

BIRDLIFE INTERNATIONAL - JOB SPECIFICATION/DESCRIPTION

JOB TITLE:	Database Developer
DIVISION/DEPARTMENT:	Information Management/Science, Policy and Information

1. OVERALL PURPOSE OF JOB

You will have a lead role in the design and implementation of a new database that will enable BirdLife to transition its existing World Bird and Biodiversity Database into a future World Database of Key Biodiversity Areas. This will involve identifying and addressing the needs of the BirdLife Partnership, adding extra fields and functionality to support the new Key Biodiversity Area (KBA) standard, a requirement to bring (currently separate) tabular and geospatial data together and a desire to more effectively utilise external datasets, often available through web APIs.

You will play an important part in all the phases of the project, from initial planning and scoping, through a requirements collection exercise and onto the database design itself (conceptual, logical and physical). Based on requirements, you will recommend a suitable database management system, implement the database design and load existing data. You will test your design to ensure it meets user needs and monitor the system to ensure it meets performance and security criteria. You will assist other team members in designing data applications that will allow data input from web-based forms, structured file uploads, GIS software and external APIs.

2. WORK RELATIONSHIPS

REPORTING TO (LINE MANAGER):
Head of Information Management
REPORTING TO JOB HOLDER (LINE MANAGED STAFF):
There are currently no BirdLife staff that report to this position.
PRINCIPAL OTHER WORKING RELATIONSHIPS/RESPONSIBILITIES WITHIN SECRETARIAT: <i>(Include nature of work relationship)</i>
<p>Information Management (IM) team – You will sit within the IM team and will work closely with the other team members who have a variety of GIS and database skills allied with a deep understanding of the underlying datasets. In addition, you will work closely with a recently recruited full stack web developer, especially in the design of any data applications built on the new database.</p> <p>All BirdLife staff – You will work closely with a large number of BirdLife staff, especially those in the Science, Conservation and Policy teams that work with Important Bird Areas (IBAs), Key Biodiversity Areas (KBAs) and species ranges data.</p>
PRINCIPAL WORKING RELATIONSHIPS/RESPONSIBILITIES WITHIN BIRDLIFE NETWORK :
The BirdLife Secretariat manages the global IBA database on behalf of the BirdLife Partnership and relies on Partner staff to input, validate and review IBA data. Partners and their staff are therefore essential stakeholders for you to engage with in order to better understand their needs.
PRINCIPAL EXTERNAL RELATIONSHIPS/RESPONSIBILITIES:
Conservation NGOs – The KBA partnership (see www.keybiodiversityareas.org/) of 12 leading global conservation organisations will provide a significant set of stakeholders (both scientific and technical) for you

BIRDLIFE INTERNATIONAL - JOB SPECIFICATION/DESCRIPTION

to engage with. You will also engage with the newly formed KBA secretariat (co-hosted by BirdLife International and IUCN).

Third-party contractors – A number of contracted third-party developers have been and are being used to develop data and information systems for both core and project-based work and you will assist with specifying requirements and ensuring deliverables meet these specifications.

Other stakeholders – Existing data and information systems have a wide range of stakeholders outside of the BirdLife secretariat and partnership including (in no particular order) decision makers, academia, businesses, funders, donors, educators, students, job seekers, bird enthusiasts and the general public. This role will focus on understanding the needs of these user communities and ensuring that data models are developed that take their needs into account.

3. KEY WORKING RELATIONSHIPS GRID

Contact	Level (1-3)	Contact	Level (1-3)	Contact	Level (1-3)
BirdLife network / other NGOs	3	General public	2	Policy makers (institutional /politicians/ corporations)	1
BirdLife advisory groups, committees, reg. councils	2	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	2	VIPs/ royalty/ high worth individuals	1

Level of Contact

- 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:

Development of the World Database of Key Biodiversity Areas (WDKBA)

You will take a lead role in redeveloping the existing World Bird and Biodiversity Database in order to meet the needs of a wide range of stakeholders including the BirdLife Partnership and the KBA partnership. Work duties will include:

BIRDLIFE INTERNATIONAL - JOB SPECIFICATION/DESCRIPTION

<ul style="list-style-type: none"> • Database planning and systems definition. • Requirements collection and analysis to ensure that any new database satisfies the needs of a wide range of stakeholder groups. • Database design including conceptual, logical and physical designs. • Selecting an appropriate database management system to best match the identified requirements followed by prototyping and implementing the new physical database design. • Data conversion and loading followed by testing, monitoring and operational maintenance. • Ensuring that performance and security criteria are met. • Assisting other members of the Information Management team with data application design and development. <p>Leadership, strategy and planning</p> <ul style="list-style-type: none"> • Assisting in the development of a long-term strategy for BirdLife’s data architecture. • Keeping up to date with industry best practice and researching new technologies relevant to current and future projects. <p>People and resources</p> <ul style="list-style-type: none"> • Acting as a bridge between technical staff (web developer, database manager, GIS analysts) and end-users producing and using the global-level datasets managed by BirdLife. <p>Communication and user engagement</p> <ul style="list-style-type: none"> • Providing a forum for user engagement and a process to collect and act on user feedback. • Developing and maintaining technical documentation associated with all development work. • Providing user training where necessary

5. LIMITS OF AUTHORITY/RESPONSIBILITY FOR RESOURCES

RESPONSIBILITY AREA	LEVEL OF AUTHORITY
Financial/Budgetary	Delegated authority from Head of Division as needed to spend from divisional and/or project budgets
Contracts – Funders	Delegated responsibility from Head of Division as needed to submit proposals and negotiate contracts
Contracts – Staff/Consultants	May have delegated responsibility to hire short term/project staff/consultants and recruit interns/volunteers
Contracts – Service providers	May have delegated responsibility to negotiate contracts
Legal Responsibility	May have delegated responsibility to negotiate funding contracts
Other	

6. EDUCATION/SKILLS AND OTHER SPECIAL REQUIREMENTS

REQUIREMENTS	KNOWLEDGE/SKILLS/ATTRIBUTES
Minimum General Education	Degree or higher in a relevant subject area. OR equivalent relevant work experience
Job Specific Education/Qualification	BSc, Computer Science or equivalent OR equivalent relevant work experience
Job Specific Knowledge	<ul style="list-style-type: none"> • Extensive knowledge of Relational Database Management Systems such as PostgreSQL, Oracle, SQL Server, MySQL etc. • Proficient in SQL and knowledge of database procedural languages such as PL/pgSQL.

[Type text]

BIRDLIFE INTERNATIONAL - JOB SPECIFICATION/DESCRIPTION

Experience	<ul style="list-style-type: none">• Demonstrable experience of designing databases and implementing these designs in a previous role.• Experience of collecting and analysing user requirements.
Management & organisational skills	<ul style="list-style-type: none">• Ability and motivation to deliver high quality work with minimum supervision.
Communications skills	<ul style="list-style-type: none">• Excellent interpersonal and oral communication skills with the ability to present and consult with colleagues at all levels.• Excellent written skills with the ability to produce technical documentation for a non-technical audience.
Creativity & Initiative	<ul style="list-style-type: none">• Experience of keeping up to date with new technology and industry best practice.
Computer Literacy	Covered in job-specific knowledge.
Languages	Fluency in English required. Other languages an advantage but not essential.
Travel requirements	<ul style="list-style-type: none">• Occasional travel to relevant training events, workshops and conferences.
OTHER DESIRED/HELPFUL KNOWLEDGE/SKILLS/ATTRIBUTES	
<ul style="list-style-type: none">• Database Administrator experience.• Knowledge of database performance testing and tuning.• Knowledge of database security best practice.• Experience with geospatial database extensions and working with geospatial data.• Knowledge of a range of back-end and front-end programming languages.• Project management experience and qualifications (e.g. Agile).• Knowledge and experience of working with biodiversity data.	
Prepared by:	Date:
Alex Tate	13/05/2018