

**Report on Implementation of Programme of Work for the
Global Taxonomy Initiative**

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Date of submission:	25 th April 2005

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.

- Various stakeholders, whose line of work relates to taxonomic issues to a major or minor extent, have been contacted with regards to specific queries posed in the GTI questionnaire.
- This report was then compiled based on available documentation (cited throughout the report) as well as from valuable feedback received from the institutions/persons listed below:

Malta Environment & Planning Authority

- Mr. Darrin Stevens (CBD National Focal Point);
- The Nature Protection Unit within the Environment Protection Directorate; and
- The Environment Assessment (EA) Team of the Resource Management Unit within the Environment Protection Directorate (in connection with Environment Impact Assessments and part of the answer to question 18).

Department of Biology, University of Malta

- Mr. Edwin Lanfranco - actively involved in research and consultancy work in the botanical sciences. His research includes both marine and terrestrial vegetation and floristics, with particular reference to the Maltese Islands. He is also actively involved in the scientific aspects of conservation. Mr. Lanfranco is also a full-time senior lecturer at the Department of Biology of the University of Malta;
- Prof. Patrick J. Schembri – apart from his academic teaching at the Department of Biology of the University of Malta, Prof. Schembri also carries out research in the following areas:
 1. General biology of selected species of marine animals and ecology of Mediterranean marine benthic communities;
 2. Faunistics of the Maltese Islands, particularly with reference to biogeography;
 3. Impact of man on Mediterranean small island ecosystems, especially the Maltese Islands;
 4. Conservation biology especially as applied to the Maltese Islands.

All these activities involve taxonomy in one form or another. Prof. Schembri also acts as a consultant on the living natural resources and the natural environment of the Maltese Islands to a number of Government departments and agencies and to private enterprise. Prof. Schembri started the Group on Faunistics and Ecology of the Maltese Islands (FEMI) within the Department of Biology.

- Dr. Adriana Vella – full time senior lecturer and Head of Conservation Biology Research Group within the Department of Biology. The Biological Research and Conservation Group, is a research group within the University of Malta and focuses on scientific research processes applied to conservation, including the application of different tools such as genetics, field surveying and questionnaires.

The National Museum of Natural History

- Mr. John J. Borg - Collections and Site Executive within Heritage Malta.

Department of Agriculture

- The National Soil Unit, Department of Agriculture (in connection with Question 12 of this questionnaire).

Fisheries Conservation and Control Division

- Dr. Matthew Camilleri (Head of the Malta Centre for Fisheries Studies and National Focal Point of FAO-MedSudMed)

Other Researchers Consulted:

- Mr. Timothy Tabone in relation to the ongoing ethnobotanic survey and Question 17 in the questionnaire.
- Ms Claudette Gambin in relation to Palynology and that Part of Question 12 whereby reference is made to the International Pollinator Initiative.

**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)	
b) No, but assessment is under way	
c) Yes, some needs assessments made (please provide details)	X
b) Yes, comprehensive assessments made (please provide details)	
Further comments on country-based taxonomic needs assessments and identification of priorities	
<p><u>National Red Data Book</u></p> <ul style="list-style-type: none"> - Assessment of the taxonomic status of species of flora and fauna in the Maltese Islands was done with the publication of the 1989 Red Data Book for the Maltese Islands¹ (Schembri & Sultana editors, 1989). From the time of this publication, many new records have been added to the Maltese list of species consequent to better exploration of the islands, thus contributing to the improvement of our knowledge of certain groups. In addition, the taxonomic status of several taxa has been revised since then. <p>¹ Schembri P.J. & Sultana J. [eds] (1989) Red data book for the Maltese Islands. Valletta, Malta: Department of Information; viii + 142pp. + plates I-VIII. (The National Red Data Book is available for viewing online on the MEPA website by accessing the following link: www.mepa.org.mt/environment/publications/RedBookforMalteseIslands.pdf)</p> <p><u>Knowledge on Biota of the Maltese Islands:</u></p> <ul style="list-style-type: none"> - Although a large amount of work on the biota of the Maltese Islands has been carried out, paucity of knowledge of the terrestrial, freshwater and marine biota of the Maltese Islands that is attained through taxonomic assessment still remains for certain groups. This is due to the fact that most research has been mainly done on the 'popular' groups such as flowering plants, conifers, ferns and their relatives, fish groups, chitons, bivalves, decapods, dragonflies, moths and butterflies. In addition, birds, amphibians, reptiles and mammals are well studied. Nonetheless, knowledge of certain groups of organisms is either minimal or entirely inexistent. <p><u>Current State of knowledge on Maltese Flora:</u></p> <ul style="list-style-type: none"> - Tracheophytes: Our knowledge of tracheophytes in the Maltese Islands is practically complete. Detailed study of Maltese tracheophytes dates back to the beginning of the 19th century. - Algae: Knowledge of Maltese algae made little progress since the main study of Sommier & Caruana Gatto² (1915). However since the 1970s, there has been a great accumulation in our knowledge of the Maltese phycoflora, particularly marine but knowledge of freshwater phycoflora is also quite advanced. Most complete is our knowledge of macroalgae; the build up of more information is required with regards to microalgae. <p>²Sommier, S. & Caruana Gatto, A. (1915) <i>Flora Melitensis Nova</i>. Stabilimento Pellas: Firenze, viii + 502pp.</p>	

- **Fungi:** Very little progress has been made in the knowledge of fungi between 1915 and 1980; knowledge of the macromycoflora has now increased considerably although there are still gaps while numerous taxa discovered in Malta are still only tentatively identified. On the other hand, knowledge of microfungi is still very limited with little progress done since Sommier & Caruana Gatto (1915).
- **Slime moulds:** Local knowledge of the Maltese myxomycoflora is fairly good, but limited to studies at six localities on the island of Malta whereby 74 taxa have thus far been identified. Pioneering work on slime moulds (Myxomycetes) was done locally, by Briffa³ (1998), followed by updates by Briffa, Moreno and Illana⁴ (2000). Prior to these studies, there seems to be no records of this group at all from the Maltese Islands. Further study is required in other areas of Malta, and the other islands and islets of the archipelago.

³ Briffa, M. (1998) First checklist of the Myxomycetes of Malta. *Xjenza*, 2 (2): 28-34.

⁴ Briffa, M., Moreno, G. & Illana, C. (2000) Some Rare Myxomycetes from Malta. *Stapfia* 73, *Zugleich Kataloge des OÖ. Landesmuseums, Neue Folge*, 155: 151-158.

- **Bryophytes:** We have a fairly good knowledge of bryophytes. Hardly any work was done on this group between 1915 and mid-1970s; however, fairly extensive surveying since then has yielded relatively little new information.
- **Protozoa:** Our knowledge is still very limited and relatively very few works have been published.
- As indicated by Schembri *et al.*⁵ (2002), certain groups although widely studied such as the orchids, present **uncertain taxonomic relationships**, often arising from divergence of opinion between the many different experts. On the other hand certain groups require **further fieldwork**.

⁵ Schembri, P.J., Baldacchino, A.E., Mallia, A., Schembri, T., Sant, M.J., Stevens, D.T. and Vella, S.J. (2002) State of the environment report for Malta 2002: Living resources, fisheries and agriculture. Pp. 162-346. In: *State of the Environment Report for Malta, 2002*. Santa Venera, Malta: Ministry for Home Affairs and the Environment; iv + 581pp.

This report is available for online viewing by accessing the following link:

<http://www.mepa.org.mt/environment/publications/soer2002/SOER02.PDF>

Current State of Knowledge of Maltese Fauna

- Schembri⁶ (2003) carried out a review of the current state of knowledge of non-marine fauna (lower invertebrates, molluscs, chelicerates, crustaceans, uniramians, and vertebrates) in the Maltese Islands. Other reviews by Gulia⁷ (1914) and Schembri⁸ (1993) were previously undertaken.
- Mifsud⁹ (2000a) carried out an assessment of the present knowledge of the entomofauna of the Maltese Islands.
- Several books/ popular articles in scientific journals have been published documenting the scientific knowledge on several other specific areas of biological studies in the Maltese Islands e.g. **ornithology** (Sultana & Gauci¹⁰, 1982), **ichthyology** (Lanfranco¹¹, 1958; Lanfranco¹², 1993; Falzon¹³, 1999; Schembri, Fergusson & Schembri¹⁴, 2003), **malacology** (Cachia, Mifsud and Sammut¹⁵, 1991, 1993, 1996, 2001; Schembri & Schembri¹⁶, 1997), **mammalogy** (Vogel, Maddalena & Schembri¹⁷, 1990; Borg & Schembri¹⁸, 1991; Borg, Violani & Zava¹⁹, 1997), **carcinology** (Baldacchino²⁰, 1983; Lanfranco²¹, 2001), **arachnology** (Baldacchino, Dandria, Lanfranco and Schembri²², 1993), **entomology** (Cassar²³, 1990; Mifsud & Mascagni²⁴, 1997; Mifsud & Scapola²⁵, 1998; Farrugia²⁶, 1999; Bellés & Mifsud²⁷, 2000; Mifsud²⁸, 2000b; Ebejer²⁹, 2001).

⁶ Schembri, P.J. (2003) Current state of knowledge of the Maltese non-marine fauna. In: Malta Environment and Planning Authority *Annual report and accounts 2003*. pp. 33-65; Floriana, Malta: Malta Environment and Planning Authority; 92pp.

⁷ Gulia, Giovanni (1914) Uno sguardo allo zoologia delle "Isole Maltesi" IX^o Congrès international de Zoologie (Monaco 1913) Section 4 pp. 545-555; Rennes (France).

⁸ Schembri, P.J. (1993) The fauna of the Maltese Islands: a review and analysis. In: Ellul-Micallef, R. & Fiorini, S. [eds] *Collegium Melitense Quartercentenary Celebrations (1592-1992); Collected papers contributed by members of the academic staff of the University of Malta*. Pp. 541-573; Msida, Malta: University of Malta; xxv + 621pp.

- ⁹ Mifsud, D. (2000a) Present knowledge of the entomofauna of the Maltese Islands. *Entomologica Basiliensia* 22: 75-86.
- ¹⁰ Sultana, J. & Gauci, C. (1982) *A New Guide to the Birds of Malta*. Malta: The Ornithological Society.
- ¹¹ Lanfranco G., (1958) A complete guide to the fishes of Malta; Malta 74pp + 41 plates.
- ¹² Lanfranco G. (1993) The fish around Malta (Central Mediterranean). Valletta, Progress Press Co Ltd, 132 + xi pp.
- ¹³ Falzon, M.A. (1999) A survey of Blenniidae, Clinidae and Tripterygiidae (Pisces) in Maltese Waters (Central Mediterranean) including four previously unrecorded species. *The Central Mediterranean Naturalist*, 3(1): 17-22.
- ¹⁴ Schembri, T., Fergusson, I.K. & Schembri, P.J. (2003) Revision of the Records of Shark and Ray Species from the Maltese Islands (Chordata: Chondrichthyes). *The Central Mediterranean Naturalist*, 4(1): 71-104.
- ¹⁵ Cachia C., Mifsud C. & Sammut P. M. (1991) The marine shelled mollusca of the Maltese Islands (Part one: Archaeogastropoda). Marsa (Malta), Grima Printing and Publishing Industries, 112 + xii pp.
- (1993) An annotated checklist of the marine mollusca of the Maltese Islands. Erste Vorarlberger Malakologische Gesellschaft. Rankweil, Austria, 80 pp.
- (1996) The marine shelled mollusca of the Maltese Islands (Part two: Neotaenioglossa). Leiden, Backhuys Publishers, 228 pp.
- (2001). The marine shelled mollusca of the Maltese Islands (Part three: Prosobranchia). Leiden, Backhuys publishers, 266 pp.
- ¹⁶ Schembri, T., and Schembri, P.J. (1997) Records of Cephalopods (MOLLUSCA: Cephalopoda) from Maltese and surrounding waters (Central Mediterranean). *The Central Mediterranean Naturalist*, 2(4): 124-135.
- ¹⁷ Vogel, P.; Maddalena, T. & Schembri, P.J. (1990) Cytotaxonomy of shrews of the genus *Crocidura* from Mediterranean islands. *Vie Milieu* 40: 124-129.
- ¹⁸ Borg, M.J. & Schembri, P.J. (1991) A short note on the herpetofauna of Gozo. *British Herpetological Society Bulletin* 38: 8-9.
- ¹⁹ Borg, J.J.; Violani, C. & Zava, B. (1997) The Bat Fauna of the Maltese Islands. *Myotis*, 35: 49-65.
- ²⁰ Baldacchino, A.E. (1983): A preliminary list of freshwater crustaceans from the Maltese Islands. *The Central Mediterranean Naturalist*, 1(2): 49-50.
- ²¹ Lanfranco, S. (2001). A review of the branchiopod fauna of the Maltese Islands (Crustacea: Branchiopoda). *The Central Mediterranean Naturalist*, 3 (3): 109-114.
- ²² Baldacchino, A.E.; Dandria, D.; Lanfranco, E. & Schembri, P.J. (1993): Records of Spiders (Arachnida: Araneae) from the Maltese Islands (Central Mediterranean). *The Central Mediterranean Naturalist*, 2(2): 37-59.
- ²³ Cassar, L.F. (1990). Notes on rare and infrequent Orthoptera of the Maltese Islands. *The Central Mediterranean Naturalist*, 2(1): 1-4.
- ²⁴ Mifsud, D. & Mascagni, A. (1997) Heteroceridae (Coleoptera) of the Maltese Islands (Central Mediterranean). *The Central Mediterranean Naturalist*, 2(4): 175.
- ²⁵ Mifsud, D. & Scapola, A. (1998) The Tenebrionidae (Coleoptera) of the Maltese Islands (Central Mediterranean). *Annali del Museo Civico di Storia Naturale G. Doria*, XCII: 191-229.
- ²⁶ Farrugia, C. (1999) A preliminary list of the Leucospidae of the Maltese islands (Hymenoptera, Chalcidoidea). *The Central Mediterranean Naturalist*, 3(1): 15-16.
- ²⁷ Bellés, X. & Mifsud, D. (2000) Ptinid Beetles (Coleoptera, Ptinidae) from the Maltese Islands. *The Central Mediterranean Naturalist*, 3(2): 43-48.
- ²⁸ Mifsud, D. (2000b) The Languriidae (Coleoptera) of the Maltese Islands. *The Central Mediterranean Naturalist*, 3 (2): 49-52.
- ²⁹ Ebejer, M.J. (2001) A contribution to the knowledge of the Ephydroidea (Diptera: Camillidae, Campichoetidae and Drosophilidae) of Malta. *The Central Mediterranean Naturalist*, 3(3): 85-88.

Faunistics and Ecology of the Maltese Islands (FEMI)

- The FEMI project was started in 1984 by Prof. Patrick J. Schembri of the Department of Biology, University of Malta, with the following objectives:
 - (i) The compilation and analysis of existing data on the **faunistics and ecology (coastal and marine)** of the Maltese Islands with the aim of **assessing present knowledge**, identifying areas where information is still poor or non-existent, and producing a baseline account as a starting point for further work;
 - (ii) The **detailed study of particular habitats**, and of the **taxonomy**, distribution, habitat relations, biogeographical affinity, basic ecology and conservation status of particular groups of the Maltese fauna. Groups were chosen taking into consideration a number of factors including: intrinsic biological interest, importance in terms of the biogeography of the Maltese Islands, the fact that they have been little studied, the ecosystem services they provide, and their potential for use as biological indicators of environmental quality and habitat type; and
 - (iii) The **assessment of human impact on the natural environment**, particularly the biota, habitats and ecosystems, of the Maltese Islands. The aim here is to generate good quality information on which to base policies for the sound management of local biotic resources.
- **Some of the main results obtained** to date include:
 - a) The **production of inventories** of various groups of marine animals, including: sponges, thoracican cirripedes, brachyuran decapod crustaceans, polyplacophoran, gastropod and cephalopod molluscs, and echinoids. Work on polychaetes, other crustacean and echinoderm groups and on fish is in progress;
 - b) **Characterisation of particular habitats**, including: saline marshlands, coastal rock-pools, rocky shore littoral habitats and seagrass meadows. Characterisation of sandy shore littoral and adlittoral habitats is ongoing; and
 - c) The **characterisation and mapping of the major marine habitat types** in the Maltese Islands.

2. Has your country worked with other countries in the region to undertake regional taxonomic needs assessments and identify priorities in this regard?	
a) No (please specify the reasons)	
b) No, but some collaborative projects are being considered or planned	
c) Yes, some activities undertaken (please provide details)	X
d) Yes, many activities undertaken (please provide details)	
Further comments on regional taxonomic needs assessment and identification of priorities	

FAUNA EUROPAEA-NAS Extension project:

- This project, funded by the European Union through its 5th Framework Programme for Research and Technological Development, is now officially over. In Malta, the FEMI GROUP of the Department of Biology, University of Malta, represented it, lead by Prof. Patrick J. Schembri.
- One of the work packages of the **Fauna Europaea (FaEu) Project** is 'gap-analysis' on a Europe-wide scale to identify gaps in our taxonomic knowledge of the non-marine biodiversity of Europe. It became evident that a number of gaps exist:
 - 1) At the **taxonomic levels**: some groups have very few taxonomist working on them, and a few, none at all;
 - 2) At the **faunistic level**: the lack of local knowledge or of study of particular areas by non-locals results in a lack of information about distribution.
- As a result of this gap analysis, initiatives are already being undertaken by the FaEu group in the form of existing and planned applications to the EU for funds to train taxonomists, explore unexplored regions and to make major museum collections accessible to taxonomists, including students, from Europe. This last initiative has already been funded in the form of the **SYNTHESYS Project** through which funding is available to provide scientists based in European Member and Associated States to undertake short visits to utilize the infrastructure (the collections, staff expertise and analytical facilities) at one of the 20 partner institutions for the purposes of their research.
- Although the FaEu project as financed by the European Union is over, the database itself will be continued by the **Society for the Management of European Biodiversity Data** which is a society aiming to make biodiversity data available for the benefit of science and environmental management.

European platform for biodiversity research strategy" (EPBRS):

- Regional (that is European) taxonomic needs are regularly discussed in the "**European platform for biodiversity research strategy" (EPBRS)** and its supporting group EU Biodiversity Science. These groups have held a number of web conferences on the assessment of taxonomic needs and to identify priorities. Malta is represented in the EPBRS.

Collaborating to increase floristic knowledge:

- The team working on **floristics** of the Maltese Islands, lead by Mr. Edwin Lanfranco of the Department of Biology, University of Malta has (and are still) working in close liaison with foreign institutions, particularly **Italian Universities**. Much work on tracheophytes and macroalgae has been carried out in collaboration with botanists from Italian institutions, while for freshwater algae most collaboration was carried out with **French and British collaboration**. Most work on macrofungi was carried out with the collaboration of French mycologists.
- Other work has been carried out on **macrofungi and myxomycetes** by Mr. Michael Briffa, who has and is still working with various foreign experts and institutions.

Malta National Biodiversity Platform:

- The Malta National Biodiversity Platform (MNBP) falling part of **BioPlatform** (the European Platform for Biodiversity: the thematic network for supporting the EPBRS), has been operating with both governmental and non-governmental institutions in order to promote the improvement of biodiversity research strategies and biodiversity conservation policies at national and European level.

More information on the MNBP may be obtained by accessing the following link: (www.bioplatformmalta.org)

3. Is your country involved in any activities, as part of a global taxonomic needs assessment?	
a) No	
b) Yes (please provide details)	X
Further comments on the involvement in the activities for the global taxonomic needs assessment	
<ul style="list-style-type: none"> - The BioPlatform, the thematic network for supporting the EPBRS, and to which Malta was involved, was one international project that assessed such global taxonomic needs. (http://www.bioplatform.info/). 	
4. Is your country undertaking any activities of public education and awareness to promote the implementation of the programme of work for the GTI?	
a) No	
b) Yes, some programmes developed and some activities undertaken (please provide details)	X
c) Yes, comprehensive programmes developed and many activities undertaken (please provide details)	
Further comments on public education and awareness programmes and activities	
<ul style="list-style-type: none"> - Voluntary training courses consisting of interactive lectures with visual presentations and directed at both primary and secondary school teachers and various radio programmes targeting nature protection, have been undertaken to promote the biodiversity of life and its appreciation among the general public. - Training and education is also promoted through lectures delivered at the University of Malta by the Department of Biology in terms of the modules on diversity of animal and non-animal organisms as well as plant systematics and phylogeny, offered to students reading for the Bachelor of Science Degree in Biology. (http://home.um.edu.mt/biology/) - The National Museum on Natural History (NMNH) is responsible for the curation of the National Biological collections. The main majority of specimens belong to the following groups: Entomology, Conchology and Ornithology. These are used for research purposes as well as for education. The collections housed at the NMNH play a fundamental role in the “outreach programme” designed for students of different age groups. They also provide material for permanent as well as temporary displays. (www.heritagemalta.org/naturalhistorymuseum.html) - The Malta National Biodiversity Platform has endeavoured in developing local awareness on biodiversity needs at local and international level, such as through the website: www.bioplatformmalta.org - A book entitled Wildlife of the Maltese Islands³⁰ (Editors J. Sultana & V. Falzon) was published by the then Environment Protection Department in 1996, whereby a number of experts having interests in the field of taxonomy, flora, entomofauna, avifauna, herpetofauna, ichthyofauna and other groups, contributed to its compilation with the aim of inspiring the appreciation of the beauty and biodiversity of the Maltese Islands and of serving as an education tool. The publication covers at least 985 species and was reprinted in 2001. The original publication dated 1995, was in Maltese. 	
<p>³⁰ Sultana, J. & Falzon, V. [eds] (1996) <i>Wildlife of the Maltese Islands</i>. Floriana (Malta): Environment Protection Department. pp. 336.</p>	

- A set of volumes³¹ in the Maltese Encyclopaedia Series '**Kullana Kulturali**' presents updated local knowledge and information on lepidoptera, fish, molluscs, reptiles, amphibians, birds, mammals, trees and shrubs, Maltese flora including natural habitats in the Maltese Islands, as authored by local experts. This set of volumes is published in Maltese.

³¹ Amongst these include the following publications:

Baldacchino, A.E. & Schembri, P.J. (2002) *Amfibji, rettili, u mammiferi fil-gzejjer Maltin*. [Sensiela 'Kullana Kulturali'] II-Pjeta, Malta: Pubblikazzjonijiet Indipendenza; xii + 256pp. [In Maltese; Amphibians, Reptiles and Mammals in the Maltese Islands]

Cachia C., (1999) *Il-Molluski ta' Malta*. [Sensiela 'Kullana Kulturali'] II-Pjeta, Malta: Pubblikazzjonijiet Indipendenza; x +210pp. [In Maltese; Molluscs of Malta]

Lanfranco, E. & Lanfranco, G. (2003) *Il-Flora Maltija*. [Sensiela 'Kullana Kulturali'] II-Pjeta, Malta: Pubblikazzjonijiet Indipendenza. [In Maltese; Maltese Flora]

Sultana, J. (2001) *L-Għasafar ta' Malta*. [Sensiela 'Kullana Kulturali'] II-Pjeta, Malta: Pubblikazzjonijiet Indipendenza, xiv + 182pp. [In Maltese; Birds of Malta]

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 capacity building to support access to and generation of taxonomic information ¹ ?	
a) No (please specify the reasons)	
b) No, but some programmes under development	X
c) Yes, limited capacity building (please provide details)	
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	
<ul style="list-style-type: none"> - Although a number of taxonomic studies have been or are being undertaken locally, the lack of human and financial resources still holds back capacity building to support access to and generation of taxonomic information locally. There is the need to strengthen the existing infrastructure for biological collections, and also, innovative tools for taxonomic research and further capacity building should be encouraged and supported. - The NMNH is currently assessing the local situation in order to provide a strategy for the matter (addressed in the question posed). 	
6. Is your country working with other countries to create and/or strengthen 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 provide details)	X
e) Yes, comprehensive activities undertaken for this purpose (please provide details)	

¹ Responses to question 5 are expected to focus on, but not limited to (a) human capacity building; (b) infrastructure capacity building.

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

BioCASE Project

- Malta represented by the Environment Protection Directorate within Malta Environment and Planning Authority (MEPA) falls part of the consortium of 35 institutions from 30 European countries plus Israel involved in the **Biodiversity Collection Access Service for Europe Project**. The latter is an on-going research project, referred to as BioCASE, which is funded via the Energy, Environment and Sustainable Development (EESD) Programme of the European Union's Fifth Framework Programme (FP5). The aim of the project is to set up a concerted access to the science knowledgebase embodied by European biological collections. BioCASE will support ongoing taxonomic projects of the EU, provide an access point for voucher information underpinning large areas of environmental and biodiversity research, directly contribute to meet EU obligations under the CBD, and provide significant input to the Global Biodiversity Information Facility.
- A **National Seminar for the BioCASE Project** was held on the 20th October 2004, to introduce the BioCASE network and to further identify private Maltese collectors that would like to take part in the network.
- This project has been finalised round about the end of January 2005. Data was gathered from a number of private collectors and also the Argotti National Botanical Gardens. This data was inputted into the **BioCASE database** and is publicly available.

(Refer to the following link: www.biocase.org/BioCASESimple/default.cfm).

FaEu Project (refer to reply given to question Number 2)

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 digitised data/information?	
a) No	
b) No, but some plans are being considered	
c) Yes, to a limited extent (please provide details)	X
d) Yes, to a significant extent (please provide details)	
Further comments on involvement in the development of a coordinated global taxonomy information system	

National Database on Biodiversity

- A '**National Database on Biodiversity**' project was initiated a few years back by the Malta Council for Science and Technology (MCST) and the Department of Biology within the University of Malta. Since then, it has been dormant, though it shall be resumed and funded on a permanent basis, in line with the obligations set by international law. Information inputted in this database will be gathered from a number of studies that have been commissioned by the Malta Environment & Planning Authority, and include the following:
 1. Setting up of a list of threatened and/or endemic fish;
 2. Setting up a list of threatened and/or endemic vertebrates, excluding fish, birds, bats and cetaceans;
 3. Setting up a list of threatened and/or endemic invertebrates, excluding insects; and
 4. Setting up of a list of threatened and/or endemic insects.
- Other studies include the setting up of a list of alien fauna and another on the setting up of a list of alien flora
- Further information that has been compiled on bats in the form of species data sheets shall also be entered.
- Information from these studies shall be gathered and used to provide baseline data to revise the 1989 Red Data Book for the Maltese Islands and instead compile an **IUCN National Red Data List**. This list will prioritise the species to be covered by the Biodiversity Action Plan Programme.

FAUNA EUROPAEA-NAS Extension project

- As afore-mentioned in part of the answer to question number 2, the **FAUNA EUROPAEA-NAS Extension project**, represented in Malta by the FEMI team, aimed to produce a **central database** with a unique comprehensive list of valid accepted scientific names of the terrestrial and freshwater multicellular animal species that currently live in Europe, and information about their distribution at least at a European country level.
- An **EcoExplore Database**, which provides illustrative information on certain species of flora and fauna of the Maltese Islands, is also available to the public by accessing the following link:

www.mepa.org.mt/environment/index.htm?ecoseek/ecoseek.asp&1

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 biological diversity, in particular in areas under current threat for habitat 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 details)	X
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	

<ul style="list-style-type: none"> - Some studies have been undertaken limited to forest remnants in connection with Natura 2000/Emerald Network process. - It should be borne in mind that in the Maltese Islands, the native forest is all but extinct and only remnants remain at four localities (<i>Ballut tal-Wardija</i>, <i>Ballut ta' l-Imgiebah</i>, <i>Ta' Baldu/Wied Hazrun</i>, and <i>Il-Bosk</i> near <i>Buskett</i>) all on the island of Malta. These forest remnants take the form of small copses of the Holm Oak (<i>Quercus ilex</i>) where the total number of trees is often less than thirty. Some of these trees are estimated to be between 500 and 900 years old. 	
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	X (in the case of mangroves)
c) No, but some programmes are under development	
d) Yes, some activities undertaken (please provide details)	X (in the case of ballast water)
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	
<ul style="list-style-type: none"> - Various studies have been carried out since the 19th century on marine and coastal biodiversity, and various scientific papers, books and popular articles, were written on such biodiversity. With respect to ballast water, there is limited data, published by the Environment Protection Directorate in 1996 following a seminar on alien species³². - Two species of bryozoans (<i>Celleporaria pilaefera</i> and <i>C. aperta</i>) were first recorded in 1977 when they were discovered fouling cages of an oyster farm. It is thought that both species might have reached the Maltese Islands via shipping as reported by Agius, Schembri and Jaccarini³³ (1977). - An adult of the sea urchin <i>Prionocidaris baculosa</i> was collected from the ballast tank of a ship undergoing repairs in the Maltese Drydocks as reported by Schembri³⁴, 1978. <p>³² Baldacchino, A.E. & Pizzuto, A. [eds] (1996) Introduction of alien species of flora and fauna. [Proceedings of a seminar held at Qawra, Malta, 5 March 1996] Floriana, Malta: Environment Protection Department; vi + 77pp.</p> <p>³³ Agius, C., Schembri, P.J. and Jaccarini, V. (1977). A preliminary report on organisms fouling oyster cultures in Malta (Central Mediterranean). <i>Memorie di Biologia Marina e di Oceanografia</i> (n.ser.) 7: 51-59.</p> <p>³⁴ Schembri P.J., (1978). Recent Echinoids (Echinodermata: Echinoidea) from the Maltese Islands and surrounding waters. <i>Animalia</i> 5 (1-3): 123-132.</p>	

10. Has your country developed taxonomic support for implementing relevant actions identified in the programme of work on dry and sub-humid 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)	X
e) Yes, many activities undertaken (please provide details)	
Further comments on taxonomic support for implementing the programme of work on dry and sub-humid lands biodiversity	
<ul style="list-style-type: none"> - All terrestrial habitats in the Maltese Islands classify as arid or semi-arid. With respect to the Programme of Work on Dry and Sub-humid Lands, certain activities are in part being undertaken, as indicated below. - Through the Natura 2000/Emerald Network Process, information on the state of biological diversity of dry and sub-humid habitats falling within sites nominated as candidate special areas of conservation (SACs) and special protected areas (SPAs) under the Habitats Directive (Council Directive 92/43/EEC) and Birds Directive (Council Directive 79/409/EEC) respectively is assembled and analysed. Pressures exerted on such sites are also identified by means of this process. Through this process species inventories are compiled for every site. <p>(More information on the Natura 2000 Process in Malta may be obtained by accessing the following link: www.mepa.org.mt/environment/index.htm?natura2000/natura2000.htm&1)</p> <p><u>SI-MO Project:</u></p> <ul style="list-style-type: none"> - Biodiversity indicators on threatened species, Maltese wetlands, marine turtles and public expenditure on protected areas were compiled (Stevens, Fava and Mifsud³⁵, 2002) as part of the Sustainable Indicators – Malta Observatory (SI-MO) Project, an affiliate organisation of the Foundation of International Studies of the University of Malta set up in December 2000. Although, the SI-MO bioindicators were baseline indicators for a comparative approach, some comparative studies were carried out on some habitats/ecosystem types, such as wetlands and wetland flora (Lanfranco³⁶, 1999), forests and floristic biodiversity (Stevens & Baldacchino³⁷, 1998) and sand dune (Stevens³⁸, 2001). <p>(More information on the SI-MO Project may be obtained by accessing the following link: http://www.um.edu.mt/intoff/si-mo/firstpg.html)</p> <p>³⁵ Stevens, D.T.; Fava, J. and Mifsud, C.R. (2002); Sustainability Indicators for Biological Diversity: Threatened Species, Wetland Area, Marine Turtles and Public Expenditure on Protected Areas. Malta: Sustainability Indicators Malta Observatory, University of Malta, 27pp.</p> <p>³⁶ Lanfranco, E. (1999). Identifying trends in erosion and land degradation through the study of vegetation. In: Baldacchino, A.E. and Tanti, C.M. [eds.] (1998). <i>National Awareness Seminar on Desertification and Land Degradation: Proceedings of Seminar Foundation for International Studies</i>, Malta: Ministry of Foreign Affairs and Environment Protection Department, 105-108pp.</p> <p>³⁷ Stevens, D.T. and Baldacchino, A.E. (1998). <i>Siġar Maltin, Siġar Barranin, il-Ħarsien tagħhom u l-Obbligi Nazzjonali u Internazzjonali</i>. In: Baldacchino, A.E. and Stevens, D.T. (eds.) <i>Is-Siġar Maltin – l-użu u l-importanza</i>. [Seminar Nazzjonali ta' Ġurnata imlaqqa' l-Furjana, Malta], pp. 53-100. Floriana, Malta: Environment Protection Department; 135pp.</p> <p>³⁸ Stevens, D.T. (2001). The status of Maltese sand dunes and their flora and vegetation, with a case study on Ramla l-Hamra (Gozo, Central Mediterranean). Unpublished MSc dissertation, Department of Biology, University of Malta, xv + 341pp.</p>	

- Certain **measures for the conservation and sustainable use of biodiversity of dry and sub-humid lands** are also being undertaken locally, such as **nature protection** mainly administered by way of national legislation affording protection to a number of endangered, threatened and endemic species of flora and fauna, from activities that might endanger the conservation status of these species and drawing up of management plans for **protected areas** in line with the criteria of the CBD and the EU Acquis, and/or the setting up of management agreement with site managers. Nationally, habitats outside protected areas are indirectly protected by the fact that rare and protected species and biotopes found in an area that is not protected, are taken into account in planning applications. Furthermore, management plans may also be established for habitats outside protected areas.

(**Legal and policy documents** including Primary Legislation, subsidiary legislation in the form of Legal Notices, and Government Notices, as well as Supplementary Guidance Policy documents are all available for public viewing on the Malta Environment & Planning Authority's website www.mepa.org.mt.)

- Way back in 1987 a booklet was published entitled '**Localities with Conservation Value in the Maltese Islands**'³⁹. For every locality mentioned important species therein were listed. The final chapter listed reason why such sites merit conservation measures.

³⁹ Schembri, P.J., Lanfranco, E, Farrugia, P., Schembri, S. and Sultana, J. (1987): Localities with Conservation Value in the Maltese Islands. Malta: Environment Division, iii + 27pp.

This document is available online on the MEPA website by accessing the following link: <http://www.mepa.org.mt/environment/publications/LocalitiesConservationValue.pdf>

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)	X
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

- A study has been undertaken as part of a Master's Degree research programme related to the **identification of phytoplankton species**, population assessments and their **relation to environmental conditions**.
- Phytoplankton abundance and composition in surface waters is one of the biological quality elements set out by the **EU Water Framework Directive (2000/60/EC)** for the assessment of the status of a water body, and thus for implementing the necessary measures to prevent the deterioration of the status of all bodies of surface water. The Water Framework Directive requires the characterisation of water bodies according to type-specific reference conditions of all water bodies. It also requires the setting up of a monitoring programme, which should include the monitoring of the composition, abundance and biomass of the phytoplankton in inland water bodies (including lakes and rivers), transitional water bodies, and coastal waters.

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?

a) No	
b) No, but some activities are being planned	
c) Yes, some activities undertaken (please provide details)	X

d) Yes, comprehensive activities undertaken (please provide details)	
Further comments on taxonomy-related activities for the implementation of the programme of work on agricultural biodiversity	
<ul style="list-style-type: none"> - Taxonomy related projects on soil biodiversity (endogean species) are limited and mostly carried out by Dr. David A. Mifsud of the Entomology & Apiculture Section within the Department of Agriculture. - Knowledge on soil biodiversity in the Maltese Islands is very limited, with the few information available mostly limited to selected group of insects (mostly Coleoptera), molluscs, fungi (mostly macrofungi) and some invertebrate species (such as millipedes and isopods) associated with leaf-litter, particularly in wooded areas. This limited knowledge is mostly due to the cryptic nature of soil-inhabiting species, which are often small, if not minute, and not easily found. Nonetheless, a number of soil-inhabiting species have found in soil at 10-30cm depths, often under trees, many of which have been recently described as new species to science, endemic to the Maltese Islands. - Although not an activity directed to the implementation of the International Pollinator Initiative, a study carried out as part of a Bachelor of Science thesis dealt with the pollination relationships of hoverflies (Diptera: Syrphidae) and the flora at a coastal site in the Northern part of the Island of Malta. A pollen library for the area under study was compiled as a reference library for the identification of the floral sources of the pollen grains retrieved from the guts of captured specimens. The compilation of the pollen library of the Maltese flora is being continued as part of a Master of Science thesis, which focuses on the pollen characterisation of Maltese honey and also focusing on the foraging behaviour of <i>Apis mellifera</i> in the Maltese islands with respect to local flora. <p><u>MALSIS Project:</u></p> <ul style="list-style-type: none"> - MALSIS: Malta Soil Information System was a project funded under the LIFE III, Third countries, aiming to establish a soil information system for the Maltese Islands in harmonization with wider European Soils Information System. The two-year project was completed in February 2004 and was implemented by the National Soil Unit, Ministry for Rural Affairs and the Environment. Prior to the MALSIS project, the only soil survey information available for the Maltese islands was the 1:31,680 scale map and accompanying report produced by Lang⁴⁰ (1960) for the then Colonial Office. - In MALSIS a precise grid survey at 1km x 1km interval was conducted on Malta, Gozo and Comino and data was recorded manually on field recording forms from 272 sampled sites. The information recorded on the field survey form enabled the soil to be classified according to the World Reference Base for Soil Resources (WRB). The MALSIS grid survey has identified 19 soil units, from 7 soil reference groups (Leptosols, Arenosols, Vertisols, Calcisols, Luvisols, Regosols and Cambisols) according to the WRB soil classification system. - (Further information on the MALSIS project may be obtained by accessing the following link: www.agric.gov.mt/malsis_activities.htm) <p>⁴⁰ Lang, D.M. (1960) Soils of Malta and Gozo: Colonial Research Studies No. 29, Colonial Office, London: HMSO.</p>	
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	N/A
b) No, but some programmes are under development	
c) Yes, limited support (please provide details)	
d) Yes, significant support (please provide details)	

Further comments on taxonomic support for the implementation of the programme of work on mountain biodiversity	
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	X
c) Yes, some programmes in place and are being implemented (please provide details)	
d) Yes, comprehensive programmes are being implemented (please provide details)	
Further comments on taxonomic support provided to the implementation of the programme of work on protected areas	
<ul style="list-style-type: none"> - The government allots funds to non-governmental organizations for the management of protected areas. As part of the management of such protected areas, MEPA stipulates that management activities would also include baseline studies related to taxonomy. Financial support is thus provided indirectly for studying less known groups of organisms. - University students are also undertaking taxonomic studies as a Masters Degree with the University of Malta. For instance, such studies shall be carried out on two protected areas <i>Għadira</i> and <i>Ballut Ta' Marsaxlokk</i>. 	

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 the inventory and classification of biodiversity and its components in the development of a national strategy on access and benefit sharing?	
a) No	
b) No, but some programmes are under development	X
c) Yes, some measures taken (please provide details)	
d) Yes, comprehensive measures taken (please provide details)	
Further comments on the measures to strengthen capacity for the inventory and classification of biodiversity and its components in the development of a national strategy on access and benefit-sharing	
<ul style="list-style-type: none"> - Legal Notice 160 of 2002 'Convention on Biological Diversity (Incorporation) Regulations, 2002', transposes the Convention on Biological Diversity done at Rio de Janeiro on the 5th June, 1992 to form part of the Laws of Malta including Article 15 on Access to Genetic Resources. (www.mepa.org.mt/environment/legislation/LN_160_2002_E.pdf) 	
16. Has your country developed taxonomic support to address the issues of invasive alien species?	
a) No	
b) No, but relevant policy and programme under development	
c) Yes, some policies and programmes in place (please provide details)	X
d) Yes, comprehensive policies and programmes in place (please provide details)	
Further comments on taxonomic support to address the issues of invasive alien species	

National Legislation

- The issue of alien species is addressed under a range of key international agreements including in the context of nature protection and international trade. The control of alien species from these aspects is addressed by national legislation through the primary legislation Environment Protection Act (**EPA - Chapter 435, Act XX of 2001**) via Regulation 9 sub-regulation 2kiii, and further by subsidiary legislation mainly Regulation 22 of the Flora, Fauna and Natural Habitats Protection Regulations, 2003 (**Legal Notice 257 of 2003**), Regulation 10 of the Trees and Woodland (Protection) Regulations, 2001 (**Legal Notice 12 of 2001**), and Regulation 6(1) of the Trade in Species of Fauna and Flora Regulations, 2004 (**Legal Notice 236 of 2004**).

These legal documents may be viewed by accessing the following links:

(EPA - www.mepa.org.mt/environment/legislation/chapt435_2001_E.pdf)

(L.N. 257 of 2003 - www.mepa.org.mt/environment/legislation/LN_257_2003_E.pdf)

(L.N. 12 of 2001 - www.mepa.org.mt/environment/legislation/LN_12_2001_E.pdf)

(L.N. 236 of 2004 - www.mepa.org.mt/environment/legislation/LN_236_2004_E.pdf)

Studies on Alien Species

- Local taxonomic experts play a leading role in identifying newly discovered invasive alien species.
- To **increase the knowledge base** of alien species in the Maltese Islands, two studies have been commissioned by MEPA, a '**study for the setting up of a list of alien flora**' and a '**study for the setting up of a list of alien fauna**'.
- The **purpose** of these studies is to identify the alien flora and fauna of the Maltese islands respectively, their invasiveness and extent, the threats they pose on local biodiversity, their present exploitation and other uses, and suggest ways how to control or eradicate and the implications resulting from such measures. Information presented would include the scientific name, life form, distinguishing features, abundance and dispersal, seed production, breeding method, introduction source, invasive category/potential, possible eradication methods, distribution, habitat invaded, socio-economic uses, impact on native species, and implications on removing species.

17. Has your country developed taxonomic information system to support the maintenance, preservation and protection of traditional knowledge, innovations and practices of indigenous and local communities in accordance with Article 8(j) and related provisions?

a) No	
b) Not applicable	
c) No, but some programmes are under development	
d) Yes, some activities undertaken but a system is not in place yet (please provide details)	
e) Yes, a taxonomic information system in place (please provide details)	X

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

- An **ethnobotanic survey** is being undertaken by Mr. Timothy Tabone, who has been gathering ethnobotanical data for 13 years and has started doing so systematically since 1996.
- This ongoing research consists of semi-structured interviews, including discussions, and participant observation. Most interviewees are farmers and/or herders, and sometimes fishermen and traditional healers. Since **traditional knowledge** has declined considerably during the past 50 years, informants are usually sought from among the pre-World War II generation. Aspects of biocultural knowledge discussed include: Medicinal plants; folk concepts of disease; local cultivars of crops; plants in myth, legend and superstitions; vernacular names and **ethnotaxonomy**; traditional agricultural practices; traditional methods of pest control; role of plants in animal husbandry, e.g. use of plants for veterinary purposes and fodder; old methods of pest control; fibrecrafts; etc. This research will culminate in the publication of a **monograph on the ethnobotany of the Maltese Islands**.

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

Environment Assessments & Development Planning

- **Environment assessments** in the form of Environment Planning Statements (EPS), Environment Impact Assessments (EIA), as well as appropriate assessments as required by the Habitats Directive, all include activities supporting the implementation of the ecosystem approach.
- **Terms of Reference** are issued for development proposals subject to an **Environment Impact Assessment**. In view that terms of reference are tailor-made to specific projects, **ecological baseline studies** have been requested, where relevant, for various projects in the Maltese Islands. The following information is usually requested:
 - a) Field surveys with illustrations of the biotopes/habitat types, flora and fauna of the area;
 - b) Description of any landscape and/or habitat feature in the locality to be retained, removed, enhanced or supplemented with an emphasis on any protected areas and endangered, rare, unique, endemic and other species known or reported from the area;
 - c) The potential or expected impact of the proposed project on features of ecological importance.

Ecosystem Approach to Fisheries Management

- The **Malta Centre for Fisheries Sciences** has been involved (since 2001) in an FAO sub-regional project "**MedSudMed**" which is focusing on the **Ecosystem Approach to Fisheries (EAF)** in the central Mediterranean. MedSudMed is funded by the Italian Ministry of Agriculture and Forestry Policies (MiPAF), operating in the Southern part of the Central Mediterranean with the scientific cooperation between scientists from Italy, Libya, Malta and Tunisia. This project has four main areas of research. One of the phases of the project dealt with the standardized surveys in the project area namely trawl, ichthyoplankton and acoustic surveys, which also included data collection on oceanographic parameters as well as on benthic abiotic and biotic characteristics. Data collected is being used to identify and study the main benthic biocoenosis and demersal fish assemblages, apart from other features and parameters, and thereby basic work undertaken also includes taxonomic characterisation.

(Information obtained from Camilleri, M. (2004). Ecosystem Approach to Fisheries in the Mediterranean: A Scientific Approach. (Abstract). IUCN World Conservation Forum, Bangkok, 18-20 November 2004).

Ecosystem Approach applied to Policy Making

- A **Biodiversity Monitoring Programme (BMP)** for Malta is currently being set up. It aims at including the monitoring of special areas of conservation, and other protected habitats and species according to their conservation objective, which takes into consideration both the attainment of their favourable conservation status, and the ecosystem approach. The monitoring programme also aims at incorporating these monitoring obligations for the analysis of the effectiveness of local and other international legislation to which Malta is party.
- The BMP shall be developed in parallel with the setting up of the **National Biodiversity Strategy and Action Plan (NBSAP)** for the Maltese Islands, which is currently in the initial stages of the planning phase, whereby terms of reference are being developed setting out the way forward for developing the NBSAP and further proposes a set of themes to be included in the strategy. A Stakeholders meeting held on the 14th July 2004 was essentially an introductory meeting on the setting up of an NBSAP for the Maltese Islands where a number of stakeholders were consulted on the themes to be covered by the document and its vision. A participatory approach is being aimed at for compiling the NBSAP by fully engaging the participation of stakeholders in its compilation and for setting priorities in order to integrate biodiversity concerns in sectoral and cross-sectoral policies and programmes as required under Article 6 of the Convention on Biological Diversity and in line with the European Community Biodiversity Strategy (ECBS). The general aim is to establish a strategic framework for action to conserve sustainably, use and manage the biological diversity of the Maltese Islands by way of motivated and coordinated support and action by society.

If your country wishes to provide additional information on implementation of this programme of work, please do so in the following space

Over the years students reading for a Bachelor of Science and/or Master of Science Degrees within the Department of Biology, Faculty of Science at the University of Malta have undertaken a number of taxonomic research studies. The complete list of biology theses may be accessed via the following link: <http://home.um.edu.mt/biology/Dissertations.xls>

A vast number of articles have also been published in scientific journals documenting the discovery of new species and hence adding on to list of documented species for the Maltese Islands, compiling checklists or their review, as well as other studies related to taxonomy undertaken on a national scale or in liaison with fellow experts from other countries. To maintain the succinctness of this report, these have not all been listed in this report.
