

## BIRDLIFE INTERNATIONAL - JOB SPECIFICATION/DESCRIPTION

<b>JOB TITLE:</b>	Full Stack Developer
<b>DIVISION/DEPARTMENT:</b>	Operations/ IT

### 1. OVERALL PURPOSE OF JOB

Responsible for design, build, implementation, and support of bespoke data driven development within BirdLife International's conservation and business systems.

The principal project over the first two years will be to undertake developments to improve the World Database of Key Biodiversity Areas (WDKBA), a database managing information on 16,000 of the most important locations for biodiversity. Further functional development will build on and compliment work carried out by our external development house, with a view to bring continuous development and continuous integration works in house, including but not limited to:

- Additional functionality that supports the management of data within the system, including managing information on sensitive species and sites whose datasets need to be withheld from public-facing platforms; facilitating the splitting or merging of other Key Biodiversity Areas (KBAs); and managing information on references to scientific papers, reports etc cited in the documentation.
- Development of a restful API accepting JSON requests, to serve KBA data to the KBA website, BirdLife Data Zone, Integrated Biodiversity Assessment Tool, and third-party platforms and users. Development of file sharing functionality to enable upload and storage of supporting information, documents, and other pdfs.
- Provision of support when issues with the WDKBA arise that impact on data capture.
- Improving the solution's communication and notification processes, for consultation with other registered users of the WDKBA, and for notifying proposers about any of their assessments needing their attention and/ or reassessment.
- Ongoing management and maintenance of tabular and spatial functionality of the WDKBA, and further development as needs arise.

### 2. WORK RELATIONSHIPS

#### REPORTING TO (LINE MANAGER):

Head of IT

#### REPORTING TO JOB HOLDER (LINE MANAGED STAFF):

NA

#### PRINCIPAL OTHER WORKING RELATIONSHIPS/RESPONSIBILITIES WITHIN SECRETARIAT:

Close working relationship with the Global Science Coordinator (IBAs/KBAs) who is currently the internal lead defining user-needs for the WDKBA, other Science staff (particularly the Biodiversity Data Management unit) working on KBA data, and Head of the KBA Secretariat.

Strong working relationships with the other internal IT team members.

Interaction with third party service and support providers.

Supporting and advising all other BirdLife secretariat staff as required.

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### 3. KEY WORKING RELATIONSHIPS GRID

Contact	Level (1-3)	Contact	Level (1-3)	Contact	Level (1-3)
BirdLife network / other NGOs	2	General public	1	Policy makers (institutional /politicians/ corporations)	1
BirdLife advisory groups, committees, reg. councils	1	Press & media	1	Funding organisations (institutions, foundations, corporations )	1
BirdLife Global Council	1	Regulators/ legislators/ auditors	1	Individual donors/ members	1
Suppliers/service providers	2	Scientific community	1	VIPs/ royalty/ high worth individuals	1
<b>Level of Contact</b> 1.= General Informing. "Appearance, first impressions". May have some independent outside exposure and contact, primarily informative. 2.= Presenting/Representing/Reporting "Relationship management". Independent exposure representing BirdLife. Maintaining individual contacts. Usually managing information flow. 3.= Justifying/Negotiating - "Influencing decision makers". Independent exposure as lead contact, representing Birdlife to highly influential people. Responsible for complex and sensitive/high risk communications.					

### 4. MAIN DUTIES/WORK PROGRAMME RESPONSIBILITIES

By main work area:
<ul style="list-style-type: none"> <li>• Design, development, unit-testing, maintenance, and enhancement of software products adhering to the product architecture.</li> <li>• Designing and implementing best practices in software development.</li> <li>• Implementation of automated testing.</li> <li>• Technical documentation of software design.</li> <li>• Configuration management and management of builds.</li> <li>• To support, manage and maintain any development environments and underlying systems within the Azure environment.</li> <li>• Creation and oversight of Standard Operating Procedures.</li> <li>• Implement system upgrades, ensuring continued service availability and that changes are carried out in a controlled and tested manner.</li> <li>• To give additional support to any outsourced support company as and when required to deal with outstanding external tickets and resolving complex queries. Taking ownership and responsibility for liaising with multiple external functions when required to get a resolution.</li> <li>• Working with outsourced support companies and consultants on projects.</li> <li>• Creation, implementation and maintenance of novel innovations to meet the Secretariat's development needs; in tight budgetary and capacity restrictions.</li> <li>• To perform reasonable tasks as requested by the Head of IT and BirdLife International</li> </ul>

### 5. LIMITS OF AUTHORITY/RESPONSIBILITY FOR RESOURCES

RESPONSIBILITY AREA	LEVEL OF AUTHORITY
Financial/Budgetary	NA

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<b>Contracts – Funders</b>	NA
<b>Contracts – Staff/Consultants</b>	NA
<b>Contracts – Service providers</b>	Delegated responsibility to purchase IT services within parameters set and directed by the Head of IT.
<b>Legal Responsibility</b>	NA
<b>Other</b>	NA

**6. EDUCATION/SKILLS AND OTHER SPECIAL REQUIREMENTS**

<b>REQUIREMENTS</b>	<b>KNOWLEDGE/SKILLS/ATTRIBUTES</b>
<b>Minimum General Education</b>	Bachelors or Masters degree from an accredited university in Computer Science, Engineering, or related field; or equivalent industry experience and qualifications
<b>Job Specific Education/ Qualification</b>	Systems development practitioner with extensive experience and exposure to React, Node and database technologies working within Scrum and / or Agile working practices.
<b>Job Specific Knowledge</b>	<ul style="list-style-type: none"> <li>• Experience of building efficient applications in JavaScript and React.js.</li> <li>• Experience of Node.js design and development.</li> <li>• Experience of SQL and RDBMS technology (PostgreSQL, MS SQL, TSQL)</li> <li>• Experience with database development and CI/CD pipelines.</li> <li>• Experience of integrating front-end and back-end components.</li> <li>• Experience in agile ways of working and the associated tools.</li> <li>• Experience with principles of continuous integration and deployment.                             <ul style="list-style-type: none"> <li>○ Experience of creating artifacts and artifact repositories.</li> <li>○ Experience of containers and container orchestration services. For example, Docker and Docker Swarm and Kubernetes.</li> <li>○ Build automation experience i.e. Jenkins.</li> <li>○ Experience of MS Azure.</li> <li>○ Experience of using version control (Git, Github)</li> <li>○ Experience of creating and running automated tests</li> </ul> </li> <li>• Experience of Linux system architecture/administration and supporting network architecture.</li> <li>• Experience of Geographic Information Systems (GIS)</li> <li>• Excellent organizational and prioritization skill.</li> <li>• Excellent communication skills, ability to present technical concepts to technical and non-technical audiences.</li> <li>• Proven ability to work on multiple development projects.</li> <li>• Proven ability to problem solve in logical and analytical way.</li> <li>• Excellent comparable technology and industry experience.</li> </ul>
<b>Experience</b>	<p>Proven experience of working in a busy department and delivering content in a timely and professional manner.</p> <p>International experience would be a benefit, but not essential.</p>
<b>Management &amp; organisational skills</b>	<ul style="list-style-type: none"> <li>• A systematic approach to problem solving.</li> <li>• Ability to organise own workload and prioritise accordingly</li> <li>• Ability to work in a team environment and user focused</li> <li>• Good attention to detail, testing and documentation</li> </ul>
<b>Communications skills</b>	<ul style="list-style-type: none"> <li>• Excellent verbal and written skills</li> </ul>

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	<ul style="list-style-type: none"><li>• Ability to communicate technical concepts and ideas to a non-technical audience, including with people whose first language is not English.</li><li>• Approachable and positive.</li></ul>
<b>Analytical Skills</b>	<ul style="list-style-type: none"><li>• Ability to analyse support issues and create novel and flexible solutions.</li></ul>
<b>Creativity &amp; Initiative</b>	<ul style="list-style-type: none"><li>• Ability to work proactively on own intuitive.</li><li>• Ability to produce working solutions to complex issues with minimal supervision; within over arcing guidance and strategy.</li></ul>
<b>Computer Literacy</b>	A high degree of computer literacy.
<b>Languages</b>	The ability to speak other languages would be an advantage, but not required.
<b>Travel requirements</b>	NA
<b>OTHER DESIRED/HELPFUL KNOWLEDGE/SKILLS/ATTRIBUTES</b>	
A highly motivated, focused and ambitious individual to ensure our users receive exemplary service at all times, with the ability to understand people's problems and manage staff requests in a professional and efficient manner. A friendly approach to resolving IT and development issues.	

<b>Prepared by:</b>	<b>Date:</b>
Mat Kilby, Head of IT	March 2022