



FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
Terms of Reference for Consultant/PSA

Job Title: Information Technology Officer – IT Developer	
Division/Department: AGA/AG	
Programme/Project Number: EMPRES	
Location: Rome, Italy	
Expected Start Date of Assignment: Asap	Duration: 11 months
Reports to: Name: J. Pinto	Title: Animal Health Officer

GENERAL DESCRIPTION OF TASK(S) AND OBJECTIVES TO BE ACHIEVED

In the framework of the FAO-EMPRES Emergency Centre for Transboundary Diseases (ECTAD), under the overall supervision of the Chief, Animal Health Service (AGAH), direct supervision of the GLEWS coordinator in close collaboration with EUFMD, IDENTIFY and EPT + Coordinators, the incumbent will undertake the following activities:

- To contribute to the development, validation and launch to the public of the Genetic Module for Influenza Virus and FMD virus in the EMPRES-i platform
- To improve interfaces with SIB Web Services, in order to search influenza virus isolates also by country and by status (validated or not)
- To assist in the use of phylogenetic tools -developed by SIB- within the genetic module
- To implement the in-site validation for the EMPRES-i system, by writing the same algorithm exposed by the SIB Web Service
- To make the genetic module actually connectable to more than one external system/database, e.g. for GISAID genetic influenza virus data. The main idea is to reuse the interfaces already established for exchanging with SIB
- To implement an "ETL" (extract, transform, load) adapter to allow inserting data coming from the EuFMD databases, into the EMPRES-i Surveillance Module.
- To integrate Serotyping, Genetic information of FMD isolates into EMPRES-i by linking outbreak information with genetic sequences information from isolates published by FAO FMD WRL.
- To integrate EUFMD project surveillance activities in EMPRES-i that include preparation and upload of files (Access mdb) containing different sections (vaccination plus serology, population and outbreaks). The data model is fixed and the adapter has to transform data from EUFMD database into EMPRES-i by using Excel files with tabular data for single sections (e.g. outbreaks, vaccination).
- To develop a web interface that allows uploading and inserting the data into the Surveillance Module.
- To develop outputs for EuFMD data to be displayed in EMPRES-i. Possible outputs to be implemented are:
 - Tabular representations of data;
 - Downloadable files (e.g. csv, xls) with data;
 - Mapping tools (e.g. layers and interpolation with other GIS resources)
 - Charts with analytical/statistical results.
- To implement a Geo RssFeeds reader, inside EMPRES-i, that periodically connects to the Wildlife Health Event Reporting System (WHER) GEO RSS public interface, in order to acquire the new data and insert rows on a "temporary storage" in EMPRES-i, where data can be seen, updated and validated.
- To implement the internal validation interface in the EMPRES-i System in order to let the data to be

checked, in case changed, and finally validated.

- To implement the adapter that transforms an WHER RSS just validated row into a regular Outbreak inside the Disease Tracking system.
- To develop outputs for that set of data (GIS layers, charts, etc).
- To show results also in the EMPRES-i public website and Wildlife Unit Web page
- To further develop the EMPRES-i laboratory directory, including for annual reporting by FAO Reference Centres.
- Other duties as requested.

Technical Requirements:

7+ years of expertise in developing software for Enterprise class systems, as for both Web Developing and System to System integrations.

He/she has to be an experienced developer in the following languages/platforms:

JAVA, Adobe FLEX, SQL (MySQL and PostgreSQL), HTML/HTML5/CSS, JavaScript/Ajax (i.e. jQuery and/or Dojo), XML.

He/she has to be familiar with the following tools/frameworks for Java and Flex: Eclipse for J2EE (including Flex Builder), Jboss, Tomcat, JDBC, Hibernate, Spring, BlazeDS and/or GraniteDS for Flex, SOAP and RESTful API for Java. JasperETL is a plus.

Fluent in English and with knowledge of Spanish/ French.

Duration: 11 months

How To Apply:

Applicants must complete the Personal History Form available in MS Word, that can be downloaded from the Employment/Consultants page (top-right corner) or by opening the following link:

http://www.fao.org/fileadmin/user_upload/Employment/ADM11E.DOT

and send the completed Personal History Form to the following email address:

Empres-i-Consultants@fao.org

by specifying the Profile-code in the email subject (the Profile-code is identified close to each Profile Description).

Note: Any email that does not include a completed Personal History Form will be discarded.

What happens next:

When you send in your Personal History Form, you will receive an automatically generated acknowledgement indicating that we have received your email. After reviewing all relevant Personal History Forms, if we wish to pursue your application, we will contact you.

Please note that other than the automatic acknowledgement, you will not be contacted by us unless we wish to pursue your application.

Please do not send any inquiries or status requests to the above mentioned email address, as this email address is intended for electronic filing of Personal History Forms only.