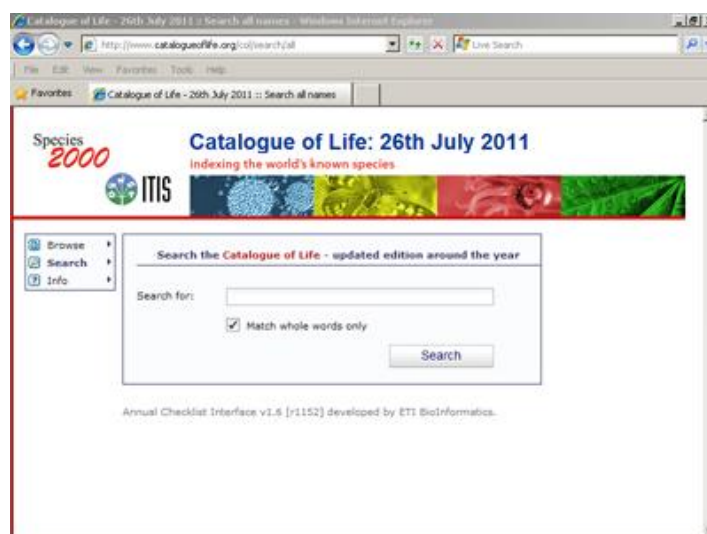




Call for Expressions of Interest

For hosting the Species 2000 Secretariat
that leads the
Catalogue of Life Programme



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Summary

The Species 2000 organisation seeks expressions of interest from institutions willing to host its Secretariat. This is the Secretariat that provides the hub of activities for the Species 2000 programme, and the base for its leadership of the creation and publication of the Catalogue of Life, a taxonomic resource that is widely used all over the world.

The Secretariat of presently 7 staff includes:

- i) the Office of the Executive Secretary,
- ii) the Organisational Secretariat for the international Species 2000 programme, associated projects and networks of partners,
- iii) the leaders of the Production Team that produces the Catalogue of Life
- iv) the leaders of the Server and Service Centre that provides Catalogue of Life online services.

Some other functions of Species 2000 are distributed, particularly to the Species 2000 Philippines Office, software preparation in Leiden and Cardiff, and regional responsibilities to centres in Beijing China, Canberra Australia, Christchurch New Zealand, Campinas Brazil, and ITIS Washington.

Species 2000 is an independent not-for-profit organisation with its own governance and legal status, to which the Executive Secretary and the Secretariat are responsible. It has a rich network of partnerships with taxonomic organisations around both Europe and the world, including a founding partnership with the ITIS project at the Smithsonian Institution in Washington DC. It seeks a renewed Secretariat Hosting Agreement on a 5-yearly basis from 1 November 2012, the date on which the present agreement finishes and the present Executive Secretary retires.

It seeks to embed the Secretariat within a dynamic taxonomic and biodiversity informatics research environment that can be provided by active research institutions and university departments, and that will stimulate the new Executive Secretary to lead, fund, manage and further develop this exciting international programme.

The Secretariat is largely self-funding, but it is expected that the host institute will itself make a financial commitment, for instance to one or more employees and to the continued operation of the Secretariat.

The Directors of Species 2000 seek expressions of interest from relevant institutions, including possibly from partners in the existing EC-funded 4D4Life, i4Life and EUBrazil OpenBio projects. After a first closing date, the Directors will make up a short list and invite selected institutions to prepare a full proposal for a second closing date. After the second closing date, the Directors will enter into direct negotiations prior to final selection.

Why do we think hosting the Species 2000 Secretariat will be of potential interest to taxonomic and informatics institutions? Species 2000 has established a significant and central niche in creating and providing the

Catalogue of Life as a taxonomic backbone for global biodiversity science. An institution hosting the Secretariat will have the benefit of participating in the global vision of a significant product of the taxonomic profession, publicity and exposure at world-wide events, a throughput of international visitors and meetings, and an in-house project in which multiple departments can participate.

The intention is to circulate this Call from 26 September 2011, the first closing date for expressions of interest to be eight weeks later on 18 November 2011, the second closing date for full proposals to be end March 2012. A decision is expected in April 2012, prior to new arrangements being put in place from 1 November 2012.

Potential Benefit in hosting the Secretariat

In creating the Catalogue of Life resource and services, Species 2000 has established a significant niche in providing a taxonomic backbone and associated services for global biodiversity science, and made real progress towards filling this niche. An institution hosting the Secretariat will have the benefit of:

- i) Contributing to this vision and programme as to how the taxonomic profession as a whole can deliver a workable global taxonomic backbone to biodiversity science.
- ii) Gain, as a host institute of international standing, from the publicity and world-wide exposure of the Catalogue of Life programme, for instance, at GBIF, CBD, IUCN, and EC events.
- iii) Gain, in its own critical mass, from the regular flow of international visitors, workshops and project meetings associated with the programme and its EC network projects.
- iv) Have present in-house a programme to which many internal departments may contribute or interact – for instance, across zoology, entomology, microbiology, botany, molecular and barcoding labs, within a museum; or across conservation, biodiversity, agri-forestry & fisheries, food and regulatory agencies, computer science and systems engineering within a university. As in recent times at University of Reading, staff may contribute to a variety of taught courses and MSc/PhD programmes.
- v) Contribute to the critical mass and project portfolio of an institutional IT or systems development department.
- vi) Gain contributions to the publications, cyber-presence and impact of the host institution.
- vii) Gain opportunities among citizen scientists and outreach education programmes of the host institution.

Species 2000

Species 2000 (www.species2000.org) is an organisation, effectively a world-wide "federation" of taxonomic database organisations working closely with users, taxonomists and sponsoring agencies. It was set up in 1996, is registered in the United Kingdom as a not-for-profit 'company limited by

guarantee', and is owned and governed by its members from all over the world. The Memorandum and Articles of Association of Species 2000 were deposited at the Companies House in the UK at 11 December 1997 (see the section on Relevant Documents).

The core business and main product of Species 2000 is to create and maintain a validated checklist of *all known species* on Earth (plants, animals, fungi and microbes), the so-called *Catalogue of Life (CoL)*. This is realized principally by aggregating species checklists and taxonomic hierarchies from a large array of global species databases, each providing expert knowledge on different major groups of organisms, and using a consistent taxonomic system validated by specialists. A further input of additional information from regional and other taxonomic databases is in preparation as well.

In June 2001 Species 2000 and the ITIS organisation (see <http://www.itis.gov>), started working together to further develop the Catalogue of Life. By working together in creating a common product, they reduced duplication of effort, made better use of resources, and accelerated production – a most successful partnership. More recently two new EC projects have substantially extended not only the array of expert databases contributing to the CoL (to presently 100), but also the network of major taxonomic resource organisations that we work with as partners. This includes the significant 'intermediate aggregators', such as WoRMS, FADA, Species Fungorum/ MycoBank, and The Plant List, the new Catalogue of Life Regional Centres (Sp2000 China Node in Beijing, NZOR in New Zealand, Atlas of Living Australia in Canberra, and Catalogo da Vida in Campinas Brazil); plus the 'Global Biodiversity Partners' in the i4Life Project (GBIF, IUCN Red List, EBI/EMBL, Barcode of Life, EOL and LifeWatch).

The Catalogue of Life

The published electronic Catalogue is composed of a single species checklist integrated with a single taxonomic hierarchy available at www.catalogueoflife.org or on the free DVD.

Considering that it is a specialist resource, the Catalogue of Life (CoL) receives heavy usage on a global scale. The web editions receive 70 – 90 million page views per year to the CoL servers; the 4,500 free copies of the DVD edition are distributed to nearly all countries of the world; over 1.5 million web-sites are linked to the CoL services; and the single largest user is the molecular community via link-outs from GenBank.

A major use is as provider of a digital taxonomic backbone for indexing and operating biodiversity portals and information systems filled and operated by other organisations. This usage ranges from very visible global portals such as the Global Biodiversity Information Facility (GBIF), Encyclopedia of Life (EOL), SeaLifeBase, IUCN Red List to the 40 or so national and regional portals (eg IABIN in Latin America, the ASEAN Biodiversity Centre in SE Asia, and shortly the European BHL- Europe and OpenUp! Project portals), and the growing internal use by major taxonomic collections. There is also a growing

usage by a number of utilities and national regulatory agencies dealing with all biodiversity, such as the biosecurity agencies of the New Zealand and Australian governments. The extent of these usages is in addition to the usages tallied on the CoL servers. Together they illustrate that a significant purpose for the Catalogue is to provide an electronic infrastructure for global biodiversity science, and it is on this basis that the three present EC grants place this programme as a key component of the EC e-Infrastructures Programme.

Very many of the web and DVD usages are by working scientists simply checking or looking up species, names and taxonomic positions. But there are also areas where the Catalogue makes a real contribution to the science, as in studies of patterns of species richness or diversification, especially for comparisons across continents or oceans, and as a resource for the numbers of known species in discussions concerning the totality of species on earth, (e.g. Mora C, Tittensor DP, Adl S, Simpson AGB, Worm B, 2011. *How Many Species Are There on Earth and in the Ocean?* PLoS Biol 9(8): e1001127. doi:10.1371/journal.pbio.1001127).

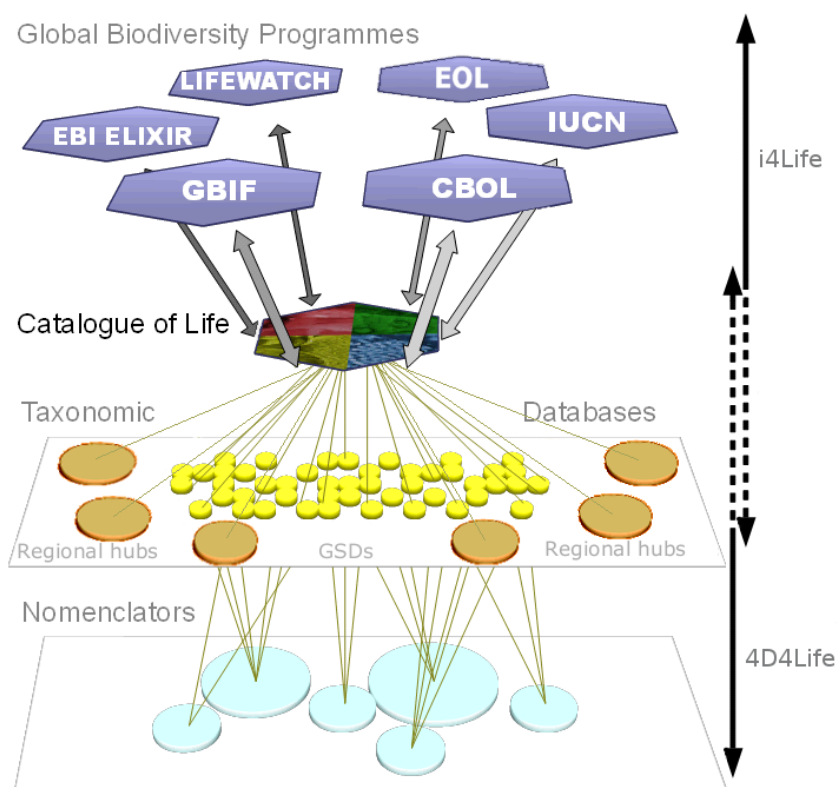
The CoL contributes towards "a widely accessible checklist of known species" prioritised by the Global Taxonomy Initiative of the UN Convention on Biological Diversity, and to the assembling of "a widely accessible working list of known plant species" prioritised by the Global Strategy for Plant Conservation (original) Target 1.

The ambition is for the CoL very soon to realize a comprehensive catalogue of *all known organisms*. Workflows now under development in the 4D4Life and i4Life projects will enable both the topping up of existing sectors and the closing of gaps. The global species databases (see Box 1 for definition) that provide the principal sources for the knowledge in the Catalogue are maintained and updated by their custodians who provide the CoL with a standard dataset (Box 2).

Box 1 Definition of a Global Species Database (GSD)

GSDs aspire to the following properties

- Cover one taxon worldwide
- Contain a taxonomic checklist of all species within that taxon
- Deal with species as taxa, and contain synonymy and taxonomic opinion
- Have an explicit mechanism for seeking at least one responsible/consensus taxonomy, and applying it consistently
- Cross-index significant alternative taxonomies in their synonymy

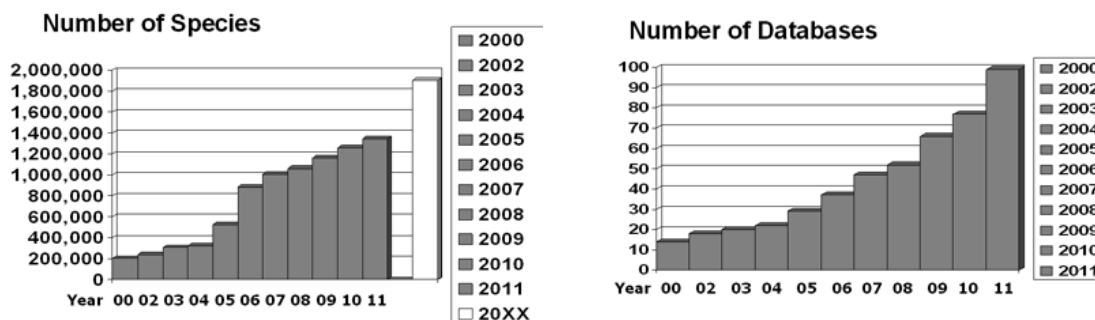


Information infrastructure for the Catalogue of Life as being implemented in the EC funded 4D4Life and i4Life projects

Box 2 The Catalogue of Life Standard Dataset

- (1) Accepted scientific name (and reference)
- (2) Synonyms (and references)
- (3) Common names (and references)
- (4) Classification above genus, and highest taxon in database
- (5) Distribution
- (6) Life zone
- (7) Latest taxonomic scrutiny (name of person and date)
- (8) Source database
- (9) Additional data (optional)
- (10) GUIDs

The coverage of the CoL expands yearly (see Table 1). The eleventh edition (2011) of the Annual Checklist contains contributions from 99 databases with information on 1,347,224 species, 92,306 infraspecific taxa, 895,441 synonyms and 366,401 common names of Plants, Animals, Fungi, Chromista, Protozoa, Bacteria, Archaea and Viruses. Note that this is about 2/3 of the world's currently known species. This means that for many groups the CoL continues to be deficient, and users will notice that species are still missing from the Catalogue.



Development of the Catalogue of Life in the past 10 years in terms of numbers of species covered and contributing databases.

The total number of known species is estimated to be 1.9 million (Chapman, 2009); the CoL presently covers about 70%.

Table 1. Coverage of the 2011 Catalogue of Life Annual Checklist

Viruses • Viruses and Subviral agents from [ICTV_MSL](#)
Bacteria and **Archaea** from [BIOS](#) • Blue-green algae (Cyanobacteria) from [AlgaeBase](#)
Chromista • Chromistan fungi from [Species Fungorum](#) • Chromistan algae from [AlgaeBase](#)
Protozoa • Major groups from [ITIS](#) and [AlgaeBase](#) • Protozoan fungi from [Species Fungorum](#) and [Trichomycetes](#) database • Slime moulds from [Nomen.eumycetozoa.com](#)
Fungi • Various taxa in whole or in part from CABI Bioservices databases ([Species Fungorum](#), [Phyllachorales](#), [Rhytismatales](#), [Saccharomycetes NEW!](#) and [Zygomycetes](#) databases) and from three other databases covering [Xylariaceae](#), [Glomeromycota](#), [Trichomycetes](#), [Dothideomycetes NEW!](#)
 Lichens from [LIAS NEW!](#)
Plantae (Plants) • Mosses from [MOST](#) • Liverworts and hornworts from [ELPT](#) • Conifers from [Conifer Database](#) • Cycads and 6 flowering plant families from [IOPI-GPC](#) and 99 families from [WCSP](#) • Plus individual groups: Brazil Nut family ([LecyPages](#)), Cranesbills ([RJB Geranium](#)), Crucifers ([Brassicaceae](#)), Custard Apple family ([AnnonBase](#)), Legume family ([ILDIS](#)), Nightshade genus ([Solanaceae Source](#)), Sundew family ([Droseraceae Database](#)), Sunflower family ([GCC](#)) and Waits Numi family ([LHD](#))
Animalia (Animals) • Sponges, freeliving flatworms, ribbon worms, marine oligochaetes, bristle worms, remipedes, brachyopods, cumaceans, pillbugs, slaters, woodlice, bryozoans, lamp-shells, horseshoe worms, sea stars, brittle and basket stars from [WoRMS](#) (13 [NEW!](#) checklists) • Other marine invertebrates (10 phyla & 21 classes) and chordates (4 classes) from [URMO](#) • Sea anemones from the [Hexacorals](#) • Rotifers from [Rotifera](#) database • Entoprocts, cyclophorans, velvet worms, water bears from [ITIS](#) • Shrimps, krill, cumaceans, freshwater crabs from [ITIS](#), [ETI WBD \(Euphausiacea\)](#), [FWCrabs](#) • Spiders, scorpions, ticks & mites from [SpidCat](#), [SalticidDB](#), [ITIS](#), [TicksBase](#), Mites GSDs, [SpmWeb NEW!](#) & [CunaxidBase NEW!](#) • Diplopods, centipedes, pauropods and symphylans from [SysMyr](#) and [ChiloBase](#) • Dragonflies and damselflies from [Odonata](#) database • Stoneflies from [PlecopteraSF](#) • Cockroaches from [BlattodeaSF](#) • Praying mantids from [MantodeaSF](#) • Stick and leaf insects from [PhasmidaSF](#) • Grasshoppers, locusts, katydids and crickets from [OrthopteraSF](#) • Webspinners from [EmbiopteraSF NEW!](#) • Some groups of true bugs from [ScaleNet](#), [FLOW](#), [COOL](#), [Psyllist](#), [AphidSF](#), [MBB](#), [3i Cicadellinae NEW!](#), [3i Typhlocybinae NEW!](#) & [MOWD NEW!](#) • Lacewings, antlions, owlflies, fishflies, dobsonflies & snakeflies from [LDL Neuropterida](#) • Some beetle groups from the [Scarabs](#), [TITAN](#), [WTaxa](#) & [ITIS](#) • Fleas from [Parhost](#) • Flies, mosquitoes, bots, midges and gnats from [Systema Dipterorum](#), [CCW](#) & [CIPA](#) • Butterflies and moths from [LepIndex](#), [GloBIS \(GART\)](#), [Tineidae NHM](#), [World Gracillariidae](#) • Bees & wasps from [ITIS Bees](#), [Taxapad Ichneumonoidea](#), [UCD](#) and [ZOBODAT \(Vespoidea\)](#) • Snails and slugs from [AFD \(Pulmonata\)](#) • brachyopods, bristle worms, brittle and basket stars, bryozoans, horseshoe worms, hot-springs shrimps, lamp-shells, mystacocarids, pillbugs, slaters & woodlice, remipedes, ribbon worms, sea stars, tantulocaridans from [WoRMS](#) • Fishes from [FishBase](#) • Reptiles from [TIGR Reptiles](#) • Amphibians, birds and mammals from [ITIS](#)
PLUS additional species of many groups from [ITIS](#) & [NZIB](#)

The 2011 Annual Checklist is compiled with sectors provided by 99 taxonomic databases from around the world. Many of these contain taxonomic data and opinions from extensive networks of specialists, so that the complete work contains contributions from more than 3,000 specialists from throughout the taxonomic profession. Species 2000 peer reviews the expert databases, selects appropriate sectors and integrates the sectors into a single coherent catalogue with a single hierarchical classification – a difficult and skilled editorial/taxonomic task. It is planned to introduce alternative taxonomic treatments and alternative classifications, but an important feature is that for those users who wish to use it, a single preferred catalogue, based on peer reviews, will continue to be provided.

The Catalogue of Life is published as two products:

- **The Catalogue of Life** (quarterly editions)

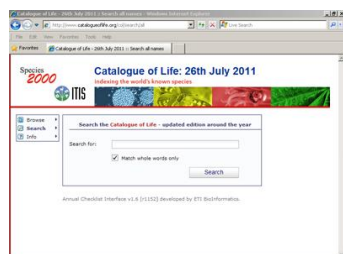
These are progressively enhanced editions in what will become a dynamically developing system, made available online and as web-services.

The present frequency is quarterly with releases in July, October, January, and on 1st April as an Annual Checklist. At all times the latest release is available for online access at www.catalogueoflife.org/col. Archives of previous releases can be downloaded from www.catalogueoflife.org/services.

- **Annual Checklist** of the Catalogue of Life

The Annual Checklist is published each April online, as web-services, and on DVD. At all times the latest Annual Checklist is online at www.catalogueoflife.org/annual-checklist.

It provides a fixed edition that is published, archived and deposited in public libraries, that can be cited, and that can be used as a common catalogue for comparative purposes by many organisations. An identical copy is distributed on DVD. This is distributed free of charge, and identical copies are viewable and downloadable on the website. The archive edition for 2011 is at www.catalogueoflife.org/annual-checklist/2011. Archived editions can be found by changing the year in the URL (e.g. /2010, /2009 etc.), and downloadable versions and web-services can be found at www.catalogueoflife.org/services.



Web and DVD-Rom publications of the CoL

In addition to these standard editions openly available without charge to all users, Species 2000 offers dedicated custom CoL data services to certain users on a contribution or fee basis.

Organisation and legal structure of Species 2000

Species 2000 is registered in the United Kingdom as a not-for-profit 'company limited by guarantee'. The following layers of governance are defined:

Members of Species 2000

The members are the legal owners of Species 2000. Members can be individuals or institutions supporting the aims of Species 2000 and in practice are the large and small organisations providing taxonomic databases and software to Species 2000. The members exercise control of the company through the Annual General Meeting (AGM). This includes voting for the members of the Board, approval of annual accounts and any policy matters raised by Board.

Board of Directors

The Board of Directors (BoD, max 8 members) manage Species 2000 on behalf of the members between AGMs. They represent Species 2000 legally, handle accounts and tax returns, deal with international policy and business issues, appoint new Directors (to be confirmed in the AGM), appoint and authorise 'The CoL Global Team' including appointing the CoL Global Team Chair, and appointing and authorising the Executive Secretary. Directors contribute expertise to the organisation and work closely with the Executive Secretary. The BoD elects a Chair and also appoints a Company Secretary. It meets usually two times per year, in different continents.

The CoL Global Team

The CoL Global Team (max 20 members) consists of active participants who contribute to the taxonomic and IT policy, and to the design of the work programme. Team members bring in expertise in the field of taxonomy, biodiversity informatics and/or as GSD database or regional checklist custodians. The Team develops criteria for selecting global and regional taxonomic content, ensures the project's liaison in the taxonomic and informatics communities, recommends a work programme to the Directors, monitors progress of work and deals with quality maintenance issues. It meets every 6 – 9 months, rotating between continents.

Working Groups (max. 15 persons) may be set up by the CoL Global Team for special areas. Three working groups exist: Information Systems, Taxonomy, and the Taxonomic Hierarchy Groups. The working groups are led by a member of the CoL Team but may include co-opted non-members.

Executive Secretary

The Executive Secretary (ES) is responsible for day to day running of Species 2000 as an organisation and its projects. The ES appoints and supervises the Secretariat staff, represents Species 2000 at international meetings and in contract negotiations. The ES reports to the Board of Directors and attends their meetings *ex officio*. The ES interacts with the CoL Global Team on scientific policy, prepares project/grant proposals agreed by the BoD and the CoL Global Team, and seeks core funding for the organisation as a whole.

The ES liaises with CoL partners, proposes and implements IPR agreements, is responsible for the website content, and oversees product manufacturing including quality control. The ES, assisted by the Executive Editor and the Systems Manager, liaises at various levels with members and taxonomic databases, is responsible for data quality /standards and oversees the peer review programme for contributing databases.

Species 2000 Secretariat

The Species 2000 Secretariat facilitates the Species 2000 programme and projects and assists the Executive Secretary to run the project. The Secretariat's minimum formation is: an Executive Editor, a Systems Manager, and an administrative assistant.

Current funding situation

Species 2000 has a good track record of acquiring EC and otherwise funded projects underpinning core activity programmes for the Catalogue of Life.

The programme was initially proposed to IUBS, CODATA and UNEP/CBD by the officers of TDWG in 1994.

Start-up funding came in 1995/6 from UNEP/GEF (Inaugural Workshop at ICLARM Philippines, PDF Block A – 25,000 \$), IUBS (Initiated the Secretariat 1995, 15,000\$), BIOSIS UK (Sponsored the legal incorporation of Species 2000) and CODATA (the Sp2000/CoL Global Team as a CODATA Task Group, 2 – 5,000 \$ per annum from 1994 – 2004). The CODATA sponsorship provided lasting support for the Sp2000/CoL Global Team that has met and provided scientific policy support for Species 2000 continuously to the present day. Similarly the link with the CBD and its Clearing House, Global Taxonomy Initiative and Global Strategy for Plant Conservation has been maintained from this time.

Between 1997 and 2002 a number of pilot projects and implementations were started by members of the Global Team – including the Philippines project to start an Annual Checklist on CD led by Rainer Froese, funded through EC FP4 and FishBase, the Asia-Oceania project to link microbial databases at the Riken Institute in Japan, led by Junko Shimura and funded by the Japanese Ministry of the Environment, the Expert Centre for Taxonomic Identification projects led by Peter Schalk and funded by UNESCO and the Dutch Government, and the ILDIS, LITCHI and SPICE projects led by Frank Bisby at University of Southampton with partners at RBG Kew, University of Cardiff and Missouri Botanical Garden, funded by BBSRC and the Leverhulme Trust. A fusion of the models developed at Southampton and the practical aggregation and delivery of the Philippines project led to the current Species 2000 programme, to which ITIS in N. America joined forces in 2001.

During the start-up period (1995/6), and the pilot-project period (1997 – 2002) Species 2000 benefitted from substantial in-kind support from the institutions of the key actors. It is not possible to list all of these, but prominent among them were i) FishBase Secretariat in the Philippines, ii) BIOSIS UK in York, iii)

American Type Culture Collection in Virginia, iv) Universities of Southampton, Cardiff and Reading in the UK, v) ETI in Amsterdam, vi) the RIKEN and NIES institutes in Japan, and vii) the Royal Botanic Gardens Sydney.

Full scale development and production of the Catalogue of Life started in 2003 with the EC funding to University of Reading for the EuroCat project (2.45 M Euro, Scientific Infrastructures, FP5, DG Research, 2003 - 2006), and GBIF ECAT funding to Species 2000 and ITIS (50,000 USD, 480,000 USD, 35,000 USD 2003 – 2007). It continues with the two current grants to the University of Reading, 4D4Life (3.3 M Euro, 2009 - 2012) and i4Life (2.4 M Euro, 2010 - 2013), both part of the EC e-Infrastructures Programme of DG INFSO. In addition to these Species 2000 led projects, the Secretariat has been funded for small to medium roles within other EC projects (EC ENBI, EC EDIT, EC BHL-E, EC OpenUp!, EC EUBrazil OpenBio, and EC i-Marine) including being work package leader in ENBI, and providing a central Use-case in EUBrazil OpenBio. Other financial contributions have come from EOL, ITIS, NIES, EC KeysToNature and SBNO).

Once full-scale development was under way, it became clear that the single largest resource contributing to the Catalogue of Life was not the grant support, but the accumulated resource of the array of global species databases and the knowledge of experts that they contribute. It is difficult to estimate the value or historic cost of construction, but in grant applications in 2008 a notional figure of between 86 Million GBP (99 M euro) and 144 Million GBP (166 M euro) was cited for just the 52 expert databases then involved.

Currently Species 2000 coordinates two major projects funded by the EC. The 4D4Life project focuses on developing a novel and sustainable e-infrastructure for the Catalogue of Life and internal data services. The i4Life project targets development of external data services to support large users of the Catalogue of Life (e.g. GBIF, EoL, CBOL, IUCN, LifeWatch). Included in these projects is financial support for the Species 2000 Secretariat and core staff.

Since 2007 Species 2000 has experimented with sponsor contracts of non-scientific users of the CoL. In 2010 the AGM approved non-academic, licensed use of the CoL. Income generated this way is used to finance the CoL production, to ensure core Secretariat functions, and for additional financial support of the providing databases through the so-called Species 2000 Rotating Fund. The Rotating Fund is controlled by the members through the AGM. When the Secretariat is adequately funded 80% of the Fund is distributed as Operating Costs to partner organisations.

Since the year 2000 Species 2000 and the Catalogue of Life programme has proven to be resilient and sustainable during periods in between project funding; it never failed to publish a new yearly CoL or to extend its coverage.

Sustainable costs encompass a minimum configuration of the Secretariat and the CoL production process, together amounting to 450,000 Euro per annum, largely covered by project grants.

The Current Host

The host for Species 2000 over the past 15 years has been *University of Reading* (UR) in the UK. UR has until recently provided Species 2000 with salary costs of the ES (80% senior appointment), and administrative assistant (50% of time). UR provides the Species 2000 Secretariat facilities: one office, shared open office space (60 m² over two rooms), general infrastructure (phone, light, heating, cleaning), ICT facilities (broad band connectivity, space for servers), and meeting rooms (for Team, project or Board meetings) when needed and free of charge. The executive editor, systems manager and 4.5 other staff are currently paid from project funding.

Reading is a 40 minutes coach or taxi drive from Heathrow Airport, easily connects to London by train and bus, and has ample hotel and restaurant facilities downtown.

UR receives full acknowledgement in CoL publications, and enhanced public visibility of supporting and hosting a major scientific project that is known world-wide.

According to the general governance principle the hosting of the Species 2000 Secretariat comes up for reconsideration every 5 years. The current hosting agreement with UR runs till end October 2012. An open bidding procedure for interested parties to host Species 2000 from the start of November 2012 was decided on by the Board of Directors, and confirmed by the AGM in September 2010.

The 15-year hosting at Reading has been a successful arrangement that has brought success and credit to both Species 2000 and UR with its Centre for Plant Diversity & Systematics. However, radical changes to the funding to and within British universities mean that it is presently uncertain whether UR can support a hosting agreement for the next 5 years. It is for this reason that the Directors have opened the call to all interested parties as well as the UR.

Procedure for Expressions of Interest and Full Proposals

A successful proposal to host the Species 2000 Secretariat will address the following main elements: core staffing, office space, communication facilities, internationally accessible location, taxonomic and informatics research environment, and a warranty of the organisation's independence. The expression of interest/full proposal procedure facilitates maximizing the match between the proposals made and the needs of Species 2000.

The proposals will be evaluated against the list of criteria described in the following section and a final decision taken by the Species 2000 Board of Directors. Two external assessors have been appointed to assist the Directors in the selection process.

There will be *three* stages to the process.

- a. The first stage will be an open call to all and any interested parties, both within Europe and outside Europe, to provide an Expression of Interest. The Expression of Interest is intended to be a brief preliminary document, addressing the main headings. It should be sufficient to give a clear picture of the location, style and commitment offered by that Institute, but not necessarily giving full detail or precise commitment of financial, work space and organisational detail at this stage.

The Directors are willing to consider a joint Expression of Interest from two institutions that might divide the Secretariat over two sites.

This Expression of Interest document will be used as the basis for drawing up a shortlist.

Despite their global nature, the Species 2000 organisation and the Catalogue of Life product originated from Europe, and have been consistently funded and supported by the EC as European e-Infrastructures. It is important to retain this linkage with the prime funding body, and consequently there is a presumption that a European institution might be selected. Expressions of Interest from outside Europe will be welcomed and considered, but may be held in reserve, in case no suitable arrangements are offered in Europe.

- b. The second stage will be a closed call restricted to those institutes that have been shortlisted, inviting them to submit a Full Proposal that enumerates the financial, workspace and organisational detail as well as the precise commitments offered by the proposing institute. (The Directors nonetheless reserve the right to examine a Full Proposal from another candidate institution should a well-qualified late entrant appear.)

This Full Proposal document will be used, along with an opportunity to make a presentation to the Directors, to choose the selected potential Host Institute.

- c. The third stage (April 2012) will be for the Directors to enter into detailed negotiation with the selected potential host institution, with a view to signing a 5 - year hosting agreement. (The Directors reserve the right to re-engage with other institutions, including any from outside Europe, should the final arrangements not prove suitable)

The **first stage** call for Expressions of Interest will be open for a period of *eight weeks*, starting **26 September 2011** and closing **18 November 2011**. The short list will be drawn up by 28 November 2011.

The **second stage call** for Full Proposals by shortlisted institutions will be open for *approximately four months* from **28 November 2011** and closing **20 March 2012**; with an evaluation of Full Proposals to be completed during April

2012. The new hosting agreement is planned to become operative and any move to a new location undertaken on or from 1 November 2012.

The first stage call for Expressions of Interest will be announced on the Species 2000 website www.sp2000.org as well as by wide circulation of this present document. Expressions of Interest should be addressed to the Executive Secretary of Species 2000 and may be submitted electronically or in hard copy. Electronic submissions should be followed with a hard copy document sent by express mail to arrive within 7 days. Submitters will receive notification of receipt by the Executive Secretary of Species 2000, and will be advised if the document submitted does not address, or requires clarification, on certain aspects.

Institutions shortlisted for the second stage call will be notified at the end of November 2011 and invited to prepare Full Proposals for the closing date of 20 March 2012. They will also be invited to make a presentation to the Directors on a date in early April 2012.

After the selection of the potential host institute or institutes, the Species 2000 Board of Directors will negotiate about the start-up time and possible transfer arrangements of the Secretariat, equipment and staff.

NOTE: The selection and appointment of the new Executive Secretary is a separate action likely to go ahead in the months following the selection and establishment of the new Secretariat. However, a framework for the funding and positioning of the Executive Secretary position may be a part of the Full Proposal that a selected institute makes.

Requirements for a Proposal

This call seeks proposals by potential hosts that are in principle discipline-related (i.e. taxonomy, biodiversity informatics); are established institutions with a strong international outlook and connections in this field; identify with the mission of Species 2000, the CoL products and services, and are prepared to invest in it. It seeks a host that will respect the independence of the organisation, its governance and its projects, but is prepared to contribute to that governance or policymaking by nominating a suitable senior person to a seat in the Board of Directors, or a suitable mid-career person to the CoL Global Team. Under the terms of the hosting agreement, the Secretariat will comply with the established norms of domestic and employment conditions within the host institute.

A successful proposal should address the following components:

Housing and infrastructure

- Quality office space for the Species 2000 Secretariat. Minimally one office (for the ES) and one larger open plan shared office (for the data and systems managers etc.) with a surface of 60 square meters or more.

- With suitable institutional infrastructure: heating, lighting, extensive power supplies, extensive internet connections, desk furniture, cleaning, and institutional phone and mail facilities.
- Access to, and free occasional use of, one or more meeting rooms (up to 20 people) near the office space.
- Warranted (24/7) broadband internet access, connectivity for the computers of the Secretariats' staff and server machines, flexible arrangements with IT department concerning domain names, ports, server locations, support etc..
- Facilities for institutional salary scales and payroll administration of the Secretariat's staff. (Note: Species 2000 financial administration is handled by the ES and Company Secretary)
- Use of Species 2000 owned property permitted on the premises (eg laptops, servers, filing cabinets, if suitably tested etc.)
- Facilities for the host institution to handle major project grant proposals and subsequent financial administration through the host institution (e.g. EC grants).
- Access to institutional facilities: library, museum/herbarium, tearoom and canteen/lunch facilities.

Financial framework i) Normal Operations

During normal operations the Secretariat is largely self-funding, albeit with grants and income that fluctuate, and including some junior staff on short-term contracts. Current EC grants bring in salaries, computers, servers and travel with (in different compartments) 7%, 20% and 60% overheads to the institution. Current full funding for i4Life (5 employees + 10% of ES) extends 1 year from 1 Nov 2012, that is into the first 5 year period. Current part funding in OpenBio extends 11 months into the 5 year period. The 'normal operations' scenario is therefore dependent on further grant funding being obtained to cover the remainder of the 5 year period, but the programme is well placed to make such applications at the end of FP7 and the start of FP8.

The Directors are, however, seeking Expressions of Interest from institutes that can offer ongoing financial support to ensure that one, possibly two, or even three, of the more senior Secretariat staff can be employed on a 5-year basis.

i) The *Executive Secretary* is a senior appointment requiring taxonomic, informatics, international and funding experience, and if less than 100% (say 75% or 80%), could include some element of further responsibility to the institute. It is sometimes possible to charge 10% to a project. At UR this person had a permanent position (Chair of Botany). A new appointment is needed, in consultation with the host institution, as the present incumbent retires from the programme on 1 Nov 2012.

ii) The *Executive Editor* is a mid-career, taxonomist appointment presently working 100% on the programme, leading the creation and integration of the Catalogue of Life. It is sometimes possible to charge all or part to a grant. The Directors would like to secure a permanent position for the

present incumbent. It would also be possible for this position to be, say, 80% for Sp2000, and 20% contribution to the host institution.

iii) The *Systems Manager* is the key operational IT appointment – a junior to mid-career position working presently 100% on the programme. It is sometimes possible to charge all or part to a grant. The Directors would like to continue the present incumbent. It would be possible for this position to be, say, 80% for Sp2000 and 20% for the host institution.

Such an arrangement could come in different shapes and sizes. The Directors envisaged that proposals would either match the former UR position (eg 80% of senior ES, + 50% of PA), or better it, such as for instance, 100% of senior ES + 100% of Exec Editor + 50 % PA, or a combination of 50% senior ES+ 50% Exec. Editor + 50% Syst. Manager+ 50% Admin. Asst.

Financial framework ii) Abnormal Operations

The Directors are seeking a proposal that will provide some coverage for a brief period when self-funding is reduced or not available – a ‘soft cushion’ in reserve, for anything from 1 month to a maximum of, say, 18 months:

- i) for a period when adequate grant funding is not available, the institution would allow Species 2000 to fund operations from its own resources *without* paying overheads.
- ii) for this same period, the institution would make an extra provision to maintain the core staff at the operational minimum of 3 employees described above.
- iii) the occurrence of such a period of abnormal operations would be accompanied by intense renewed efforts to generate funding, and resume income with overheads to the host institution as soon as possible.
- iv) This extra commitment would be limited, say, to 18 months duration, even if this is before the end of the 5-year agreement.

Location – access

- near an international airport (less than 100 km)
- easy access by public transport (train, bus)
- easy access for cars (near major motorway, some visitor parking).

Duration

- the hosting agreement covers, and is financially valid for, an initial period of 5 years and can be extended by mutual agreement.

Termination

- the hosting agreement should included a termination clause, in case the arrangement proves unsatisfactory to either partner. A 12 month written notice by either partner is suggested.

Transition arrangements

- if the Secretariat moves from Reading, then it will be necessary to determine which existing staff are willing to re-locate.

- the retiring Executive Secretary is likely to be available for 6 – 9 months part-time work to establish the Secretariat at a new location in Europe, during an interim period before the new Executive Secretary is appointed.

Relevant Documents

Denison Till (Solicitors), 1997. *Memorandum and Articles of Association of Species 2000*. 16 p, Leeds, UK, at http://documents.sp2000.org/Legal/Species2000_Memorandum&Articles.pdf

An active catalogue of the 99 contributing expert databases is at <http://www.catalogueoflife.org/info/databases>

A list of Members of Species 2000 is at <http://documents.sp2000.org/Legal/ListOfSpecies2000Members.pdf>

A list of the 36 partners and the work programme of the Species 2000 4D4Life project is in the Description of Work (DOW) at http://4d4life.org/documents/4D4Life_DoW_Final_commitment.pdf

A list of the 12 partners and the work programme of the Species 2000 i4Life project is in the Description of Work (DOW) at www.i4life.eu/uploaded/i4Life_DoW.pdf

A list of the 10 partners in the Barcelona Super-computer Centre EUBrazil OpenBio project is on the Consortium page at <http://www.eubrazilopenbio.eu/Content/Factfile.aspx?category=0|1600000|1620000>

The Species 2000 Annual Report and Accounts for 2010 are at <http://documents.sp2000.org/Legal/Sp2000AnnualReport2010.pdf>

Contact with Secretariat and Directors

The processes of making initial Expressions of Interest by any organisation, and subsequent Full Hosting Proposals by the shortlisted organisations is intended to be an open and informed process.

During the Call for Expressions of Interest, potentially interested parties are welcome to contact any of the Directors or the present Executive Secretary for further information, all of whom have agreed to be available, and to endeavour to provide a level playing field with regard to all potential candidates. Potentially interested parties are also welcome to visit the present Secretariat at the University of Reading UK, or to invite the Executive Secretary to make a brief visit to them (within the limitations of time and funding available).

The Directors and Executive Secretary will endeavour to maintain confidentiality as to the identity of these potentially interested parties.

It should be noted that the terms of the call for Expressions of Interest are as written in this document, and that the Expression of Interest will be judged on the document submitted alone – neither officers of Species 2000 nor officers of interested parties are entitled to make any alteration to the terms and process of the Call.

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