

## **REQUEST FOR PROPOSALS #0140A**

### **Request for Proposals for a Business Intelligence and Analytics Platform**

#### **In Support Of**

**ELIZABETH GLASER PEDIATRIC AIDS FOUNDATION (“EGPAF”)**

**1140 Connecticut Avenue, NW**

**Suite 200**

**Washington, DC 20036**

**Firm Deadline: February 9, 2018 - 5:00 PM EASTERN STANDARD TIME**

The Elizabeth Glaser Pediatric AIDS Foundation, a non-profit organization, is the world leader in the fight to eliminate pediatric AIDS. Our mission is to prevent pediatric HIV infection and to eliminate pediatric AIDS through research, advocacy, and prevention and treatment programs. For more information, please visit <http://www.pedaids.org>.

#### **BACKGROUND**

Over the course of the past 10 years, EGPAF developed a web-based data entry system (with a centralized data warehouse) used by multiple countries to enter clinical healthcare data to track the effectiveness of EGPAF’s programs designed to reduce the number of children born HIV positive as well as to improve outcomes for HIV positive children. For the most part, reporting requirements were uniform and hundreds of indicators were captured by facilities in 15 country programs (14 in Africa and 1 in India).

In the past few years, the number of health care facilities supported through EGPAF programs increased tremendously, and with the introduction of new donors with different reporting requirements, working with the centralized legacy data entry and reporting system became burdensome and untenable for some EGPAF country programs. Furthermore, some country programs requested data entry frequencies changed to a monthly pattern as opposed to the standard quarterly reporting. This frequency change further compounded matters as the legacy system was not built to easily address differing reporting requirements which ultimately resulted in several country programs creating their own data management systems.

EGPAF recently created a Global Informatics Unit responsible for developing data systems for country teams including supporting their new and/or changing data landscapes. Unfortunately, as country programs implemented their own data entry systems, data delivery to the Informatics Unit switched from the legacy data entry system to providing flat files through a variety of means including FTP, Dropbox, and email to name a few. In addition, the format of data being sent was often inconsistent therefore complicating the ability of the Informatics Unit to easily aggregate data within or across country programs.

These changes in delivery cycles and data formats made data sharing a more manual, time intensive process. The Informatics Unit had to work with each country program to resolve file format issues, data validation errors, and inconsistencies with both indicator and facility names.

EGPAF understands that a new business intelligence and analytics platform, leveraging current technologies and incorporating new processes for information management, is needed to address the shortcomings of the current system and to provide robust reporting of EGPAF program outcomes and effectiveness to EGPAF staff, the public, and donors.

EGPAF is therefore soliciting the services of a competent and experienced consulting firm to provide services to work collaboratively with the Global Informatics Unit to build platform for the purpose of business intelligence and analytics and a special focus on information management as well as to mentor and train relevant EGPAF staff on the day to day use and maintenance of the new system.

### PURPOSE/SCOPE OF WORK

The overall goal of the this project is to create a platform which allows for the collection of multiple, frequently changing formats of data collected by multiple sources and country programs across multiple time periods. The Informatics Unit will need to collate and aggregate this data into a cohesive and holistic view for business intelligence and analytics by various EGPAF staff at multiple levels.

#### Data Warehouse Storage and ETL (Extract, Transform, Load)

Data warehouse storage and ETL functionality and analytics will leverage current Microsoft Business Intelligence technologies that may include but are not limited to:

- SQL Server 2016 Enterprise Edition Database Server
- SQL Server 2016 Integration Services
- SQL Server 2016 Analysis Services (Tabular)
- Azure Data Lake

Data volumes for the data warehouse are expected to fall between approximately 50-100 GB of data. The ETL processes will need to discern between those country programs with their own clinical data management systems and those country programs who will deliver their clinical data in flat files. Data are expected to be collected monthly or quarterly from EGPAF supported health care facilities, though the frequency may change in the future.

ETL is expected to capture data via multiple interfaces leveraging REST API connectivity to DHIS2 installations as well as several in-country databases and flat files exported from other systems. The system must have the ability to dynamically adjust to accommodate changes to the underlying data sources.

#### Measures

There are two levels of granularity for indicator measures that will be stored in the new system: health facility indicators collected from country programs, and a set of Global Priority Indicators (see Appendix I) which are calculated by rolling up respective health facility indicators. Because

facility indicators vary from country program to country program (as well from quarter to quarter), there will need to be a mapping which specifies exactly how each country program's indicators map to the respective global indicator for each reporting quarter (or month). Both facility and global indicators may change over time so the new system must be able to accommodate these changes without an overhaul to the ETL (see Enterprise Information Management below).

### Dimensions

Dimensions defined for the data warehouse include the following:

- Sites (facilities)
  - Sites are nested within geographic region (country, region, and district)
  - Site names will be maintained by a master list controlled by the Informatics Unit
- Time (Date)
  - Quarterly and monthly reporting views depending on how measures are collected. In the future there may be weekly or even daily level data.
- Indicators
  - EGPAF Global indicators
    - EGPAF Global indicators will be maintained by a master list controlled by the Informatics Unit
  - Country specific indicators
    - Country specific indicators will map to EGPAF global indicators via the master list above
- Disaggregations
  - Breakdowns of indicators on additional attributes such as:
    - Main: Gender
    - Main: Age
    - Main: Project
    - *Additional possibilities: Entry Point to Care, HIV+ status, etc.*

### Reporting and Visualizations

The new business intelligence and analytics platform is expected to leverage current Microsoft Reporting technologies including but not limited to:

- Power BI Pro
- SQL Server 2016 Power BI Report Server and/or Power BI Premium
  - Web-based reporting
  - Mobile platform reporting

The Informatics Unit is also familiar with the Microsoft Business Intelligence stack and expect to continue leveraging these technologies. All new work will leverage the Microsoft SQL Server Data Platform of which the Enterprise Edition is currently licensed by EGPAF for this effort.

EGPAF currently leverages Power BI for reporting and sharing of information both to internal recipients as well as to the public and would like to continue to use the product in the future. It is expected that approximately 100 users will be designing and sharing Power BI reports within the organization. Data from this platform will need to meet the needs of several audiences:

- EGPAF Global (HQ) - ~200 staff
- EGPAF Country Offices ~ 500-1000 staff

- Donors and Partners
- Public Visitors

Each audience has individualized needs for data use and security requirements around the types and granularity of data in the system.

#### Enterprise Information Management (or similar solution)

Data sources in the country programs change periodically so the new system must include the flexibility to allow for changing data sources. For this reason, Enterprise Information Management (EIM) will be a crucial component of the successful rebuild effort. EIM encompasses two distinct areas for EGPAF: master data management and data cleansing/standardization.

Master data management may be used to maintain the list of all facilities (sites) and indicators to be stored in the central data warehouse. EGPAF will maintain a master list of facilities used to maintain consistency when reporting and analyzing data. The data cleaning/standardization process will ensure that facility name changes match up to their master facility record. Since the Global Priority Indicators are aggregated from one or more individual facility indicators, the system must include mapping and oversight to maintain the correct relationship between facility indicators to their respective global indicator.

As EGPAF currently has a license for SQL Server 2016 Enterprise Edition, it is expected that Enterprise Information Management will rest in the purview of Master Data Servers and Data Quality Services. Both products work in conjunction with one another to ensure the smooth processing of data into the new warehouse.

#### Cloud

It is expected that a portion of this effort may reside in Microsoft Azure. Cloud utilization is not required at this time but may be introduced if sufficient need is warranted.

### DELIVERABLES

- A document or report summarizing the results of a requirements gathering conducted by the consulting firm through interviews with key Informatics staff (3 staff maximum)
- One or more databases as needed to support platform and reporting as described above and/or per requirements gathering
- ETL Framework for automating processing of EGPAF data which *may* include:
  - Incorporating REST API connectivity to DHIS2 health management systems used in select countries
  - Automated flat file processing for country programs not using DHIS2
  - Integration with in-country databases such as SQL Server, MySQL, etc.
- One or more semantic models to support reporting and analysis for EGPAF HQ and country programs
- Implementation of Enterprise Information Management system (or a similar solution) as described above which includes services for maintaining:
  - Site Master List
  - Global Priority Indicator Master List

- Relationships to country program facility indicators
- Framework to allow for changing data sources for each country program
- The incorporation of appropriate security roles and privileges for identified audiences: EGPAF Global HQ staff, Donors, Country Programs/Facilities, and the Public
- Data warehouse metadata auditing and report tracking for access and consumption metrics
- Weekly project progress status updates with key Informatics staff
- Documentation to support the project including but not limited to all mappings, roadmaps, and data dictionaries
- Training and mentoring of key Informatics staff, and appropriate documentation such that the Unit is fully capable of maintaining and modifying the system independent of further consultation with the consulting firm

#### MINIMUM REQUIREMENTS:

- Consulting firm resources will consist of recognized experts in their respective technical roles and responsibilities
  - Preference will be given to firms employing one or more Microsoft Data Platform MVPs
- Previous experience leveraging Microsoft Business Intelligence technologies in a variety of environments including Enterprise Information Management
- Previous experience working collaboratively with internal resources for training and mentoring purposes
- Experience developing new business processes and procedures
- Public and private-led training experience with Microsoft data platform technologies

#### FOUNDATION RESPONSIBILITIES:

EGPAF will provide the selected consulting firm with the following:

- Proper stakeholder and executive support is given
- Access and cooperation with the appropriate subject matter experts is provided
- Environments are accessible to consulting firm resources with appropriate security permissions at project start
- Key EGPAF personnel will be ready and available when appropriate
- Installation of appropriate OS and installation of appropriate SQL Server version
- A version control system for source code control and change auditing is accessible for the consulting firm

#### LOGISTICS:

##### *Specific Timeframe*

The period of performance for this agreement is approximately six months from the date of a signed Consulting Services Contract. Projected start date is February 28, 2018, but is subject to change. Contract may be extended at EGPAF's option.

##### *Location of Work*

Consultants will be expected to perform all tasks at their own offices as well as on-site in Washington, DC. Office space with access to internet and printing facilities will be provided at EGPAF offices.

**KEY CONTRACT TERMS:**

The anticipated contract type is time and materials plus expenses. Unless stated otherwise in the statement of the work, the Consultant is responsible for providing equipment and/or supplies required to perform the services.

All deliverables provided to the Foundation must be furnished for the use of the Foundation without royalty or any additional fees.

All Materials will be owned exclusively by the Foundation. The Consultant will not use or allow the use of the Materials for any purpose other than Consultant’s performance of the Contract without the prior written consent of the Foundation.

A signed Non-Disclosure Agreement (NDA) with EGPAF must be executed along with the associated Contract by the Consultant prior to performance of Services.

**EVALUATION CRITERIA AND SUBMISSION REQUIREMENTS:**

The Foundation will accept the proposal that presents the best value. All proposals will be evaluated against the following Evaluation Criteria. Each proposal must contain the items listed in the Submission Requirements column in the following chart. Please submit your Submission Requirements in the order that they appear below.

Evaluation Criteria	Submission Requirements	Weight
1. Past performance using described technologies	1. 3 professional references from similar past projects with phone and email contact information and one or more examples of prior work using the technologies described in the Purpose/Scope of Work section of this RFP	25%
2. Consulting firm’s proposed process and approach to meet our needs efficiently	2. A maximum 5-page written proposal explaining the process and timeline for implementation	30%
3. Total price	3. Total price for all activities including a price per each of the deliverables	15%
4. Qualifications of proposed individuals	4. CV/Resume of proposed individuals to work on this project	30%
<b>Total</b>		<b>100%</b>

PROPOSED TIMELINE:

**DATE: December 21, 2017** – Release of RFP

**DATE: January 12, 2018** - Questions submitted to Stephanie Bruno, Senior Data Architecture Manager – Informatics, [sbruno@pedaids.org](mailto:sbruno@pedaids.org) with a “cc” to Cathy Colbert, Sr. Awards & Compliance Officer at [ccolbert@pedaids.org](mailto:ccolbert@pedaids.org)

**DATE: January 19, 2018** – Q&A Document posted on EGPAF Website

**DATE: February 9, 2018** - Completed proposals must be delivered electronically by the deadline mentioned on page one to: Cathy Colbert. Sr. Awards & compliance Officer at [ccolbert@pedaids.org](mailto:ccolbert@pedaids.org) with a “cc” to Stephanie Bruno, Senior Data Architecture Manager – Informatics, [sbruno@pedaids.org](mailto:sbruno@pedaids.org).

**DATE: February 23, 2018** – Final decision announced and Offers notified

**DATE: February 28, 2018** – Contract executed and Services begin.

**Please note it is our best intent to comply with the above timeline but unavoidable delays may occur.**

ADDITIONAL INFORMATION

Please include the RFP # reflected on the first page of this document on all proposals and e-mail communications.

Any proposal not addressing each of the foregoing items could be considered non-responsive. Any exceptions to the requirements or terms of the RFP must be noted in the proposal. The Foundation reserves the right to consider any exceptions to the RFP to be non-responsive.

Late proposals may be rejected without being considered.

This RFP is not an offer to enter into agreement with any party, but rather a request to receive proposals from persons interested in providing the services outlined below. Such proposals shall be considered and treated by the Foundation as offers to enter into an agreement. The Foundation reserves the right to reject all proposals, in whole or in part, enter into negotiations with any party, and/or award multiple contracts.

The Foundation shall not be obligated for the payment of any sums whatsoever to any recipient of this RFP until and unless a written contract between the parties is executed.

Equal Opportunity Notice. The Elizabeth Glaser Pediatric AIDS Foundation is an Equal Employment Opportunity employer and represents that all qualified bidders will receive consideration without regard to race, color, religion, sex, or national origin.

**ETHICAL BEHAVIOR:**

As a core value to help achieve our mission, the Foundation embraces a culture of honesty, integrity, and ethical business practices and expects its business partners to do the same. Specifically, our procurement processes are fair and open and allow all vendors/consultants equal opportunity to win our business. We will not tolerate fraud or corruption, including kickbacks, bribes, undisclosed familial or close personal relationships between vendors and Foundation employees, or other unethical practices. If you experience or suspect unethical behavior by a Foundation employee, please contact Doug Horner, Vice President, Awards, Compliance & International Operations, at [dhorner@pedaids.org](mailto:dhorner@pedaids.org) or the Foundation's Ethics Hotline at [www.reportlineweb.com/PedAids/](http://www.reportlineweb.com/PedAids/). Any vendor/consultant who attempts to engage, or engages, in corrupt practices with the Foundation will have their proposal disqualified and will not be solicited for future work.