1. Background

The HIV and AIDS Data Hub for Asia and the Pacific (hereafter, the Data Hub) was launched in 2008 through the strong collaborative effort of three partners, namely, UNICEF East Asia and Pacific Regional Office (EAPRO), the Asian Development Bank (ADB) and the UNAIDS Regional Support Team for Asia-Pacific (RSTAP), to drive the “Know your epidemic, know your response” message to countries. Based on the recommendation of an external Management Review supported by the partners in 2011, the management and operations of the Data Hub was transitioned from UNICEF EAPRO to UNAIDS RSTAP in January 2012. During 2012-2013 other aspects of the Management Review recommendations have been followed up successfully at RST, so that the Data Hub has now become a key resource and important support for countries and regional partners in the Asia-Pacific region.

The Data Hub consists of three aspects: the analysis team, the regional database, and the website. The Data Hub team collates and synthesizes available data from country cross-sectional surveys, prevalence studies, behavioral surveillance and other national and global reports, encompassing five key domains: vulnerability, risk behaviors, HIV infection/disease prevalence, HIV expenditure and national response. The Data Hub regional MS Access offline database now has about 125,000 data points for over 1600 indicators and sub indicators from over 1000 unique sources. The Data Hub complements the global standardized GARP and health sector indicator data available through UNAIDS AIDSinfo with additional thematic and sub-national information, both epidemiological and response-related. It has a strong focus on key populations at higher risk and women and children, with gender-and age-disaggregated data where available. These data are crucial to understanding the highly geographically localized epidemics among different sub-populations at higher risk in Asia-Pacific countries, and are necessary to design cost-effective targeted programmes and interventions.

Increasingly, besides routine data collection in the areas described above, the Data Hub team interacts directly with national and regional partners so that it can respond specifically to regional needs in generating and disseminating strategic information, and in raising interest in data use. This approach has increased the utility of the Data Hub considerably as the data products are produced for particular purposes as required by partners, and then posted on the website.

The Data Hub’s web portal, www.aidsdatahub.org, remains the only regional site of its kind, with a large repository of HIV strategic information on 26 countries in Asia-Pacific (including Hong Kong Special Administrative Region of the People’s Republic of China). An improved and visually eye-catching web design was developed during 2012-2013 to target policymakers with the provision of key regional and country-level HIV facts and messages for advocacy and action on the main landing pages, in addition to the existing detailed data products. Other changes include making the website more user-friendly, with information categorized more logically by key population and thematic area, an online database that mirrors the offline database and allows users to select information and create customized charts online, and a better search function. The revamped website was officially launched on 17 November 2013 at the WHO-UNAIDS Leadership Forum meeting held in the run-up to ICAAP11 in Bangkok, Thailand.

With the Data Hub fast becoming one of the region’s most important and popular HIV knowledge tools there is a larger demand on the team to improve the database and website and to keep abreast with rapidly changing data visualization tools and techniques to meet the information needs of a wide array of different UN and civil society partners. To keep up with this demand, RSTAP requires an Information and Communications Technology (ICT) consultant team to support the Data Hub team in website maintenance, online database optimization, improving the understanding of users’ profile, enhancing website traffic, and providing data visualization on website as required.
Scope of Work:
ICT consultant will be required to work from 1 October 2014 – 30 September 2015

The tasks of the ICT consultant will include provision of required technical support to the team in areas of website and database optimization. Tasks include but not limited to:

- Manage and maintain website to ensure smooth access by users through any platforms, devices and operating systems
- Keep the server up at all times to provide users with access to required information when they need it.
- Design webpages or section of webpages to supplement the improved website and database features.
- Develop user friendly and eye-catching data visualization for website as required
- Optimisation and modification of a web-based online database to best serve and conform to the complexity of HIV data and indicators in the MS Access off-line database
- Implement technological solution for search engine optimization to maximize website users and build additional traffic

Detailed Tasks:

The consultant will work on routine website management and maintenance to ensure smooth functioning of the Data Hub website and accessibility at all times. The detailed tasks will include but not be limited to those listed below.

Website Management and Maintenance

- Manage and maintain website to ensure smooth access by users on a daily basis.
- Keep the server up at all times to provide users with access to required information when they need it.
- Ensure that the website is protected and that any chance of data loss is minimized, which will include back-up of the website and code backups as required or at least once a week to enable full restoration of the website.
- Upload and install security fixes and essential patches as required or at least on monthly basis based on security threats.
- Fine-tune all web features, clean-up errors, inconsistencies, and fix malfunctions and bugs as and when the need arises.
- Coordinate with Web Hosting company to fix any problem related to Web Hosting to ensure a reliable hosting environment and a stable functioning of the Data Hub Website
- Ensure conformation to major web-standards so that the website and its content can easily be indexed by major search engines (Google, Yahoo, Bing, etc.), and is accessible by different browsers (Internet Explorer, Firefox, Google Chrome, Safari, etc.) and operating systems.
- Ensure the accessibility of the website to low-bandwidth users or slow internet connections, and mobile platforms.
- Provide necessary technical support to improve and optimize current content management system of the website

Besides the tasks described above, the consultant will also provide additional support to specific technical tasks related to the website and database or for specific campaigns/features, which will be as agreed upon with the Data Hub team and/or RST, and may include those listed below.

Website improvements

Web design and visualization:

- Improve and develop data visualization tools and techniques including online interactive mapping and data visualization features for use on the DH web site.
- Design and upload interactive features such as home-page banners, highlighted events, maps, etc. as required.
- Adjust website design template and backend as necessary to accommodate expansion and growth of the website.
Maximize self-reliance of the Hub for the features that need regular update such as key messages on the home page and country pages, banners, highlighted events, etc.

Communications Tools:
- Improve and modify the features and mechanisms of the data-alerts, E-newsletter, and Social Medias such as Facebook and Twitter accounts of the Data Hub.

User Profiling:
- Develop optimal systems for monitoring users’ profile and website traffic,
- Advise, recommend, and implement appropriate information technology related solutions to reach potential users with different level of data needs and expertise,

Search Engine Optimization:
- Implement appropriate information technology related solutions to reach potential users with different level of data needs and expertise
- Develop and implement a system to enhance SEO and website traffic.

Online database
- Maintain the online database and ensure the optimal user experience in accessing the database
- Review, design and improve the user interface of online database to optimize and best serve the data needs of the users
- Adjust the structure of online database as necessary to best reflect the Data Hub regional offline database
- Streamlining the online database and associated data visualization tools on the optimal website systems such as development of the one-time data update system that ascertains data uploaded in the online database can reflect automatically in other data visualization tools (for example online interactive mapping tool) on the website

Outputs:
These will be as agreed upon with the Data Hub Technical Manager, in line with the strategic directions of the Data Hub and RST, and in consultation with the Data Hub Secretariat. They might include but not be limited to:
- Accessible website and online database at all times.
- Appropriate monitoring tool and mechanism in place for website management and maintenance
- Secure and bug-free website with the mechanisms to regularly back-up the entire database, reference materials and website features and be able to restore all the data in case of any errors as soon as possible.
- Monthly written back-up report summaries and updates.
- Re-designed webpages and other features such as events and campaigns, etc.
- Structure of online database adapted, improved and reflecting the changes made in MS Access offline database
- User interface of online database improved to allow optimal user experience.
- One-time data update system keep in place to serve and best reflect the requirements of Data Hub regional database and online data tools.
- Website and database visually and functionally improved with appropriate data visualization tools and techniques.
- Detailed analysis of users’ profile and website traffic.
- Search engine further optimized with increased number of unique visitors Appropriate monitoring tool for the website traffic and analytics.
- Improved data alerts and other communication tools of the Data Hub
- Strategically improved features and processes to best serve the needs of various user profiles such as policy makers, managers, researchers, community, etc., while maintaining the familiarity and user-friendliness.
Supervision and Reporting Requirements:
The consultant will be guided by and report to Dr Amala Reddy, UNAIDS RST AP, Data Hub Technical Manager as Supervisor and shall provide regular updates and progress reports.

Qualifications or Specialized Knowledge/Experience Required:
Essential:
- Professional or Master’s degree in Computer Science, GIS or related fields
- A minimum of 10 years’ experience in technology related strategic planning in large scale information systems with at least 5 years’ experience in providing innovative sustainable technology solutions in public health domain
- Excellent English language written and verbal skills

Preferred:
- Ability to keep-up with rapidly changing information and communications technology especially in the areas that are relevant to health information systems.
- Proven portfolio of innovations in health information and data management.
- Experience working with international organizations, preferably the UN
- Basic knowledge of HIV/AIDS

Duration
The work will commence over the period of 1 October 2014 – 30 September 2015.

Closing Date:
Interested applicants/teams/companies are requested to send a technical proposal briefly describe the methodology, timeframe and expected outputs, etc., you plan to use to address the above requirements together with consultant fee and other budget, if any. Please submit your proposal along with application letters and your profile to Data Hub Program Associate at wangchumtongn@unaids.org the closing date is 29 August 2014. Only short listed candidates will be contacted.

Note: In case the consultant is not a current resident of Bangkok, transfer and visa requirements will be the Consultant’s own arrangements.