

The **Botswana Department of Meteorological Services (BDMS)** has signed a three years Grant Contract with the African Union Commission (AUC) to implement the **African Monitoring of the Environment for Sustainable Development (AMESD)** programme in the Southern African Development Community (SADC region).



AMESD

The **African Monitoring of the Environment for Sustainable Development (AMESD)** initiative makes use of **Space technologies** (satellites) to **observe the environment on Earth**. The initiative aims to establish operational regional information services to support and improve the decision-making process in the field of Environmental and Agriculture management. It is scheduled to run until December 2013 and receives funding from the European Commission through the European Development Fund. The programme is managed by the African Union Commission in Addis Ababa, Ethiopia. The Southern African Development Community (SADC), the ACP Secretariat and the other Regional Economic Communities in Africa provide guidance to the programme.

AMESD focuses on specific themes in each African region. In the SADC region, the theme is “**Agricultural and Environmental Resource Management**”. (SADC-THEMA).

SADC-THEMA

AMESD in Southern Africa aims to empower SADC and its member states **to manage their agricultural and environmental resources** in a sustainable way. Three core services are foreseen to be developed and implemented within the project duration namely Agriculture, Drought and Fire services. The Agricultural Service will monitor the state of the crops and rangeland. The Drought Service will monitor drought during the whole year and provide drought outlooks. The Fire Service will provide a daily fire risk indication, will detect and follow-up active fires (in real time) and deliver burnt area assessments.

The SADC-THEMA is implemented under the leadership of **Botswana Department of Meteorological Services (BDMS)**. BDMS monitors and analyses Botswana and regional weather, providing weather forecasts, bulletins and an extensive range of meteorological and climatological data and reports.

BDMS is therefore inviting applications from suitably qualified and experienced individuals with excellent credentials to fill the following project positions on a contract basis for duration of 2 years 8 months:



AMESD Project Manager (1 post) based in Gaborone

Duties and Responsibilities

The **Project Manager** is the final responsible for the proper execution of the SADC THEMA project and will lead the AMESD team at BDMS. He/she will work under the overall supervision of the Director/Deputy Director at BDMS. He/she is supported by the Finance and Administration Officer, the Thematic Expert, the Software Developer and the System Administrator and plans, directs, and supervises their work.

His/her key responsibilities include:

- Project leadership and co-ordination.
- Liaison with the AMESD Headquarter and with the African Union Commission on financial and contractual issues.
- Submission of reports and deliverables to the African Union Commission.
- Manage interactions between work packages, especially where there are interdependencies.
- Satisfactory completion of the tasks detailed in the work plan.
- Coordinating the Work Packages.
- Review and comment on detailed plans for project outputs.
- Ensure the logistical preparation of international meetings (AMESD Fora, workshops, missions, etc) and appointments.
- Follow-up tasks from the start to the end and organize and maintain paper and electronic archives related to these specific tasks.
- Close communication with all the BDMS divisions, partners, associates, stakeholders and other related institutes.
- Travel to SADC and other African countries will be required.
- Monitors and ensures that the expenditure for project is in accordance with the planned budget.

Qualifications & Experience

- A Master in Meteorology, Computer Science, Agriculture/Bio-engineering or relevant discipline with specialization in remote sensing.
- At least 10 years post qualification experience in the Earth Observation field.
- At least 3 years post qualification experience in Project Management.
- An in-depth knowledge on European Development Fund (EDF) financial procedures.
- Experience of international projects in the SADC region is an advantage.

Required Skills and Competencies

- Team player with a distinction for professional growth and self-management.
- Interpersonal sensitivity.
- Analytical and problem solving skills.
- Planning, organising and presentation skills.
- Computer skills with proficiency in Open-Office tools.
- Ability to communicate effectively orally and in writing.
- Ability to prepare written reports in a clear, concise and meaningful manner.
- Ability to work in an international environment.



AMESD Finance and Administration Officer (1 post) based in Gaborone

Duties and Responsibilities

The **Finance and Administration Officer** is responsible for a variety of financial and administrative duties necessary to run and execute the SADC-THEMATIC project professionally. Reporting directly to the Project Manager, who is the head of the entire project, the Finance & Administration Officer key responsibilities include:

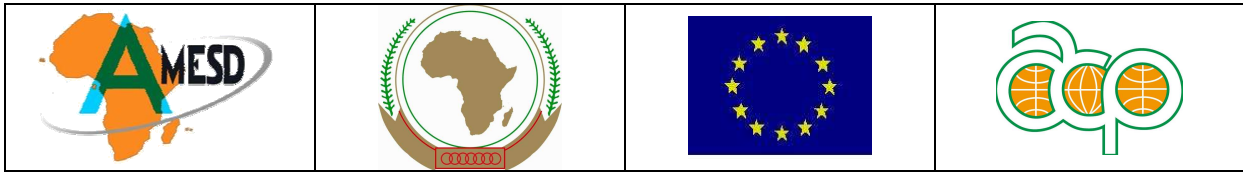
- Set-up the accounting system and organize the accounts files.
- Perform budget follow-up, analysis and control following the 10th EDF rules.
- Encoding all account data linked to the budgets.
- Prepare payments, follow-up of the money transfers.
- Manage the entire project budget.
- Verify the expenditures in relation to the approved/available budget.
- Preparation of the expenditures spreadsheets and reports for various stakeholders.
- Present the financial reports for audits and as may be required from time to time.
- Manage the office petty-cash.
- Verify the expenditures of our partners and give them financial management support.

Qualifications & Experience

- A Postgraduate Diploma in International Business Management/Accounting or relevant field.
- At least 10 years post qualification experience in accounting and project finance administration.
- An in-depth knowledge on European Development Fund (EDF) financial procedures, especially the 9th and 10th EDF procedures.
- Experience of international projects in the SADC region is a must.
- A Master in Business Administration or a professional qualification will be an advantage.

Required Skills and Competencies

- Team player with a distinction for professional growth and self-management.
- Interpersonal sensitivity.
- Analytical and problem solving skills.
- Attention to detail and business acumen.
- Customer service orientation.
- Planning and organising skills.
- Presentation skills.
- Computer skills with proficiency in Office tools.
- Ability to communicate effectively orally and in writing.
- Ability to prepare written reports in a clear, concise and meaningful manner.
- Ability to work in an international environment.



AMESD Thematic Expert-Agriculture/Drought/Fire (1 post) based in Gaborone

Duties and Responsibilities

The “**AMESD Thematic Expert Agriculture, Drought and Fire Services**” is responsible for the scientific part of the development of the Agriculture, Drought and Fire Services within the SADC THEMA including:

- Provision of support to research and development of the three services drought, fire and agriculture based on Earth Observation data.
- Defining the algorithmic specifications of the Agricultural AMESD service targeting the user needs and supports the other ones.
- Developing prototypes and test and validate those algorithms including set-up and performing validation exercises.
- Testing and validating the generated output products.
- Supporting the Software Developer and the System Administrator.

In addition to the primary role, additional responsibilities on a regular basis include;

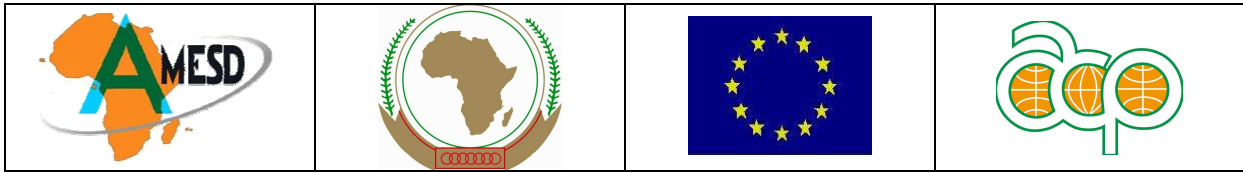
- Documentation of AMESD services (specification of the service, product description, user manuals, training material and other).
- Representing AMESD and BDMS on international events.
- Creating active user-networks in and outside Botswana.
- Conducting stakeholder trainings.
- Creating training material and supporting universities to adapt their curriculum.

Qualifications & Experience

- MSc/PhD in Agriculture/Bio-engineering or relevant discipline with specialization in remote sensing.
- At least 7 years post qualification experience in the use of earth observation for agricultural and/or environmental monitoring using GIS tools/Remote Sensing and image processing technology knowledge.
- Experience of international projects in the SADC region will be an asset.

Required Skills and Competencies

- Team player with a distinction for professional growth and self-management.
- A flair for Geographic Information System, Remote Sensing and Image Processing Technology.
- Application of Earth Observation.
- Experience with applied digital image processing and analysis software's.
- Good computing skills including system management under Unix/Linux, knowledge of programming and scripting.
- Good knowledge of SADC regional ecosystems.
- Ability to communicate effectively orally and in writing.
- Ability to prepare written reports in a clear, concise and meaningful manner.
- Ability to work in an international environment.



AMESD GIS & Remote Sensing Software Developer (1 post) based in Gaborone

Duties and Responsibilities

The “**AMESD GIS & RS Software Developer**” is responsible for developing the operational processing chains for the Agricultural Service within the SADC THEMA and for developing tools to support the integration of all chains in the operational processing environment of BDMS and the dissemination of the products to the outer world including:

- Discussing with Thematic Experts to determine what software is required or what modifications to existing software are needed.
- Providing high-level expertise in designing, developing and customizing GIS-based applications.
- Setup of structured development environment.
- Develop and update the SADC THEMA AMESD website and webservice;
- Maintenance and configuration of a EUMETCast reception station.
- Testing and validating software.
- Working directly with Thematic Experts and end-users to help them use the software accurately and as intended.
- Provides and searches ICT techniques to improve the service.
- Set-up and maintain website and FTP-server for the distribution of products.
- Troubleshooting code or computer programs.
- Set-up and maintain a QA (Quality Assurance) system.
- Performing general system maintenance and production support as necessary.

In addition to the primary role the **AMESD Software Developer** will perform additional responsibilities on a regular basis including;

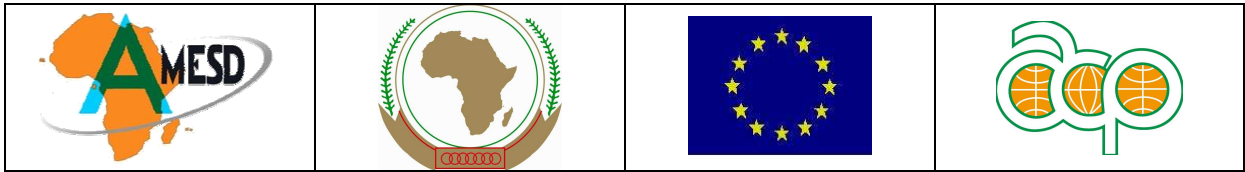
- Documentation of AMESD services (specification of the service, product description, user manuals, training material and other).
- Representing AMESD and BDMS on international events and support to the creation of active user-networks in and outside Botswana.
- Conduct stakeholder training and support in the creation of training packages.

Qualifications & Experience

- BSc in ICT or relevant field.
- MSc in Computers Science in ICT or relevant field will be an advantage.
- At least 7 years post qualification experience in GIS and Remote Sensing knowledge.
- At least 5 years of working experience in operational IT services or projects.

Required Skills and Competencies

- Team player with a distinction for professional growth and self-management.
- A flair for Geographic Information System, Remote Sensing and Image Processing Technology.
- Experience in developing Earth Observation Applications.
- Good computing skills under Unix/Linux and Windows.



- Use of GIS tools (ILWIS, ERDAS Imagine, ARCGIS, etc.)
- Knowledge of Programming and Script Languages (C/C++, Java, IDL, Perl/Python, tcl/tk, bash, etc.)
- Database design and management methods and software (UML, MySQL, PostgreSQL, Oracle, etc.)
- Website and web services development (PHP, CSS, Javascript, etc.).
- Knowledge of SW Development Tools; (make, build, version control, deployment, bug-tracking, debugging, QA, document management).
- Server maintenance and administration (Linux, Windows 2003/2008 server);
- Ability to communicate effectively orally and in writing.
- Ability to prepare written reports in a clear, concise and meaningful manner.
- Ability to work in an international environment.



AMESD System Administrator (1 post) based in Gaborone

Duties and Responsibilities

The “**AMESD Systems Administrator**” is responsible for the installation and the maintenance of the AMESD ICT infrastructure within BDMS and for the timely processing of the chains and the dissemination of the output products; installing, maintaining and upgrading servers and the network, the disk-storage and the tape-writers. This position requires the incumbent to:

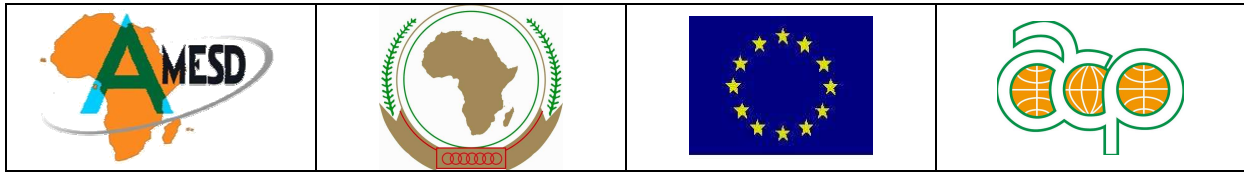
- Perform programming (usually scripting, which involves writing programs to automate tasks).
- Maintenance of laptops and the printers.
- Acquisition of required Earth-Observation (EO) data (via EUMETCast and/or FTP), back-up and storage of those data.
- Maintenance and configuration of a EUMETCast reception station. Operating the processing chains at predefined regular intervals. Set-up and maintenance of website and FTP-server for the distribution of products.
- Ingestion of the generated products in the upload facility of EUMETCAST.
- Working directly with Thematic Experts and SW-Developers to help them use the systems and software accurately and as intended.
- Troubleshooting code or computer programs that are causing errors or inaccuracy in various programs.
- Provides and searches ICT techniques to improve the services and dissemination of the generated products towards our end-users.
- Set-up and maintain a QA (Quality Assurance) system and performing general system maintenance and production support as necessary.

In addition to the primary role the **AMESD Software Developer** will perform additional responsibilities on a regular basis including;

- Documentation of AMESD services (specification of the service, product description, user manuals, training material and other).
- Representing AMESD and BDMS on international events and support to the creation of active user-networks in and outside Botswana.
- Conduct stakeholder training and support in the creation of training packages.

Required Skills and Competencies

- Team player with a distinction for professional growth and self-management.
- Flair for computer networking, system administrations, and software installation.
- Server maintenance and administration (Linux, Windows 2003/2008 server);
- Use of GIS tools (ILWIS, ERDAS Imagine, ARCGIS, etc.)
- Knowledge of Script Languages (IDL, Perl/Python, tcl/tk, bash, etc.)
- Database maintenance (MySQL, PostgreSQL, Oracle, etc.)
- Network installation and administration.
- Website and web services development (PHP, CSS, Javascript, etc.).



- Knowledge of SW Development Tools; (make, build, version control, deployment, bug-tracking, debugging, QA, document management).
- Experience in operating Earth Observation Applications is an advantage.
- Ability to communicate effectively orally and in writing.
- Ability to prepare written reports in a clear, concise and meaningful manner.
- Ability to work in an international environment.

Qualifications & Experience

- A BSc in Computer Science or relevant field.
- A MSc in Computers Science in ICT or relevant field is an advantage.
- At least 7 years post qualification experience in system administration.
- At least 3 years of working experience in operational IT services or projects.

AMESD offers an attractive and competitive salary and also provide an opportunity to operate at regional and international level with high exposure on the operational systems for the ACP, AU, EU and SADC.

Applicants

Qualified candidates are required to quote the position they are applying for and provide a comprehensive CV, certified copies of certificates, and at least three work related references. Applications should be addressed to:

The Managing Director
Corporate Services Bureau
P O Box 45404
Gaborone



Or

Email to: peters@csb.co.bw
enquiries@csb.co.bw

or

Or

Hand Deliver to: Unit 48G, First Floor, Molapo Crossing, Gaborone

For further information please contact: Moagi at 3973740 or 71825041

NOTE: Only short-listed applicants will be responded to.

Closing Date: Monday 4 October 2010



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