach and the work in the field of assessments, monitoring and indicators

The Federal Agency of Nature Conservation has published a list of habitat types of the Natura2000 European network of protected areas on the territory of Germany (<a href="www.bfn.de/en/03/030301\_lebensraumtyp.htm">www.bfn.de/en/03/030301\_lebensraumtyp.htm</a>). Furthermore Red Lists of plant communities, threatened habitat types, animal and plant species of the German Wadden Sea, North Sea region, Baltic Sea region are available. The Red Lists species and habitats are regularly monitored and are also used as indicators for habitat quality. Germany has 14 regions protected in the UNESCO's Man and Biosphere Programme (MAB, <a href="www.bfn.de/05/0506.htm">www.bfn.de/05/0506.htm</a>), which are regularly monitored.

The aforementioned Natura2000 legislation requires monitoring of the protected areas and species. National reports are prepared by the Federal Agency for Nature Conservation.

The German Bird Monitoring Trust (<a href="www.vogelmonitoring.de">www.vogelmonitoring.de</a>) monitors the German avifauna in cooperation with the relevant national and state ("Länder") agencies, as well as ornithological societies. The gathered data serve to protect the species and to indicate the state of protected areas alike. The Federal Agency for Nature Conservation has coordinated the compilation of a "Map of the Natural Vegetation in Europe" at 1:2,500,000, (available on CD-ROM) assessing the European vegetation types. A more detailed map at 1:500,000 with priority on protected forests is currently prepared.

If your country wishes to provide additional information on implementation of this programme of work , please do so in the following space  ${\sf prop}(x)$ 

Although there is a good international recognition of taxonomy through the CBD, EU, GBIF and other institutions, the situation of taxonomy at universities and museums is still less than good.

Taxonomy relevant chairs at universities and posts at museums are often allocated to other research areas. One reason is the little soft money allocated to taxonomy and as university need to maximize the amount of third party money, taxonomy is given up.

Deteriorating job opportunities will also endanger succession of knowledge in taxonomy. These challenges might also pose major problems in the implementation of the PoW at national level in the future.

A positive trend is certainly that the taxonomists become more and more aware of the different international programmes and their importance for achieving the goals. This leads to a better organisation in national systematic societies and closer cooperation with similar societies in neighbouring countries.

Another clearly positive trend is the increasing amount of taxonomic information available on the internet, and the significant support to digitize taxonomic information. These activities do significantly increase efficiency of taxonomic work and usefulness and availability of taxonomic information for a wide scientific usage, such as nature conservation, and the public.

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