BANGLADESH RCMS AFIS

Assignment name: Supply And Delivery of Implementation of Automated Fingerprint Identification System (AFIS) including necessary licenses, hardware and relevant equipment Country: Bangladesh Location within country: Dhaka

Name of Client: International Organization For Migration (IOM)

Duration of assignment (months): 6 months

Start date (month/year): 24th November 2019

Completion date (month/year): Ongoing

Name of associated Contractors, if any: N/A

Narrative description of Project:

The project requirements included Supply, delivery and commissioning of an Automated Fingerprint Identification System (AFIS) including necessary software, hardware and licenses by the International Organization for Migration (IOM). This system efficiently features one-to-one and one-to-many matching of a given biometric fingerprint input against the stored biometric records within the system. At the same time IOM RCMS AFIS features automated synchronization with the data sources of multiple stakeholder agencies connected with this system. As a result, this system always remains updated and for the deployment of specific identity instance management algorithms, the redundancy of deduplication will be obsolete. In addition to that, a stand-alone AFIS Engine being a part of this project, the user of this system with proper access is able to adjust threshold for False Acceptance Ratio (FAR) and False Rejection Ratio (FRR) which even results better matching result.

Description of actual services provided by your staff within the assignment:

- System and software requirements analysis for coming up with a detailed list and description for each of the functional and non-functional requirements based on the clients' needs. This will be prepared in collaboration with the clients, stakeholders, and through field visits and meetings etc.
- Finalization of the development and implementation methodologies and revising the proposed work plan, if needed, in collaboration with the client by showing proper reasoning for each changes how they are best suited for the successful implementation of the project.
- System designing and preparation of the design document for internal development team usage and reference that should identify the required components of the system, functional modules, database design, API design etc.
- Designing, developing and implementing a fingerprint biometric matching engine for one-to-one (1:1) and one-to-many (1: N) matching of the fingerprints of potential returnees processed under RCMS applications against the whole database of fingerprints.
- Designing, developing and implementing an Identity management system (IMS) which serves the purpose of adjudication for handling the abnormal cases and possible multiple results sets identified by the AFIS.
- Planning, designing, developing and implementing a separate Data Synchronization Module (DSM) that maintains a regular sync with the data sources on DIP and BMET i.e. the fingerprint data including the facial image and demographics stored in their respective databases.
- Designing and development of a separate module for managing the manual enrollment and deduplication on the available data entities so that multiple instances of a person's fingerprints can be kept along different timeframe.
- Testing and quality assurance of the software features and other components of the developed

system so that the system and the software come out virtually bug free and all components work properly as they should be.

- Performing an extensive Operational Acceptance Test (OAT) including other tests for the client and the users to test the system and report any changes that they might require, fixing any newly found issues and changing any features as per the requirement of the client.
- Conducting a thorough hands-on user and technical training and knowledge transfer program as per the proposed training plan, providing with training materials to the trainee such as handouts, user manuals, assignments/quizzes depending on the client's requirement specified in the bidding document etc.
- Maintenance and support services in order for accommodating any new changes as and when they are required by the client, fixing bugs, maintaining the system and the environment regularly in order to ensure that the system runs smoothly all the time, and responding to the support requests as per the Service Level Agreement (SLA).