



National Center for Biological Sciences  
Tata Institute of Fundamental Research

GKVK, Bellary Road, Bangalore 560 065. India

Tel. No : 080 2366, 6344

Email: sampattuks@ncbs.res.in,www.ncbs.res.in

ENQUIRY

Ref: NCB/CF20-13/200089

May 27, 2020

P)

Dear Sirs

Please let us have your Quotation for the following:

S.No.	Item Code	Description	Qty	UOM
1	LSCSC001272	Website development service 2 PART TENDER EMD Amount : Rs.28,000.00 The soft copy of the Technical Bids shall be submitted on or before 17/6/2020 in PDF format. Technical evaluation will be carried out and those Vendors who qualified in technical evaluation will be asked to submit the price Bids. Thereafter, Financial Proposal shall be evaluated. The Commercially LOWEST BIDDER shall be the first preferred Vendor for award of Order. Pl. submit Technical offers only. The Bids which includes Technical and Price both are considered. E-mail : chetana@ccamp.res.in SPECIFICATION AS BELOW: Development of advanced, data-intensive websites with a responsive theme, building of applications for handheld devices along with their integration with these websites, managing back-end services, and the interchange of data between the servers (virtual and physical) and the users. The primary focus will be the development of all server-side web and handheld device applications, definition and maintenance of the central databases, and ensuring high performance and responsiveness to requests from the front-end, as detailed in the attached document. EMD amount of Rs.28,000.00- BANK DETAILS ATTACHED.	1.00	NO

**1. The quotation shall be submitted in a sealed envelope duly superscribed with the enquiry number, and the due date for ..... Ref No: 200089. The bids should be addressed and to be mailed/couriered (sent by post/courier) to 'THE HEAD-PURCHASE'.**

The bids are liable to be rejected if the sealed envelope is not addressed to "THE HEAD-PURCHASE" with Tender Ref No. and Item Description and due date. The bids delivered in person shall be dropped in Purchase Section. If the bids are sent through courier or mail, it should reach by submission date and time and NCBS will not be responsible for the delay.

**2. DUE DATE FOR SUBMISSION OF QUOTATION AGAINST THIS ENQUIRY IS 17/06/2020 BY 5.30PM.**

3. QUOTATIONS RECEIVED AFTER THE DUE DATE SHALL BE REJECTED.

4. The validity of your quotation should be for 60 days from the due date.

5. All duties, taxes, surcharge and cess as currently applicable must be stated in your quotation, separately. Otherwise your quote is liable to be rejected.

6. Your quotation should indicate delivery period & warranty period.

7. Delivery to be made to our stores. Please indicate charges, if any extra. Transit Insurance should be done upto NCBS Stores.

8. If you are unable to supply the quality, specifications or brand as mentioned in our enquiry, please state so and then offer alternative to quality/specifications.

9. Payment: within one month after delivery & acceptance/satisfactory installation.

10. Please ensure that the enquiry number and the due date is superscribed on the envelope failing which your quotation is liable to be rejected.

11. Since we are a public funded research institution, we are exempted from paying Customs duty (Except ad valorem duty of 5% + 2% Cess and 1% Cus Sec & High Edu. CESS vide Notification No. 51/96 with latest amendments) and excise duty vide Notification No. 10/97 CENTRAL EXCISE dated 01-03-1997 for all scientific equipments, technical instruments, equipments (including computers), their accessories, spares, consumables and software. Hence, please offer your prices

**12. If the item is covered under DGS&D rate contract, please quote the rate as per the DGS&D rate contract with xerox copy of the DGS&D order.**

13. Any dispute or differences that may arise between the parties shall be referred to the sole arbitration of the Centre Director or his nominees. The decision of the arbitrator shall be final and binding on the parties. The venue for arbitration shall be Bangalore. The provisions of the Arbitration and Conciliation Act, 1996 as amended from time to time shall apply. The courts in Bangalore shall have exclusive jurisdiction to deal with any or all disputes between the parties.

14. TIFR is a public funded research institute and is entitled to concessional rate of GST @ 5% for certain items supplied for research purpose vide notification no. 47/2017 and 45/2017 dated 14th Nov, 2017. The offer should be submitted after fully considering the above notification.

15. Liquidity Damages: If the equipment/ items as per specifications in our P.O. is not supplied (shipped) within the specified delivery schedule, then liquidated damages (not in terms of penalty) will be imposed automatically and shall be deducted from the bill at the rate of 0.5% per week subject to a maximum of 10% of the order value.

16. Income Tax at the applicable rates as per the Indian Income Tax Act 1961 will be deducted at source for the services availed / ordered. In case of service provider, the rate of tax deduction shall be at 2% as per Section 194C, and in case of fee for professional / technical services under section 194J, the tax deduction shall be at the rate of 10%. In case service provider does not provide PAN number, the deduction shall be at 20% under section 206 AA.

- Tax Deduction Certificates will be provided on request for non PAN holders & Foreign Vendors and PAN holders could avail them through NSDL site dealing with 26AS.

Yours faithfully  
For and on behalf of  
National Centre for Biological Sciences

for Chetana - chetana@ccamp.res.in  
Head Purchase Ph: 23666344  
67176344

## **ADDITIONAL TERMS AND CONDITIONS**

**Earnest Money Deposit (EMD) amount of Rs.28,000.00**

**Payable to :- Bank details as per attached sheet.**

### **BID GUARANTEE / EARNEST MONEY DEPOSIT**

**Bid Guarantee amount of Rs.28,000.00 shall be submitted by NEFT/RTGS as per Bank details attached. Alternatively, the BG may be submitted by way of Bank Guarantee from a nationalised bank/first class foreign bank valid for 12 months. in favour of "National Centre for Biological Sciences, Bangalore". The BGA amount will be forfeited if the successful bidder fails to accept the Letter of Intent/ Purchase order/Work Order or withdraws or amends impairs or derogates from the tender in any respect within the period of validity of this tender. The offers are liable to be rejected, at the discretion of the Centre, if they are not accompanied with BGA. No interest shall be payable by NCBS for BGA amount. The BGA shall be refunded to the unsuccessful bidders once the order is released on the successful bidder.**

### **Micro and Small Enterprises (MSEs):**

1. Micro and Small Enterprises (MSE) must, along with their offer, provide proof of their being registered as MSE (indicating the terminal validity date of their registration) for the item tendered, with any agency mentioned in the notification of the Ministry of Micro, Small and Medium Enterprises (Ministry of MSME)
2. The MSEs are exempted from payment of earnest money and tender fees subject to furnishing of relevant valid certificate for claiming exemption as per privilege rules of Government of India.
3. The bidder submits registration of Udyog Adhar Memorandum (UAM) by Ministry of Micro Small and Medium Enterprises (MSME) vendors on Central Public Procurement Portal (CPPP). The bidders who fail to submit UAM number shall not be able to avail the benefits available to MSEs as contained in Public Procurement Policy for MSEs Order 2012 issued by MSME.





**ELECTRONIC CLEARING SERVICE (Credit Clearing) / REAL TIME GROSS SETTLEMENT (RTGS)  
FACILITY FOR RECEIVING PAYMENTS**

**DETAILS OF ACCOUNT HOLDER**

NAME OF THE INSTITUTION	NATIONAL CENTRE FOR BIOLOGICAL SCIENCES
COMPLETE CONTACT ADDRESS	Mr. Pawan Kumar Pahwa, Head (Administration & Finance), National Centre for Biological Sciences, TIFR, GKVK, Bellary Road, Bengaluru - 560 065
TELEPHONE NO. / FAX NO.	080-23666319 / 080-23636662
E-MAIL ID OF THE FO / AO / REG / DIR	pawan@ncbs.res.in / srinidhiv@ncbs.res.in / accounts@ncbs.res.in

**BANK ACCOUNT DETAILS**

INSTITUTION ACCOUNT NAME (AS PER BANK RECORD)	NATIONAL CENTRE FOR BIOLOGICAL SCIENCES
ACCOUNT NO.	50100263361695
IFSC CODE	HDFC0004839
BANK NAME (in full)	HDFC BANK
BRANCH NAME	AMRUTHAHALLI
COMPLETE BRANCH ADDRESS	362, TALAKAVERI LAYOUT AMRUTHAHALLI MN RD BANGALORE- 560092
MICR NO.	560240154
ACCOUNT TYPE	SAVING ACCOUNT

Certified that the Institute's account is in an RTGS enabled branch.  
I hereby declare that the particulars given above are correct and complete.

Date: 27-02-2019.

Signature of the Competent Authority  
of the institution with seal.

Certified that the particulars furnished above are correct as per our records.

Date: 27-02-2019



Signature of the Authorized  
Bank official with Bank Seal.

MEERA RAO  
MP CODE: M4120  
BRANCH MANAGER  
HDFC BANK LTD

## **NOTICE FOR WORK ORDER FOR WEBSITE AND APP DEVELOPMENT AT NCBS**

**INSTITUTIONAL INTRODUCTION:** The National Centre for Biological Sciences (NCBS) is a premier research institute for biological research. NCBS is a part of the Tata Institute of Fundamental Research, which is a Grant-in-Aid institute under the Department of Atomic Energy, Government of India. Further information is given on the institutional website, <https://www.ncbs.res.in/>.

**DESCRIPTION OF WORK:** This work order is for development of data-intensive natural history websites with a responsive theme, building of applications for handheld devices along with their integration with these websites, managing back-end services, and the interchange of data between the servers (virtual and physical) and the users. The primary focus will be the development of all server-side web and handheld device applications, definition and maintenance of the central databases, and ensuring high performance and responsiveness to requests from the front-end, as detailed below.

1. **Development of a primary website called Butterflies of India** at <https://www.ifoundbutterflies.org>. This website should be developed using a custom-made Drupal 8 theme that is comparable in features to Progressive theme (<https://themeforest.net/item/progressive-multipurpose-responsive-drupal-theme/8624928>). This website will expand the architecture and features of the existing Butterflies of India website (URL above), with added features as described below. In case of any doubt or questions, the Butterflies of India website should be used as a reference, and NCBS should be consulted.
2. **The home page should have modules for information on the website**, including description of the website, relevant numbers (no. of species pages, no. of images, no. of contributors, Contributor of the Month/Year awards, etc.), news, donate, sponsors, etc. The final design should be approved by the NCBS Committee constituted to supervise this work.
3. **Species pages and taxon database:** The main strength of the website will be species pages to which registered users can contribute images and other information (see the Butterflies of India website, and further description below). The species pages will have a set theme in which all the information, images and maps about the species may be displayed in a tabbed system. The species pages should be based on an editable, central taxon database. This taxon database will have taxonomic information on each species and subspecies. The species pages will draw updated taxonomic information from the taxon database in real time. If a taxon name is edited in the future, the edited information should automatically get updated on the species page and on the images (images may be bulk-edited after taxonomic updates).
4. **The species page should have a set but editable theme (compare with Butterflies of India website) with elements in the order given below:** (a) species names in the title, (b) a reference image and a distributional map, (c) conservation or other special status, (d) taxonomic information, and (e) reference images and natural history information under various tabs, (e) a text box for final notes at the bottom. The reference map should be derived from the spot records contributed to the website, and should be generated on the fly based on the latest database entries. Reference images of the butterfly species should be organized in a 2 x n format (two images per row x a defined number of rows). On the first page, there should be 20 images (2 x 10 format) that are selected by editors, with image selection feature built into the code. From second page onward, images should be organized as 100 images per page (2 x 50 format), and they will be organized in the reverse chronological order in which they are contributed. These images should be 345px wide. When a user clicks on them, the images will open to their full size, at 700 pixels wide. It should be possible to move between these images with left and right arrow keys.



5. **The species pages should have the following editable tab structure:** (a) Image gallery, (b) Early stages, (c) Distribution, (d) Identification, (e) Status, Habitat and Habits, (f) Larval Hosts, and (g) References, in that order. Each tab should have editable text below it. Distribution tab will display a distributional map of the species based on submitted images and mobile app-based records from the latest database entries. Status, Habitat and Habits tab will display a graphic of occurrence by months, and a summary below of seasonal occurrence of the species by states, with totals in the last row and column. Images in the Photo Gallery and Early Stages should be automatically databased, which should be editable (see Butterflies of India website). It should be possible to edit, add and remove tabs.
6. **Distribution should be based on Google Maps** as a base map and user-contributed images and other records that are databased. These should be displayed under the Distribution tab, they should be linked to latitude-longitude records in the spot record database, and hyperlinked to state-wise locality records (see Butterflies of India website). The mapped spot records should be organized by subspecies and other suitable taxonomic categories.
7. **Larval Hosts should be based on a central database of hosts.** These should be linked to host plant species pages. Plants species pages should be organized by Family, Subfamily and genera. They will contain images that are similarly formatted as the butterfly images.
8. **A central database of locations:** All the images and other information contributed by registered contributors should be automatically mapped using latitude, longitude and altitude. This should be done using Google Earth/Maps. Each location entered into the location database should have country, state, district, locality name, lat-lon and altitude specified. Locality entries may be done by registered users at the time of data or image submission, and by the editors at any time. Locality database entries must be completely editable by registered editors, and accessible as a csv or tab-delimited text file that can be downloaded from the website and replaced on the website.
9. **A central database of images/records:** each image/record contributed will be centrally databased with all the associated information. This database will be used for species pages. It will also be used for searching and filtering of images and records for display purposes. It should be possible to search specifically for and filter out individual elements of the database. It will also be used for mapping the contributed images/records. It should be possible to export this database as a tab-delimited text file for Excel, R and other datasheet or statistical platforms (only for editors). Registered contributors should be able to download database entries of their own contributions, with limited columns (see below).
10. **Registration of contributors:** Contributors of the website need to register the first time with the following details:
  - i. Full name [as given in a formal ID card; Mandatory]
  - ii. Email address [Mandatory]
  - iii. Phone number [Mandatory]
  - iv. Country of residence [Mandatory]
  - v. City of residence [Mandatory]
  - vi. Birth date [year mandatory, month and date optional]
  - vii. Social media handle: Facebook [and/or mandatory]
  - viii. Social media handle: Twitter [and/or mandatory]
  - ix. Social media handle [other (Instagram, etc.), up to 3; optional]
  - x. Relevant natural history interests [optional]

The registration process should include a statement that registrants have read and agreed to the legally binding rules and regulations of the website, for which registrants have to check a box. At subsequent logins, users will have to check this agreement box, without which they cannot log in to the website to make their contributions (these logins and checking of agreement box should be logged as a legal requirement). They should also check another box during registration which gives the website

permission to list them as contributors along with the listing of their Facebook/Twitter/other social media pages and contributions. They should read the copyright statement and agree to the copyright rules at the time of registration. Users should be able to log in using social media as well (Gmail, Facebook or Twitter), but new users who register using social media accounts will have to agree to the website rules, without which their registration and subsequent logins cannot proceed. After registration, they will be able to contribute images or other information to the website, review images (only for approved reviewers and editors) and import images on the species pages (only for approved editors), edit website content (only for approved editors), and manage their contributions (edit previously submitted but unpublished records, download database entries of their observations, and download formatted images that they have contributed). It should be possible to track activity of individual contributors. A user registered on Butterflies of India should be able to log in to any other website under Biodiversity Atlas – India platform, and vice versa, with the same registration details. That is, registered users should have universal access across all websites with the same login credentials. A user name (i.e., email address) and a highly secure password should be specified at the time of registration, and it should subsequently be possible to change/reset passwords by the contributor and an approved website editor.

11. **A central database of contributors and other users:** There should be a central database of contributors and other users. This will be editable by the contributors (personal profiles) and by the website editors (the entire database). Contributors should register on the website the first time, as mentioned above.
12. **There should be a separate page listing contributors and individual contributions.** This page should list the formal name, Facebook/Twitter page link, the number of images/records contributed by each contributor, and a link to their observations (the link will open a separate page for each contributor, drawing updated data on the fly). This page should be populated automatically as contributors open their accounts on the website and start contributing images/records. Thus, this page will not have to be manually updated. However, approved website editors should be able to add extra content on this page at the head and bottom of this auto-updated content.
13. **Visitor counter:** Visits to each page and the website should be logged by country, date, time and other standard data fields. The visits should also be logged by the identity of the registered user as well as non-registered users using cookies (see below).
14. **Data contribution system:** Registered contributors should be able to contribute images and non-image-based records (e.g., via an approved tab-delimited text file of daily or location checklist, and through the connected mobile apps) to the website. Each record will be contributed using a form that will include name of the species, date, locality, altitude, habitat, life stage, sex, taxonomic form, aberration/seasonal form, copyright holder name, contributor email, and notes (see Butterflies of India website). Contributors should be able to retain information from the previous entry for subsequent contributions to save time and make it convenient to upload multiple entries easily. It should also be possible to upload images from an entire field trip, with date, location and species name editable for individual entries (e.g., similar to iNaturalist bulk data upload). These submitted contributions will automatically enter the review system. It should be possible to subsequently change the images or the information in the contributions until the images/other records are published on the website.
15. **Reviewing submitted images into the website:** Registered and authorized reviewers and editors should be able to review images and associated information in a separate review system. Reviewers/editors should be able to change entries in any field of the review system (species name, locality, data, form, sex, contributor name, etc.). They should also be able to leave notes for the contributors or other reviewers/editors in two independent Notes fields: one field where questions and notes for the image contributor may be written, and the second field



where questions and notes for other reviewers/editors may be written. These notes should be automatically emailed to contributors and/or reviewers/editors, with a link to the observation in question. Reviewers and editors should be able to review images filtered by family and genus. List of images submitted to the website for review should be emailed two times a week to a reviewer email list. At least one reviewer or editor has to agree to the species name before an image/observation may be imported and published.

16. **Importing and publishing images/observations:** Editors should be able to import and publish reviewed images on the website. When an 'import' button is clicked, the images should be automatically resized to 680 pixels width and 470 pixels height. If images are of different dimensions, then black borders should be added on appropriate sides. At the same time, additional black borders should be added on all sides of the image: 5 pixels width on left and right side, and a variable height of black border at the top and bottom of the image, with specified information added in four corners. The specified information and its location is as follows: top left corner: species name; top right corner: a unique media code with a prefix 'BOI-' followed by a 2-alphabet and 3-digit number (i.e., an alpha-numeric code; e.g. BOI- aa001, BOI-dj500); bottom left corner: contributed information on sex, form, locality, and date, in that order; bottom right corner: copyright holder name. The height of the black border at the top and bottom of the image will depend on the amount of information added in the four corners. This information should be editable in the database and on the image by right-click. Imported and published images along with the submitted information should automatically be added to the observation database.
17. **Number of copies and file naming of published images:** Published images should have three copies, as follows: (i) the original submitted file, (ii) a 700 pixels wide image that is formatted in the prescribed manner with information in four corners (as mentioned in point 16), optimized to reduce file size at a good quality (Photoshop jpg quality equivalent 10). This image will be displayed as the large-format copy when users click on an image on the species page, and (iii) a 345 pixel wide copy of ii, which will be displayed in the 2 x n format on the species page, on the genus/family, etc., breadcrumb pages for representative images, and in the 'compare images' feature in the review system. These three sets of copies should be stored in three separate, suitably named folders. Within each of these three folders, the images will be stored in individual folders by Genus\_species name. These Genus\_species folders should get automatically renamed when the taxon database entries are updated. Within each Genus\_species folder, the individual image files should be named as:  
Genus\_species\_PhotographerLastName.Initials\_media code.jpg.
18. **Auto-emails:** Automatically generated emails should notify:
  - i. **Newly registered contributors** when they submit their first observations, with this welcome message: "Welcome to the Butterflies of India community, and thanks for your contributions!"
  - ii **Contributors** when (a) their observations are received, on the same day, summarizing the number of images/observations and date, and giving a link to each observation in case they want to edit the observation while it is still being reviewed, (b) when their observations have reviewer comments, and (c) when their observations are published on the website. Emails for (a) and (b) should go out immediately, whereas emails for (c) should go out once a week (Sunday), as needed.
  - iii **Reviewers and editors** when new observations are received on the website for peer review (every Wednesday and Saturday evening if new observations have been received).
19. **Auto-calculations:** The following should be automatically calculated in real time, and it should also be automatically summarized at the end of every month and year from the image/record database: the total number of images and records, the number of species pages, the number of new images and records added in a month and year, the number of existing contributors, the average number of images/records contributed by an individual contributor. These data will be



displayed on the home page in defined sections, and on a separate page of data summary, in a graphical format.

20. **Mapping of contributed spot records:** Google Earth/Map-based mapping of contributed spatial data. This may be based on records that are contributed in conjunction with images or without images (daily checklists or individual records without images, typically contributed through the mobile app (see below)). Mapped records of individual species will be displayed on species pages, colour-coded by taxonomic information (e.g., subspecies) and basis of the record (image or non-image-based record). It should also be possible to map larger sets of records through a custom map (e.g., all records of a particular family, or all records from a particular locality or in a particular month), when users click on these categories.
21. **Contributor resources:** After logging in, contributors should be able to see and download the following resources that they have contributed:
  - i. Image contributors should be able to download a complete set of their formatted images (700 pixels wide copy) that are published on the website.
  - ii. Image as well as spot record contributors should be able to download a tab-delimited and species, locality name, date, and name of the photographer/contributor. The columns allowed to be downloaded from the database should be editable by the editors.
  - iii. Image as well as spot record contributors should be able to download a non-editable (jpg) image of all their personal observations shown on a Google map. The image copyright will be with NCBS (this should specifically be dealt with in the Copyright Statement on the website).
22. **Educational material and activities:** The website will make available the following educational material:
  - i. **Online knowledge quiz:** Online quizzes that will draw a random set of 20 questions from hundreds of questions that are available on the website. The quiz-takers should be able to choose their level [young student (1-10 classes), college student (Classes 11-15), beginning naturalist [0-3 years of field experience], mid-level naturalist [4-10 years of experience], and advanced naturalist [over 10 years of field experience]. The quiz results should be summarized at the end.
  - ii. **Online species identification quiz:** A set of 30 randomly chosen, already identified images may be displayed to challenge the users on species identification. The quiz-takers should be able to choose their level, as above. The quiz results should be summarized at the end. Inclusion of images in the species identification quiz should be semi-automated by checking a box during image review system.
  - iii. **PDF slide-show:** An informational, downloadable PDF file of a slide-show on butterflies.
  - iv. **Online educational videos on butterflies for students and beginning amateurs:** These videos will be uploaded on the website and also on YouTube. They may be downloaded and played by teachers for school educational activities.
  - v. **A slide show of beautiful butterflies:** This will play a set of 20 randomly selected images of 4K-quality that display the beauty of butterflies.
  - vi. **Species of the Day,** circulated by order among the top 500 species pages that have the highest amount of data on the website, but editors should be able to add specific pages to this list.
23. **Security:** Special security features need to be added to prevent, within reasonable limits, hacking and malware attacks. The websites will be hosted as secure websites (https), and McAfee/Norton security should also be applied, where the website content and contributed materials will be scanned for malware every day. Security certificates and McAfee/Norton license shall be provided by NCBS.
24. **Use of cookies:** The website should use cookies to track individual users, including identifying IP addresses and tracking all activities and page visits. Users will be asked to allow cookies the first time they visit the website.

25. **Unregistered usage limit:** Each unregistered user is allowed a lifetime of 200 page visits to each website (see below for the list of websites). After these 200 lifetime page visits, a user will be able to visit the website only after registering an account on the website. The details required by a registered user will be similar to those needed of contributors. The user database should be accessible only to website editors and IT staff, not displayed online. Registered contributors will not have to register separately as users, i.e., one registered account per person.
26. **Importing of the existing content:** When the development of all the above features is complete, the entire content of the existing Butterflies of India website should be imported in the rebuilt Drupal 8 platform. This includes individual page contents, all the contributed images, and databases. After this, the new website will go live.
27. **Development of a mobile app:** An Android and iOS mobile app that works in conjunction with the website should be developed. This app should draw data on all the butterfly species from the website. The species images should be automatically drawn from the website (the set of 20 images on the first page of the photo gallery). Text information should be brief and synced with the website. The data contributed through the mobile app should be incorporated with a unique colour code. Several data filtering and display features may be developed for the mobile-contributed data. The mobile app should receive its regular, automated updates from the website (two times a year, but additional, manually initiated updates should be possible). Thus, the mobile app and the website shall be closely integrated, with two-way flow of data and features with regular updates. Towards this end, the mobile app will expand existing data contribution features of the website. The mobile app should include the following features:
- **Registration of users:** this should be similar to the website registration, and registration done either on the website or the mobile app should apply to the other platform.
  - **Flow of the app after it is launched:** Welcome page, with some nice images and a line or two of description of the app and the Butterflies of India project, and sign-in [option of remembering sign-in]. This goes to the home page with tabs.
  - **Tabs:**
    - Butterfly species list
    - Larval host plant list
    - Image gallery: separate options for eggs, caterpillars, pupae, adult butterflies
    - Submit observations
    - Butterfly monitoring
    - Basic Search [search by English or scientific name of: (a) butterfly species, (b) larval host plant species. This should also appear on all pages.]
    - Advanced Search: filter image gallery by a combination of [This should also appear on all pages]:
      - a. butterfly genus
      - b. butterfly species
      - c. sex
      - d. wing surface
      - e. seasonal form
      - f. Life stage (egg, caterpillar, pupa, adult butterfly, separately)
      - g. larval host plant genus
      - h. larval host plant species
    - About Us



- **Features on species pages:**
  - Individual species pages with images and text
  - Taxonomic breadcrumbs on each page for easy navigation
  - Tabs on top for Image gallery, Description, Natural History, Early Stages, and Larval Host Plants
  - Natural history icons. Tapping on any icon should go to a page showing all the species that have that icon on the species page.
  
- **Features for non-species pages:**
  - Key to natural history icons
  - Species sorted by icons [habitat, adult food, larval host plants, etc.]. This should be accessible from any species pages, and the sorted out lists should jump to species pages.
  - Higher taxonomic categories (genera, subfamily and family) should list all the lower categories that come under it, with one representative species image each
  
- **Checklist/observation submission**
  - Submission should automatically include (a) name [from registration], (b) date and time [from the phone], (c) location [from phone location, for individual observations]
  - Location [for daily/regional checklists. Text name should be included by the user. Beginning and end GPS points and the total time will be automatically added from the phone]
  - Choose between the following before starting a submission:
    - (a) 30-min count, (b) individual observation (with or without images), (c) daily checklist (with or without defined time), (d) location checklist
    - Contributors: (a) myself [default], (b) enter names of other contributors
  - Once users start a submission, they will see a local checklist, where they can tap to add no. of individuals seen. Each tap will get logged separately in the CSV file, with associated GPS location. Additional species not in the local checklist may be searched and added in the submission. Local checklist will be downloaded when people choose their pack the first time they use the app, which can be subsequently changed/defined under Menu.
  - For 30-min counts, at the end of the 30 mins, count will stop, and two options will be displayed: Cancel, or Submit.
  - If users choose to submit, then a summary of the submission will be displayed, which should be confirmed before tapping 'Submit'.
  
- **Menu:**
  - Your profile
  - Packs
  - My contributions [this should take users to: (a) the stats of their contributions [no. of individual observations, 30-min counts, checklists, etc.], (b) one click "download my observations" (this will download a CSV of checklists and other data submitted by the user, but not images)]
  - Settings
  - About BOI
  - Share with a friend
  - Submit feedback
  - Help
  - Logout

**28. Keeping Butterflies of India as the primary installation, the following websites should be developed as sub-installations from the same website code, along with recompilation of mobile apps for these animal groups:**

- i. Moths of India (<https://www.indianmoths.org/>)
- ii. Cicadas of India (<https://www.indiancicadas.org/>)
- iii. Odonata of India (<https://www.indianodonata.org/>)
- iv. Reptiles of India (<https://www.indianreptiles.org/>)
- v. Amphibians of India (<https://www.indianamphibians.org/>)
- vi. Birds of India (<https://www.birdsofindia.org/>)
- vii. Mammals of India (<https://www.mammalsofindia.org/>)
- viii. Spiders of India (<https://www.indianspiders.org/>)

These websites currently exist. Their contents and databases should be imported into the new Drupal 8 platform, similar to the Butterflies of India website. Any core code changes made on the Butterflies of India website should reflect on all the website sub-installations. Similarly, keeping the Butterflies of India mobile app as a template, mobile apps for the above websites should be recompiled.

#### **WORK ORDER PROCEDURE:**

**Site Inspection:** Before submission of offer, the bidders are requested to Skype with the NCBS IT staff concerned to get acquainted with the actual work and prevalent conditions, facilities available, access to sites, etc. No claim will be entertained later on the grounds of lack of knowledge of any of these conditions.

**Mandatory:** The potential service providers should have the following technical and financial qualifications, quality certifications, and copies of the certificates must accompany the Technical Bid. Also, copies of relevant documents regarding registration as Company/Partnership Deed must be attached along with the Technical Bid:

1. The Bidders must enclose brief organizational profile including background & experience of the firm
2. ISO Certification
3. ISO 9001, 2001 or 2008, ISO 27001 Certified for IT Services
4. The potential service provider should have local presence in Bangalore, or should be able to commit to sending personnel to Bangalore for consultation, demonstration, work, etc., at own cost.
5. The potential service provider should have strong experience in web development and maintenance in Drupal CMS for the past 5 years as on 31 March 2020. Documentary proof of this should be submitted.
6. The potential service provider must have completed at least 3 contracts of value of Rs. 10 Lakhs or above each, which are similar to the subject matter of this tender notice (i.e., web development and maintenance, mobile app development), during the past 3 years as of 31 March 2020. The information should be provided in table format for each financial year with work order number, organization, order value (only web development/maintenance and mobile app development). Bids will be rejected if the details are not supplied in this format. Documentary proof of this should be submitted.
7. The potential service provider's average annual turnover must be at least Rs. 100 lakhs per annum for the last three years as of 31 March 2020. Documentary proof of this should be submitted.

**Process for selection:** NCBS will float a tender for this work order as a two-step process: technical bid, followed by financial bid. As a first step of technical bid, potential service providers should



submit mandatory paperwork (certificates and documents as above), Earnest Money Deposit (EMD) and a one-page plan of website development. This mandatory paperwork, EMD and website development plan will be evaluated by an NCBS committee set up to evaluate and supervise this work. Potential service providers who do not provide these mandatory documents and deposits within the specified deadline will be disqualified in the Technical Bid stage. Those potential service providers who fulfil these mandatory requirements within the deadline and then qualify through the Technical Bid, will be asked to submit the Financial Bid. The potential service provider who submits L1 Financial Bid will be chosen for the work. Decisions regarding qualification through the Technical Bid are to be made by the NCBS committee set up for this purpose. The committee's decisions are final and cannot be appealed by potential bidders on any grounds.

**Confidentiality:** Neither party shall, without the prior written approval of the other party, disclose the other party's designated confidential information. These obligations shall survive the early termination or expiration of this Agreement, for a period of one year.

**Schedule of Payment:** No advance payment shall be made. Payment of the work order will be done quarterly against the invoice produced and provided all the timelines set for that quarter are met as mutually agreed and to user satisfaction. A detailed timeline per quarter is as follows:

**First quarter: 20% payment of the total work order at the end of this quarter.**

- **Stage 0:** Detailed requirement collection should be done by the service provider. Based on the requirement collection, required goals (which are mutually agreed by NCBS and Service provider) must be set for next five stages. Duration: 1 week (0% payment upon completion of Stage 0).
- **Stage 1:** Goals as agreed in Stage 0, including completion of home page and a few sample pages. Duration: 4 weeks (0% payment upon completion of Stage 1)
- **Stage 2:** Goals as agreed in stage 0, including completion of coding of the species pages and portals for submission, review and importing on the website, with samples ready for NCBS review. Duration: 7 weeks (20% payment upon completion of Stage 2)

**Second quarter: 40% payment of the total work order at the end of this quarter.**

- **Stage 3:** Goals as agreed in Stage 0, including refinement of all the website-related coding, importing of existing data from Butterflies of India (<https://www.ifoundbutterflies.org>) website, and making the website live. Goals should also include bug fixes, trouble-shooting and feature refinement to user satisfaction. Duration: 6 weeks (0% payment upon completion of Stage 3).
- **Stage 4:** Goals as agreed in Stage 0, including development of the butterfly mobile app and its integration with the Butterflies of India website. Goals should also include bug fixes, trouble-shooting and feature refinement to user satisfaction. Duration: 6 weeks (40% payment upon completion of Stage 4).

**Third quarter: 30% payment of the total work order at the end of this quarter + return of the EMD.**

- **Stage 4:** Goals as agreed in Stage 0, including importing of data for the remaining eight websites (see point 28) and making them live, recompilation of the butterfly mobile app code and integration of the mobile apps with these eight websites. Goals should also include bug fixes, trouble-shooting and feature refinement to user satisfaction. The entire project should be finished in Stage 4. Duration: 12 weeks (30% payment).

**Fourth quarter: 10% payment of the total work order at the end of this quarter.**

- **Stage 5:** Addressing of technical queries from NCBS about the work, including about the code and site map. Duration: 12 weeks (10% payment upon completion of Stage 5 + return of the EMD after completion of Stage 5).

To facilitate review of work as per the mutually agreed timeline, a project management tool is to be used to log progress and status of the project. Timelines for each section completion should be indicated and any deviation to be brought to notice of NCBS. NCBS shall have this application deployed at their premises with access provided to the vendor. In case it is observed that at any time, there has been no progress on the work or it does not fall in line with the user requirements, vendor has to forfeit the EMD and shall be blacklisted. NCBS reserves the right to terminate the contract with a notice of one month if performance of the service provider is not deemed satisfactory during the contract period. Under these circumstances, the remaining payment will be null and void.

**No appeals of change to the payment schedule will be entertained:**

**Contact Point:** In case of any query regarding this work order, you may contact Head of Purchase, NCBS, by email at [purchase@ncbs.res.in](mailto:purchase@ncbs.res.in), quoting the work order number, or by phone (080) 2366-6001.

**Scope Summary:**

Sr. No.	Scope	NCBS Current Set-up
1	Development of web and handheld mobile device applications, and support, for the Butterflies of India website ( <a href="https://www.ifoundbutterflies.org/">https://www.ifoundbutterflies.org/</a> ) and its sub-installations, namely: i. Moths of India ( <a href="https://www.indianmoths.org/">https://www.indianmoths.org/</a> ) ii. Cicadas of India ( <a href="https://www.indiancicadas.org/">https://www.indiancicadas.org/</a> ) iii. Odonata of India ( <a href="https://www.indianodonata.org/">https://www.indianodonata.org/</a> ) iv. Reptiles of India ( <a href="https://www.indianreptiles.org/">https://www.indianreptiles.org/</a> ) v. Amphibians of India ( <a href="https://www.indianamphibians.org/">https://www.indianamphibians.org/</a> ) vi. Birds of India ( <a href="https://www.birdsofindia.org/">https://www.birdsofindia.org/</a> ) vii. Mammals of India ( <a href="https://www.mammalsofindia.org/">https://www.mammalsofindia.org/</a> ) viii. Spiders of India ( <a href="https://www.indianspiders.org/">https://www.indianspiders.org/</a> )	PHP/Mysql, Drupal, AJAX OS: Linux

**Solution Summary:** The service deliverables covered will be as below:

- End-User Support across all the web applications for the period of the contract (three months)
- Technical query support for the period of the contract (three months)
- Integration of user-facing elements
- Build efficient, testable, and reusable PHP/Drupal modules
- Migration of data sets
- Solve complex performance problems and architectural challenges
- Optimizing web applications to meet the growing online and mobile needs
- Backup Management, including data backup and restoration services
- Integration of data storage solutions
- SLA Management
- Problem Management
- Preventive Maintenance
- Patch Management



## **Service Window and Service Level Agreement**

**Period of Contract:** The contract period is 9 months from Stage 0 to 4. The entire project, including the nine websites and mobile apps, should be handed over to NCBS in this period, along with the required documentation (site map, explanation of the custom code, etc.), trouble-shooting, and training of the NCBS staff. Beyond the contract period, the service provider shall agree to answer any technical queries from NCBS about the work for a period of three months. The queries should be answered in writing, free of charge, and within two weeks after communication of the query. **Copyright and Ownership:** The web applications, mobile apps, custom and other codes, databases, infrastructure, etc., developed during this contract period shall remain the exclusive intellectual property of NCBS. The full ownership of the entire project, online resources and services generated as mentioned above, and any other outcomes of this work contract, shall also remain with NCBS. Thus, the service provider should hand over all the work completed and in progress to NCBS IT on a periodic basis, and upon request, within the contract period. NCBS is free to develop these resources further on its own with its own IT section or with other parties beyond this work period. For this purpose, the service provider should give a written report explaining the site-map and other relevant details of the work to the NCBS IT section at the end of four months into the contract period. The written report should be detailed enough that a starting-level BTech software engineer should be able to pick up website works in the future with the help of this report and the site map.

**Service Review Meetings:** Periodic review meetings will be held every month between the contracting party and the committee appointed by NCBS to review the service achievement in the previous month and work priorities for the coming month. Actions will be identified as appropriate to improve weak areas. All actions will be recorded, and progress will be reviewed at the next meeting to ensure that action items are being followed up and properly implemented. The normal agenda for such meetings will include:

- Highlights of the past month's performance statistics, concentrating on major or technical issues reported (based on monthly reports).
- Any breakdown trends and achievements.
- Explanations of matters outstanding from previous months and in particular issues which have been attended or are about to be escalated.
- Review of the scheduled workload such as fault resolutions, progress of approved changes, implementation of works.
- Suggestions for improvements and resolution of outstanding issues.
- Issues with contract management, billing/invoicing and other financial matters, if any.

**Penalty Clause:** Failure to maintain SLA with uptime at 95% of the services shall result in deduction @10% per 1% reduction in uptime or as per mutually agreed SLA.

### **Assumptions and Exclusions:**

- The service provider would be responsible to log service calls to external parties and to resolve services-related calls.
- The services report should be shared with NCBS IT In-charge for day-to-day activities.