RED LIST AUTHORITIES
TERMS OF REFERENCE

The IUCN Species Survival Commission (SSC) is responsible for maintaining and developing the IUCN Red List of Threatened Species – widely regarded as the world's most objective and comprehensive listing of species at risk of extinction. In order to maintain the credibility of the IUCN Red List, the SSC has formalized the process by which species can be included on the list. In particular, this process includes the designation of Red List Authorities (RLAs), the responsibilities of which are outlined in this document.

A. Background - The IUCN Red List Assessment Process

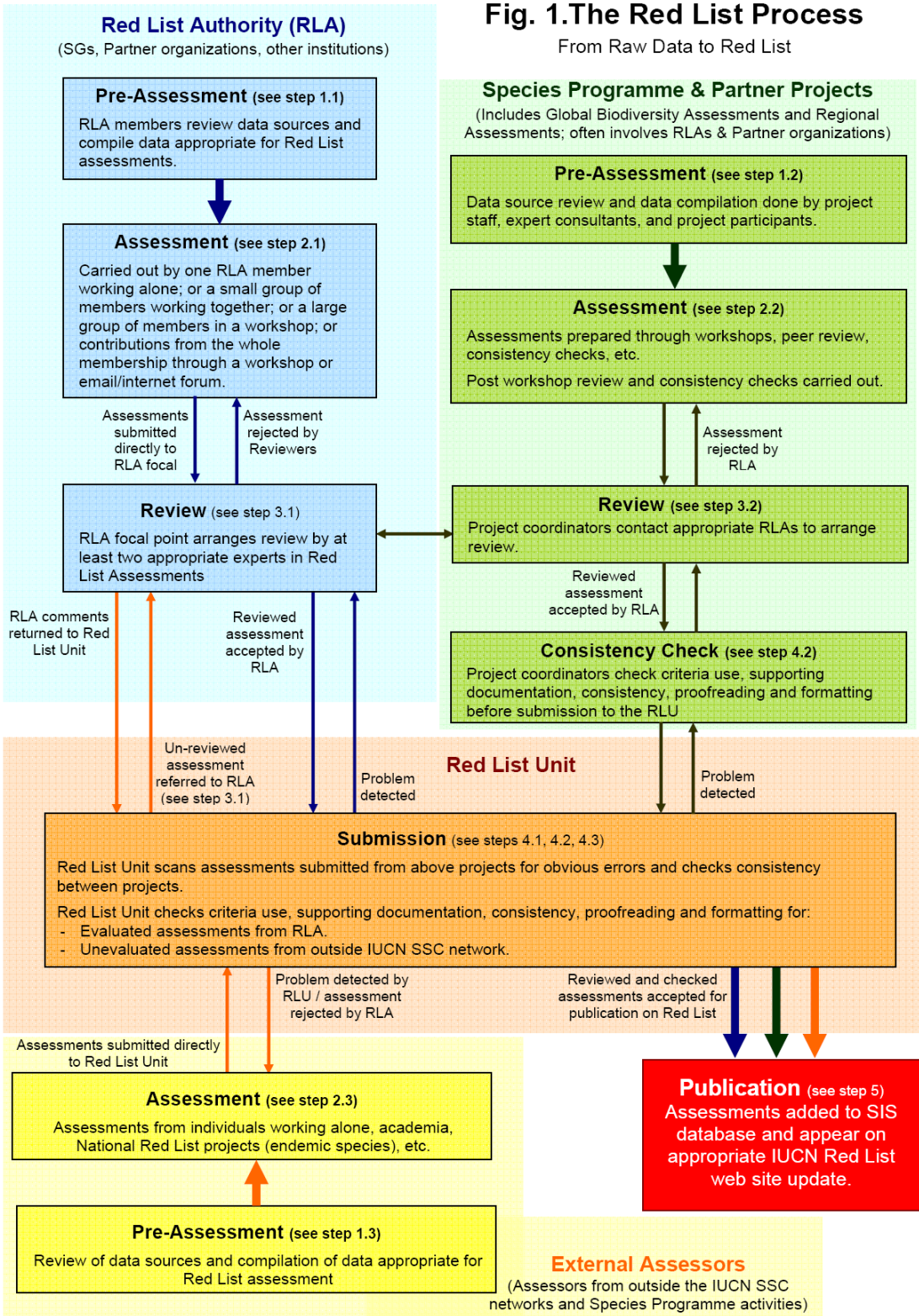There are three general routes by which assessments reach the IUCN Red List Unit:

1. **Red List Authorities (RLA)**. The majority of RLAs are within IUCN SSC Specialist Groups, but they can also be independent networks, or Red List Partner institutions (e.g., BirdLife International, NatureServe) and other organizations (e.g., Project Seahorse).

2. **IUCN Species Programme and Red List Partner projects**. These include the global biodiversity assessments (e.g., Global Amphibian Assessment, Global Mammal Assessment, Global Marine Species Assessment), and regional biodiversity assessment projects (e.g., Mediterranean biodiversity assessments, African freshwater biodiversity assessments) and assessments for the Sampled Red List Index (SRLI) run by the Zoological Society of London and the Royal Botanic Gardens Kew.

3. **External projects**. Red List assessments resulting from projects carried out by individuals, academia, and organizations outside of the IUCN network (this includes national Red List initiatives).

All three routes use the same basic process for preparing and submitting assessments for publication: raw data are gathered and provided by "contributors"; "assessors" use the data and the IUCN Red List Categories and Criteria to assess the species, and to document the assessment (as outlined in Annex 1); the assessment is peer reviewed by at least two "reviewers"; accepted reviewed assessments are published on the IUCN Red List. But, the specific activities involved in the process may differ depending on the route.

The steps involved in the IUCN Red List Process are presented schematically in Figure 1, and these steps are described in words below.

Fig. 1. The Red List Process
From Raw Data to Red List

Red List Authority (RLA)
(SGs, Partner organizations, other institutions)

Pre-Assessment (see step 1.1)
RLA members review data sources and compile data appropriate for Red List assessments.

Assessment (see step 2.1)
Carried out by one RLA member working alone; or a small group of members working together; or a large group of members in a workshop; or contributions from the whole membership through a workshop or email/internet forum.

Assessments submitted directly to RLA focal

Assessment rejected by Reviewers

Review (see step 3.1)
RLA focal point arranges review by at least two appropriate experts in Red List Assessments

RLA comments returned to Red List Unit

Reviewed assessment accepted by RLA

Species Programme & Partner Projects
(Includes Global Biodiversity Assessments and Regional Assessments; often involves RLAs & Partner organizations)

Pre-Assessment (see step 1.2)
Data source review and data compilation done by project staff, expert consultants, and project participants.

Assessment (see step 2.2)
Assessments prepared through workshops, peer review, consistency checks, etc.

Post workshop review and consistency checks carried out.

Assessment rejected by RLA

Review (see step 3.2)
Project coordinators contact appropriate RLAs to arrange review.

Reviewed assessment accepted by RLA

Consistency Check (see step 4.2)
Project coordinators check criteria use, supporting documentation, consistency, proofreading and formatting before submission to the RLU

Red List Unit

Un-reviewed assessment referred to RLA (see step 3.1)

Problem detected

Problem detected

Submission (see steps 4.1, 4.2, 4.3)
Red List Unit scans assessments submitted from above projects for obvious errors and checks consistency between projects.

Red List Unit checks criteria use, supporting documentation, consistency, proofreading and formatting for:
- Evaluated assessments from RLA.
- Unevaluated assessments from outside IUCN SSC network.

Problem detected by RLU / assessment rejected by RLA

Reviewed and checked assessments accepted for publication on Red List

Assessments submitted directly to Red List Unit

Assessment (see step 2.3)
Assessments from individuals working alone, academia, National Red List projects (endemic species), etc.

Pre-Assessment (see step 1.3)
Review of data sources and compilation of data appropriate for Red List assessment

Publication (see step 5)
Assessments added to SIS database and appear on appropriate IUCN Red List web site update.

External Assessors
(Assessors from outside the IUCN SSC networks and Species Programme activities)

Step 1: Pre-assessment

In all cases, the starting point is raw data, i.e., data and information held in published papers, articles, books and reports, unpublished documents and reports, unpublished data, databases (including the IUCN Red List itself), GIS data, satellite imagery, etc.. Prior to the assessment phase, raw data are gathered, ideally in a format compatible with the standards of the Red List Categories and Criteria and supporting documentation requirements. Individuals who provide data through the pre-assessment phase are termed "contributors".

1.1   RLA

The RLA reviews available data sources (e.g., from field based studies, workshops, other institutions) and compiles current data. This may be done by one member of the RLA working alone; or by a small group of members working together; or through contributions from the multiple RLA members and additional experts via a large workshop, e-mail correspondence, or an internet-based discussion forum (e.g., the discussion fora run by BirdLife International). The method used is likely to depend on the number of species to be assessed and the range of data sources to be checked, and the RLA is responsible for deciding how it will approach data compilation.

1.2   Species Programme and Red List Partner projects

There are two approaches to data-compilation used by Species Programme and Red List Partner projects:

(a) Projects involving data compilation and assessment only:

    (i)   RLAs provide most of the data, with other data coming from published sources and other institutions. Project staff or expert consultants review data sources (reviewing literature and contacting RLAs and institutions) and data are aggregated in species accounts in a database, and/or

    (ii)   Other experts contribute data during an assessment workshop (see step 2).

(b) Projects involving regional capacity-building:

    (i)   Participants in the project (experts from specific regions or with particular taxonomic expertise) are given Red List training (one workshop).

    (ii)   Experts review data sources and compile data in species accounts in a database (sometimes data collection is initiated by IUCN staff, then project participants add to this).

    (iii) Other experts contribute data during an assessment review workshop (see step 2).

1.3   External projects

As for the RLA (1.1 above), the individual or organization involved is responsible for deciding how they will approach data compilation.

Step 2: Assessment

All assessments are based on data currently available for taxa across their entire global ranges, and must follow the IUCN Red List Categories and Criteria and the guidelines for applying these (both documents are available on the IUCN Red List and IUCN SSC web sites). Each assessment is documented according to the requirements specified in Annex 1.

2.1 RLA

Assessments may be carried out by one member of the RLA working alone; or by a small group of members working together; or by consensus agreement of a large group of members in a workshop, via e-mail, or through an internet-based discussion forum (see 1.1 above), and may include review of assessments by external experts as well as RLA members. RLA members may also be involved in one or more of the Species Programme or Red List Partner projects (see 2.2 below).

2.2 Species Programme and Red List Partner Projects

There are two approaches to assessments used by Species Programme and Red List Partner projects:

(a) Projects involving data compilation and assessment only:

    (i) An assessment workshop is held where experts review compiled data and add to or correct this appropriately. Project staff members adjust species accounts accordingly and assessments are carried out in working groups.

    (ii) In some cases, no workshop is held, but data gathered by project staff are used to obtain 'draft assessments'. Those are then sent out by e-mail to experts for review.

    (iii) Project staff tidy the species accounts (including range maps) and post PDF species accounts on secure ftp site accessible by experts.

    (iv) Experts review assessments, and staff members modify information and assessments where necessary.

    (v) Project staff members carry out a consistency check on assessments to ensure IUCN Red List Categories and Criteria are being applied consistently.

(b) Projects involving regional capacity-building:

    (i) Experts involved in data compilation do a preliminary assessment based on the information they have gathered.

    (ii) An assessment review workshop is held where experts review compiled data and preliminary assessments and add to or correct these appropriately. Project staff members adjust species accounts accordingly.

(iii) Project staff tidy the species accounts (including range maps) and post PDF species accounts on secure ftp site accessible by experts.

(iv) Experts review assessments, and staff members modify information and assessments where necessary.

(v) Project staff members carry out a consistency check on assessments to ensure IUCN Red List Categories and Criteria are being applied consistently. If any assessment needs to be altered as a result of the consistency check, the assessors are informed of these and the rationale for these changes.

2.3   External projects

As for the RLA (see 2.1 above), the individual or organization involved is responsible for deciding how they will approach data compilation. Individuals and organizations may also be involved in one or more of the Species Programme or Red List Partner projects (see 2.2 above).

Step 3: Review

All assessments must go through a peer-review process before they can be accepted on the IUCN Red List. This involves at least two experts in the IUCN assessment process reviewing the assessment and agreeing that the data used have been interpreted correctly and consistently, and that uncertainty has been handled appropriately. In addition, for assessments that have not been carried out using the 'criteria calculator' option in SIS (which automatically assigns the criteria triggered from the underlying parameter estimates), the review process checks whether the IUCN Red List Categories and Criteria have been correctly applied and that the parameter estimates are consistent with the Category and Criteria entered.

3.1   RLA

Each RLA has a Focal Point who is responsible for ensuring that each assessment is reviewed by at least two people. The reviewers must operate independently, and none of them can have carried out the assessment. Review may be done by:

(a) The RLA focal point contacting appropriate experts on the IUCN assessment process from within the RLA membership, or seeking appropriate experts from outside the RLA;

(b) A review workshop involving a small group of RLA members or others reviewing assessments to be submitted to the IUCN Red List.

Assessment and review may be carried out at the same workshop, where an individual or a small group prepares an assessment, and then review is carried by independent experts in the IUCN Red List process who are also at the workshop. Both in workshops and in other situations, review

and assessment may not be entirely sequential, as guidance on appropriate interpretation of data and consistent approaches to handling uncertainty may be provided by reviewers throughout the assessment process.

3.2 Species Programme and Red List Partner Projects

All global Red List assessments resulting from Species Programme or Red List Partner projects must be reviewed by at least two people. All reviews must involve the appropriate RLAs. Staff members coordinating the project are responsible for referring assessments to the appropriate RLA for review.

As in 3.1 above, assessment and review may be carried out at the same workshop, where an individual or a small group prepares an assessment, and then review is carried by independent experts in the IUCN Red List process who are also at the workshop.

In cases where a new taxonomic group is being assessed, there may not yet be an appointed Red List Authority for that group. In such cases the project coordinators may act as the reviewers.

3.3 External projects

Global assessments resulting from projects run by other individuals or organizations **do not** need to be reviewed before reaching the IUCN Red List Unit.

Red List Unit staff members are responsible for:

(a) Checking the assessments to ensure that the Red List Categories and Criteria have been applied appropriately and that sufficient supporting documentation has been provided (see checks in 4.1 below).

(b) Referring all external assessments to the appropriate RLA or other experts (in cases where no RLA has been appointed to cover the taxon) for review.

(c) Informing assessors (or those who submitted the assessments) of the outcome of the review, returning any assessments that were not accepted in the peer review process.

Step 4: Submission

Assessments are submitted to the IUCN Species Programme.

4.1 RLA

The RLA focal point submits assessments to the Red List Unit on behalf of the RLA. Red List Unit staff will then:

(a) Acknowledge receipt of the assessments;

(b) Check the taxonomy used against taxonomy used in the IUCN Red List;

(c) Check assessments to ensure the Red List Criteria have been applied appropriately;

(d) Check supporting documentation to ensure it meets IUCN requirements (see Annex 1);

(e) Long sections of documentation, tables, graphs, etc. are transferred to pdf documents to be published alongside the appropriate species account with a direct link to these.

(f) Proof-read assessments and correct grammar and spelling where necessary;

(g) Contact the RLA focal point if any errors or omissions are detected or edits/changes required.

4.2 Species Programme and Red List Partner Projects

Project coordinators are responsible for checking criteria use, supporting documentation, and overall consistency, as well as carrying out proofreading and formatting before submission to the RLU. Red List Unit staff will then carry out the same checks noted above, but to a much lesser extent (since project staff should already have completed data-tidying, proof reading and consistency checks). The RLU staff will focus on looking for obvious errors, and problems in overall consistency between assessment projects. Project coordinators are notified of any errors spotted.

4.3 External projects

Un-reviewed global assessments resulting from projects run by other individuals or organizations are submitted directly to the IUCN Red List Unit, where they are checked and if adequate are sent out for review (see 3.3 above).

Re-assessments

The process for reassessing species may differ from the steps outlined above. Typically, the initial stage involves collating any new published or unpublished information available (either relevant to the species in question or relevant contextual information), and soliciting additional relevant data and information. These are used to update the data and text fields, and if new parameter estimates trigger higher, lower or different criteria thresholds, the Red List category and criteria are revised. The updated and revised documentation may then be reviewed by species experts (within or beyond the RLA), and the revised assessments and accounts are reviewed by Red List assessment experts for appropriate and consistent interpretation of data and handling of uncertainty, before submission.

Step 5: Publication

All assessments that have been reviewed, accepted and checked are entered into the central database and are published in the appropriate

update of the IUCN Red List web site (dependent on the date of submission).

Important Notes:

1. The diagram depicts a clear separation between the Red List Authority process on the left and the Species Programme & Partner projects on the right. In reality, those two processes are usually very closely interlinked and often one could not happen without the other. It is also often difficult to distinguish between the two. The Species Programme staff, for example, initiate and raise the funds for the assessment projects and provide the central coordination for running the projects, but the Red List Authority members are closely involved in helping to gather the information required for the assessments, facilitating and participating in the assessment workshops, and checking the consolidated assessments once they are completed. In general the bulk of the assessments that come into the Red List are as a result of the joint initiatives between the Species Programme and the RLAs.

2. The Red List Unit staff work very closely with the Red List Authorities and are often requested to help facilitate assessment workshops arranged by the RLA or to provide Red List training to their members. Likewise, the Red List Unit staff are used as facilitators/trainers in many of the global species assessment projects run by Species Programme staff or be Red List Partners. Hence there is usually direct involvement of Species Programme Staff in many of the steps outlined in the Red List Assessment process.

The IUCN/SSC Standards and Petitions Sub-Committee (SPSC) also has the right to check assessments for accurate and consistent application of the Red List Categories and Criteria.

B. Appointment of Red List Authorities

The Chair of the IUCN Species Survival Commission (SSC) appoints Red List Authorities on the advice of the IUCN/SSC Biodiversity Assessments Sub-Committee (BASC) and in discussion with the IUCN Species Programme, and, where applicable, the IUCN/SSC Plant Conservation Sub-Committee (PCSC), the IUCN/SSC Invertebrate Conservation Sub-Committee (ICSC), and the IUCN/SSC Marine Conservation Sub-Committee (MCSC). Red List Authorities serve from the time of their appointment until the next meeting of the IUCN World Conservation Congress, after which they may be re-appointed. The Chair of the SSC may at any time revoke the appointment of a Red List Authority.

C. Red List Authority Membership and Governance

Red List Authorities are not individual people, but are groups of people appointed by the Chair of the IUCN SSC to carry out the activities described in these terms of reference for a cover a particular (global or regional) taxonomic grouping of species. Some Red List Authorities are established within specific SSC Specialist Groups (SGs), whereas others operate outside the SG network, though still with the SSC. All members of a Specialist Group do not have to be members of the RLA. A variety of

governance structures are possible within a Red List Authority, ranging from consensus style decision-making to regional sub-groups. The RLA Focal Point (see below) is, however, ultimately responsible for the overall governance of the RLA. The Focal Point will provide the IUCN Species Programme staff and the SSC Chair's office with an outline of the chosen governance structure.

Red List Authorities are considered part of IUCN SSC, so RLA members are by definition IUCN SSC members.

D. Overlapping Red List Authority Jurisdictions
Given the structure, taxonomic scope and geographic coverage of the SSC Specialist Groups and Red List Authorities, there is a degree of taxonomic overlap between some RLAs. When an assessment is received by the RLU for a species for which there is more than one RLA, the RLU shall decide which RLA will take the lead in completing the review, and will inform the other RLA(s). Only one RLA is needed to complete the assessment and review of a species.

RLAs will be consulted by the SSC Chair prior to the appointment of a new RLA whose remit overlaps (although in practice this situation is unlikely to arise).

E. Red List Authority Activities
The activities of the RLA include:
  a) Establishing mechanisms for assessing and regularly re-assessing species within the RLA's remit and preparing Red List assessments following IUCN's Red List Categories and Criteria and guidelines, using the Species Information Service as the means to submit data;
  b) Working with the staff of the IUCN Species Programme to participate in relevant IUCN SSC global and regional biodiversity assessment processes and, as part of this, "populating" the Species Information Service with the most up-to-date information available on the species within their remit;

F. Red List Authority Focal Point
For those Specialist Groups appointed as a Red List Authority, the SG Chair must recommend to the SSC Chair one person to act as the Focal Point. The RLA focal point will not normally be the same person as the SG Chair. For all other RLAs, the Focal Point is directly appointed by the Chair of SSC. In addition to specific activities listed below, the general responsibilities of the RLA Focal Point include:
- Overseeing and coordinating Red List activities within the RLA;
- Serving as the contact person between the RLA members and the various IUCN and SSC structures including the IUCN Species Programme staff, the SSC Biodiversity Assessments Sub-Committee (that oversees the Red List process), and the office of the Chair of the SSC.

G. Focal Point Responsibilities
a. Assessment
Each RLA Focal Point is responsible for establishing mechanisms for assessing and re-assessing the species within the RLAs remit through:
1. Working closely with the IUCN Species Programme staff and any global or regional species assessment projects being implemented by IUCN and SSC (the

IUCN Species Programme will keep RLAs updated on such projects, including the development of funding proposals for them);

2. Ensuring that the assessors are familiar with and up-to date with the Red List Categories and Criteria, and their application;
3. Requiring assessors to take full account of past and present literature (published and grey) and other reliable sources of information, relating to the taxon or providing relevant context (for example, information on threats, rates of habitat loss, etc, within the range of the taxon);
4. Assisting assessors to seek and locate the best available background data relating to the threats likely to affect the taxon;
5. Requiring assessors to consult internally within the Red List Authority, and externally with appropriate specialists and other interest groups;
6. Ensuring that for each assessment, the assessors provide supporting information in line with the minimum documentation requirements, as set out in Annex 1 to these Terms of Reference;
7. Ensuring that assessors adhere to the current version of the "Guidelines for Using the IUCN Red List Categories and Criteria", noting that these are regularly updated;
8. Ensuring that assessors adhere to the current version of the "Documentation Standards and Consistency Checks for IUCN Red List Assessments and Species Accounts", noting that these are regularly updated; ;
9. Ensuring that all species are reassessed at least once every ten years, or preferably (resources permitting) once every five years;
10. Submitting the results of new assessments including changes in categorization or changes in supporting documentation to the IUCN Species Programme or Red List Unit in the format required using the Species Information Service and within schedules set for updates of the IUCN Red List of Threatened Species.

b. Review
Each RLA Focal Point is responsible for verifying Red List assessments through:
1. Ensuring that at least two named independent reviewers agree the status of each taxon based on the supporting evidence;
2. Ensuring that the reviewers check the documentation provided and deem it to be adequate;
3. Ensuring that the reviewers are competent in the IUCN Red List assessment process;
4. Ensuring that the reviewers are familiar with and up-to date with the Red List Categories and Criteria, and their application, and adhere to the current version of the "Guidelines for Using the IUCN Red List Categories and Criteria", noting that these are regularly updated;
5. Ensuring that the reviewers are completely familiar with the Red List documentation requirements, and adhere to the current version of the "Documentation Standards and Consistency Checks for IUCN Red List Assessments and Species Accounts", noting that these are regularly updated;
6. Ensuring that, for any particular assessment, the reviewers are not the same people as the assessors;
7. Acknowledging receipt of external assessments sent by IUCN Species Programme staff to the RLA for review;

8. Ensuring that the external assessments described under point 8 above are reviewed and that within three months of receipt the IUCN Species Programme staff are informed of the outcome (unless a longer time is agreed);
9. Noting that failure to review external assessments within the prescribed time period will result in the IUCN Species Programme staff using alternative reviewers.

c. Petitions Process
In the case of a petition against the listing of any taxon for which the RLA is responsible, the RLA Focal Point will:
1. Establish a process for handling the petition as set out in Annex 2 to these Terms of Reference;
2. Abide by any decisions of the arbitrating Standards and Petitions Sub-Committee.

Red List Authority Deliverables:

- Focal Point contact information and description of the Red List Authority governance structure;
- Regular updates of species assessments consistent with the IUCN's work plan (in particular any relevant global and regional species assessment projects) and resulting Species Programme staff requests;
- Prompt review of external species assessments;
- Appropriate response to any petitions;
- A mechanism for delivery of relevant information from the RLA to relevant global and regional biodiversity assessment processes, using the Species Information Service.

All deliverables should be sent to the IUCN Red List Unit at redlist@ssc-uk.org

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ANNEX 1

Documentation Requirements for Taxa Included on the IUCN Red List

In documenting species assessments on the IUCN Red List, two particular documents, both regularly updated and available from the IUCN Red List website, or directly from the Red List Unit, are available to help Red List Authorities. These are:

- Guidelines for Using the IUCN Red List Categories and Criteria; and
- Documentation Standards and Consistency Checks for IUCN Red List Assessments and Species Accounts".

The process of documentation is much more straightforward for RLAs that have familiarized themselves with these two documents.

Standard Documentation
The following is the **standard** set of information that should accompany every assessment submitted for incorporation into the IUCN Red List of Threatened Species, unless otherwise agreed with the Red List Unit:
- Higher taxonomy details including Kingdom, Phylum, Class, Order and Family
- Scientific name (including infra-specific details if relevant). Note that all taxa assessed must be validly published in accordance with the appropriate international nomenclatural codes and should be currently accepted names. Standard taxonomic checklists should be used wherever possible for names. The standard lists adopted by IUCN are periodically reviewed and listed on the Red List web site:
  http://www.iucnredlist.org/info/info_sources_quality.html . For many groups no standards are available, or there may be a valid reason for adopting another treatment. In such cases, the taxonomic treatment followed should be indicated and if not one of the standards followed by IUCN, the reference should be cited in full and a reason for the deviation given.
- The authorities for all specific and infra-specific names used in the Red List must be given following the appropriate nomenclatural rules. This should include the date of publication, except in the case of plant names. The abbreviations used for author names of plants should follow Brummitt and Powell (1992) and subsequent updates on the International Plant Names Index web site (http://www.ipni.org/index.html).
- Name of subpopulation if relevant
- Common names in English, French and Spanish wherever possible
- Major synonyms (this need not be a complete synonymy – only those synonyms that are commonly used, or names that have been used on past Red Lists
- Growth forms for plants
- Red List Category and Criteria (including sub-criteria) met following the rules laid down in the IUCN Red List Categories and Criteria (IUCN 2001) at the qualifying category level, and preferably at lower category levels

- A rationale for the listing (including inferences or uncertainty that relate to the interpretation of the data and information in relation to the criteria and their thresholds)
- Numeric data and parameter estimates underpinning the assessment (as recorded in specific fields in SIS)
- Information on any changes in the Red List category of the taxon, and why the category has changed
- Countries of occurrence
- Occurrence in specified sub-country units for large countries and islands far from mainland countries
- Occurrence in inland water bodies or systems (only inland water taxa)
- A GIS range map of species' distribution, preferably in polygons, and points if possible
- Altitudinal or depth information
- Current population trends (increasing, decreasing, fluctuating, stable or unknown)
- Coding for occurrence in freshwater, terrestrial and marine ecosystems
- Habitats utilized (including coding for degree of suitability/importance)
- Major threats (including coding for timing and nature of impact [type of stress] on species)
- Conservation actions in place and needed
- Research needed
- Basic information on the utilization of the taxon
- General text about the population size and trends, geographic distribution, range size and trends, habitat and ecology, threats, what conservation measures are in place or needed, and comments on the utilization of the taxon
- Bibliography (cited in full; including unpublished data sources but not personal communications)
- Consultation process, including:
  - The name/s of the contributor/s who assisted with the assessment
  - The name/s of the assessor/s who made the assessment
  - The names of at least two reviewers and the RLA/s involved in the peer-review process
  - Contact details for the assessor/s and reviewers

Additional Case-specific Documentation:
In addition to the minimum documentation, the following information should also be supplied where appropriate:
- Taxa listed as threatened using criteria B1a or B2a should coded either as Severely Fragmented, or the number of locations should be specified
- For taxa listed as threatened under criteria A and C1, the time period (in years) over which past and future declines have been measured
- For taxa listed as threatened under criteria A and C1 in terms of generations, the generation length should be given in years
- If a quantitative analysis is used for the assessment (i.e., Criterion E is used to trigger a listing), the data, assumptions, structural equations, and Population Viability Analysis model if used should be included as part of the documentation

- For Extinct or Extinct in the Wild taxa, extra documentation is required indicating the effective date of extinction, possible causes of the extinction, and the details of surveys which have been conducted to search for the taxon
- For taxa listed as Near Threatened, the rationale for listing should include coding and justification of the criteria that are nearly met or the reasons for the classification (e.g., they are dependent on ongoing conservation measures)
- For taxa listed as Data Deficient, the documentation should discussion of available data, sources of uncertainty and justification for why the criteria cannot be applied; including tagging each Data Deficient species as one or more of: Unknown Provenance; Uncertain Taxonomy; Insufficient Information.
- If the RAMAS® Red List software is used to make an assessment, additional guidance on how this should be done and details on what additional supporting documentation is required are given in Annex 3 of the IUCN Red List Categories and Criteria version 3.1 booklet (IUCN 2001)
- Critically Endangered taxa that could be Extinct should be tagged as either Possibly Extinct, or as Possibly Extinct Candidates.

Optional Documentation:

The Species Information Service contains tables, fields and options for recording additional information, these include:
- Widely used common names in other languages (specifying in each case the language of the name supplied)
- Life history details (e.g., life history details for fish, and breeding strategies for amphibians and reptiles)
- Numerical information on population size, number of mature individuals, reduction in population size, level of continuing decline, extent of occurrence, area of occupancy, number of locations, and number of sub-populations,
- Occurrence in sub-country units for small countries and islands close from mainland countries
- Occurrence in biogeographic realms
- Occurrence in FAO Marine Fisheries Areas (marine taxa only)
- Occurrence in Large Marine Ecosystems (marine taxa only)
- Occurrence in Land Cover units
- Information on movement patterns (nomadic, congregatory/dispersive, migratory, altitudinal migrant)
- Scope and severity of threat
- More detailed information on the utilization of the taxon
- Livelihood information
- Ecosystems services information

Reference:

IUCN 2001. *IUCN Red List Categories: Version 3.1*. Prepared by the IUCN Species Survival Commission. IUCN, Gland, Switzerland and Cambridge, UK. (See http://www.iucn.org/themes/ssc/redlists/RLcategories2000.html to download this document).

ANNEX 2

Procedure for Handling of Petitions against Current Listings on the *IUCN Red List of Threatened Species^{TM}*

Introduction

Status assessments presented in the *IUCN Red List of Threatened Species^{TM}* are open to challenge. Petitions may be made against current listings of species, subspecies or geographic subpopulations (hereinafter referred to as species). Petitions against historical listings (i.e., those that have since been updated with a new listing for the taxon in question) are not considered. Petitions may only be made on the basis of the IUCN Red List Categories and Criteria (version 3.1 - http://www.iucnredlist.org/info/categories_criteria2001.html) and in reference to any supporting documentation accompanying the listing. It is not possible to change listings for political, emotional, economic, or other reasons not based on the Categories and Criteria.

Disagreements with Current Listings

Any party may contact the IUCN Red List Unit (RLU) at any time to express disagreement with any current listing. If this disagreement is based on scientific or technical grounds, the RLU will put this party in contact with the relevant Red List Authority (RLA) or assessor (in the absence of an RLA) with intention of resolving the disagreement without entering a formal petition process. In the event of a disagreement concerning the listing of a species that is in the process of being reassessed, the RLA will seek to involve the party expressing disagreement in the reassessment process, with the objective of reaching consensus on the new listing.

The Formal Petitions Process

If the above process is not successful in resolving the disagreement, a formal petition may be submitted. The attached flow diagram presents a summary of the formal petitions process; the process is described in greater detail below.

A formal petition should be very brief, and just summarizing the points of disagreement, with explicit reference to the criteria under which the species is listed (2 pages maximum). The steps to follow for filing petitions are outlined below:

Petition Submission and Validation
1. Petitions can be submitted to the RLU at any time. The RLU will acknowledge receipt of the petition, and will inform the petitioner of the date on which the petition was received.
2. The RLU will consult with the SSC Biodiversity Assessments Standards and Petitions Sub-Committee (SPSC) to determine whether or not the petition has been filed on the basis of the IUCN Red List Categories and Criteria. If the petition has not been made on the basis of the IUCN Red List Categories and Criteria, it will be returned to the petitioner by the RLU with an explanation as to why the petition cannot be considered. This response will be sent to the petitioner within one month of the original receipt of the petition by the RLU.

Discussion Between Parties

3. If the petition is made on the basis of the IUCN Red List Categories and Criteria, it will be referred by the RLU to the RLA or particular assessor/s (if there is no RLA) responsible for the taxon assessment in question (the RLA or assessor/s are hereafter just termed the RLA). Within one month of the original receipt of the petition, the RLU will request the RLA and the petitioner to discuss the petition with the objective of reaching an agreement between them. The RLA and the petitioner will be given four months to reach agreement from the date that the RLU refers the petition to them. In seeking to reach agreement, the RLA and the petitioner should determine whether or not they are using the same underlying data. They should clarify whether or not the disagreements are due to factual discrepancies, as opposed to differences of either interpretation or application of the IUCN Red List Categories and Criteria.

4. If the RLA agrees with the petition, or if the petitioner and the Red List Authority come to agreement, then any changes to the listing will be accepted. The change will appear in the following update of the IUCN Red List.

5. If the petitioner and the RLA are unable to agree within the time period set in no. 3 above, the petition will then enter the next stage in the process.

Justification Preparation and Submission

6. Within one week of the expiration of the time period set in no. 3 above, the RLU will notify both the petitioner and the RLA that each of them should submit justifications for their case to the SPSC via the RLU. The justifications should reach the RLU within four months from the date that the RLU issues this notification. These justifications should not be longer than 8 sides of A4 (excluding the list of references), 12-point print, and should provide the data to support their position. The justifications should include a synopsis of the failed negotiations, a brief statement of the reasons for the dispute, and a clarification of any factual discrepancies (e.g., different sources of data or information used). All data used in these justifications must either be referenced to publications that are available in the public domain, or else be made available to the SPSC. The data provided should be clearly linked to the use of the IUCN Red List Categories and Criteria. If the petitioner fails to submit a justification within the set time period and in the required format, the petition will be dropped, and the RLU will inform the SPSC of this. If the RLA fails to submit a justification within the set time period and in the required format, the petition will go forward. Requests for an extension to the deadline for submitting justifications will not normally be considered, unless there are exceptional circumstances. Any request for such an extension should be submitted to the RLU at least two weeks before the deadline, who will refer it to the Chair of the Biodiversity Assessments Sub-Committee. Generally, the maximum time limit to any requested delay is one month, with only one such request being considered from each party. However, in unusual circumstances, such as multiple petitions directed to the same RLA, a longer extension may be granted, at the discretion of the Chair.

7. The RLU will send the justifications of each party to the other within one week of the time period set in no. 6 above, or within one week of both justifications having been received. Both parties have three weeks in which to provide a 1-page addendum to their justifications, should they choose to do so. Any addendums received after the three-week period will not be considered. The parties may not make any changes to the original justifications.

8. At the end of this three-week period, whether or not an addendum is received, the RLU will send the justifications to all members of the SPSC for review and confidential comment. The SPSC may choose to circulate the justifications to other independent expert reviewers for confidential comments. The Chair of the SPSC should if at all possible receive these comments within two months of the date of receipt of the justifications. If needed, the SPSC may seek clarification of particular issues from the RLA and the petitioner. In instances in which the RLA failed to submit a justification, the SPSC will make every effort to obtain a balanced set of confidential comments from reviewers.

Deliberation and Ruling
9. The SPSC will consider the justifications and the confidential reviews. It will make a ruling on each petition within four months from the time that the petitions were circulated to the SPSC members by the RLU. In the case of multiple petitions, a longer period may be granted, at the discretion of the Chair of the Biodiversity Assessments Sub-Committee. The SPSC will issue a notification that will include a full rationale and explanation of each ruling, but will not include a record of the deliberations that the SPSC made to reach its decision, and the names of any reviewers will be kept confidential. The SPSC will send this notification to the RLU.

Notification and Publication of Final Ruling
10. The RLU will send the SPSC's notification to the petitioner and to the RLA. Any changes will appear in the next update of the *IUCN Red List of Threatened Species^{TM}*. The notification of the ruling on any petition, and any resulting change in listing, will be placed on the IUCN SSC Web Site.

Petitions Against Listings Based on an Old Version of the IUCN Red List Categories and Criteria
If a petition is made against a listing based on an old version of the IUCN Red List Categories and Criteria, and the petition is based on the Categories and Criteria, then the RLA in question will first be requested to update the listing so that it is based on the version of the Categories and Criteria currently in force. The RLA will be given six months to do this from the original receipt of the petition by the RLU. The RLA should consider the additional information provided by the petitioner. Once the RLA has updated the listing, the petitioner will be so informed and asked whether or not they wish to proceed with the petition against the new listing. If the RLA fails to meet this deadline for updating the listing, the petition will proceed according to the process outlined in paragraphs 5-9 above, and the final ruling of the SPSC will provide an updated listing for the taxon in question, using the version of the Categories and Criteria currently in force.

General Principles
Acknowledging Communications. During the formal petitions process, the petitioner, the RLA, the SPSC, and the RLU should acknowledge the receipt of all correspondence among them as soon as possible after arrival, so that any failure in delivery is detected as early as possible.

Confidentiality. While a petition is being considered, the associated documents (including justifications made by the petitioner and the RLA) are confidential documents that are not made available to third parties. The SPSC will circulate the

justifications only to independent expert reviewers who agree to adhere to the confidentiality of the process and accept that their reviews will eventually be made public, but not attributed. Final rulings on petitions made by the SPSC will include both justifications, and the reviews (without the names of the reviewers), in the documentation placed on the IUCN SSC website.

Repeated Petitions. In order to prevent continuing petitions on the same species, the SPSC will not accept a petition, subsequent to the first petition, if it is not based on new information.

Reassessment of Species Following a Petition. The first time that a species is reassessed following a petition, the reassessment will be reviewed by the SPSC.

Impartiality. The SSC Biodiversity Assessments Sub-Committee and the RLU are responsible for ensuring that the process for handling petitions is adhered to, and that evaluations of petitions are carried out professionally and impartially. Prior to publishing the ruling on a petition, the Chair of the SPSC will send a brief report to the Chair of the Biodiversity Assessments Sub-Committee confirming that the above process was followed to reach the decision, or outlining any deviations from the process that had to be made. The SSC Biodiversity Assessment Sub-Committee (excluding the SPSC), the SSC Steering Committee, the SSC Chair, and the IUCN Secretariat (including the staff of the Red List Programme), have no rights to intervene in the petitions process, or to involve themselves in the substance of any petition.

Special Cases
Deviations from the Process. Every effort will be made to avoid deviations from the process as laid out, above. However, any petitions requiring such deviations should be approved in advance by the Chair of the Biodiversity Assessments Sub-Committee.

Complaints about the Petitions Process. If there is an assertion that the above procedure has been violated, then a formal and documented complaint may be submitted to the SSC Chair.

Flow Diagram of Formal Red List Petitions Process

- All timelines noted in the diagram below are based on the deadlines outlined in the petitions process. The actual timeline for a petition will depend on response times and requests for deadline extensions. Please refer to the petitions process document for details.
- Figures noted within the diagram refer to the steps outlined in the petitions process document (see *The Formal Petitions Process*).

Petition submission & validation

1. Official petition submitted to RLU. RLU acknowledges receipt of petition and confirms date of receipt (**start date**).

2. RLU consults with Standards & Petitions Sub-Committee (SPSC) to determine whether petition is based on application of IUCN Categories & Criteria.

Petition rejected by SPSC

RLU returns petition to petitioner with an explanation of reasons for rejection.

Petition accepted for consideration by SPSC

Discussion between parties

1 month after start date

3. RLU refers the issue to Red List Authority (RLA) and requests both parties to enter discussion with objective of reaching agreement within four months.

Agreement reached

4. Both parties inform RLU, outlining any modifications necessary to assessment.

Any modifications to assessment appear in next update of IUCN Red List.

5 months after start date

5. No agreement reached

Justification preparation & submission

6. RLU notifies RLA that official petition has been lodged and requests petitioner and RLA to submit justifications for their case within four months.

No justification submitted from petitioner

Petition is dropped.

7. RLU copies submitted justifications to both parties; addenda added if necessary.

Petition continues

No justification submitted from RLA

9.5 months after start date

8. RLU sends received justifications to SPSC.

Deliberation & ruling

If necessary, SPSC circulates justifications to independent expert reviewers for comment.

Comments received from reviewers

9. SPSC considers justifications and reviews.

13.5 months after start date

RLU receives ruling from SPSC.

Notification & publication of final ruling

10. RLU notifies petitioner and RLA of ruling.

Any modifications to assessment appear in next update of IUCN Red List, and notification of ruling published on IUCN SSC web site.