

REQUEST FOR QUOTATION

RFQ Reference No.: RFQ 09-2023

Date: 27 April 2023 – updated 08 May 2023

Subject of RFQ): **Application Programming Interface (API) Development and Web Development Maintenance and Support for Existing Drupal-Based Website**

International Organization for Migration kindly requests your quotation for the provision of services described in the RFQ submission form below.

When preparing your quotation, please be guided by the RFQ information below. It is your responsibility to ensure that your quotation is submitted on or before the deadline. Quotations received after the submission deadline, for whatever reason, will not be considered for evaluation.

RFQ INFORMATION

Deadline for the submission of quotations	26 May 2023 – Extended from 11 May 2023 and subsequent extension from 19th May 2023.
Method of submission	Quotation must be submitted via Email to iomdeadmin@iom.int with gmdacadmin@iom.int in CC.
Cost of preparation of quotation	IOM shall not be responsible for any costs associated with a vendor's preparation and submission of a quotation, regardless of the outcome or the manner of conducting the selection process.
Contractual Terms	Any Purchase Order that will be issued as a result of this RFQ shall be subject to the IOM standard terms for provision of goods/services/transportation/medical services available at https://www.iom.int/do-business-us-procurement or IOM standard contract templates.
Documents to be submitted	<p>Bidders shall submit:</p> <ul style="list-style-type: none"> - 2 <u>Separate</u> Quotations/Price Schedules including breakdown of expected services provided and associated costs per Hour (Including VAT/Brutto) and estimated delivery schedule. <ul style="list-style-type: none"> Quotation 1: API Development + Web Development Quotation 2: Portal Adjustment for MGI Section - Signed Bidder's Declaration of Conformity (DOC) - Expertise Overview and Examples of previous <ol style="list-style-type: none"> 1) API development and documentation 2) Platforms developed and/or maintained
Quotation validity period	The quotation/s shall remain valid for at least 30 days after the deadline of submission. In case of selection via Notice of Award, the quoted prices are to be valid from the contract start date until completion of services by 10 December 2023 .
Price	Quotations shall be for the services stated in the Specific TOR (Terms of Reference) below on Page 3 .
Clarifications	<p>Contact person for correspondence, notifications and clarifications</p> <p>Contact person: Michael McCormack</p> <p>E-mail address: iomdeadmin@iom.int</p> <p>Tel: +49 30 278 778 60</p>
Evaluation method	The contract will be awarded to the lowest price substantially compliant offer
Right not to accept any quotation	IOM is not bound to accept any quotations, nor award a contract or purchase order
Expected date for contract/PO award	24 June 2023

Intellectual Property Note	If contracted, all outputs and intellectual property created during the assignment, including but not limited to system code, system design, data, findings, results, solutions, recommendations and any other documents and designs developed throughout the project shall be owned by IOM. The Service Provider shall develop materials and recommendations assuming current business processes and retention of current duties, accountabilities and responsibilities but may make recommendations for changes. Documents provided to IOM shall be considered “draft” until IOM provides feedback and comments which the service provider shall incorporate, as appropriate; at that point, the document will be considered “final” by the Service Provider. If no comments are received by the service provider, the “draft” will be considered final by IOM.
Confidentially Note	Information relating to the evaluation of proposals and recommendations concerning awards shall not be disclosed to those who submitted proposals or to other persons not officially concerned with the process. All IOM proprietary data shared with the service provider shall be governed by a Non-Disclosure Agreement as part of the agreement.
Payments Note	There are no prepayments for deliverables from the selected service provider. Invoices will be paid within 14 days of receipt of the invoice after completion of deliverables. Individual orders can be invoiced individually.
Vendor Information and Profile Note	At the request of IOM Germany, the vendor may be requested to provide further information on the company profile including Company Name, Registration No., VAT No., and Bank Information for IOM due diligence and contracting purposes.

Thank you and we look forward to receiving your quotation.

Issued by:

Name: Hania Mir
 Title: Administrative Assistant
 Date: 27 April 2023

Amended 08/05/2023 and subsequently 16/05/2023:

Signature: _____
 Name: Michael McCormack
 Title: Senior Procurement and Logistics Assistant
 Date: 16 May 2023

TERMS OF REFERENCE (TOR)

A. Introduction

Founded in 1951, the International Organization for Migration (IOM) is the leading intergovernmental organization in the field of migration. IOM is committed to the principle that decent and orderly migration benefits migrants and society alike. Together with its partners in the international community, IOM contributes to addressing the growing operational challenges in the field of migration, promoting understanding of migration concerns, social and economic development, and migration and to maintain the well-being and human rights of migrants. Headquartered in Geneva, IOM has 174 Member States and more than 17,000 employees in 523 locations worldwide. Since September 2016, IOM has been part of the United Nations system as a related organization.

The Global Migration Data Analysis Centre (GMDAC) is part of the IOM Global Data Institute (GDI) and is responsible for providing all stakeholders with a better understanding of global migration data. GMDAC is involved in a variety of tasks including data analysis and collection, support for IOM missions, capacity development for IOM Member States and knowledge management.

B. Description of Services

As per the following description, IOM is seeking quotations from interested service providers for the **Application Programming Interface (API) development and web development maintenance and support for an existing Drupal-based website: www.migrationdataportal.org**

The Global Migration Data Portal (hereafter “the Portal”) aims to serve as a unique access point to timely, comprehensive migration statistics and reliable information about migration data globally. The site is designed to help policy makers, national statistics officers, journalists and the general public interested in the field of migration to navigate the increasingly complex landscape of international migration data, currently scattered across different organizations and agencies. In order to improve the efficiency in automatically accessing and integrating data available on the Portal, an API development is planned.

The development and maintenance of a read-only API is needed to make international data on migration available in the Portal’s database accessible with an authentication system for the following internal and external user groups:

- Data analysts who would like to use the data for further analysis;
- Web developers who would like to use the data to develop their own visualizations;
- International organizations, non-governmental organizations, governments and journalists who aim to use and share relevant data from the Portal on their customized visualizations.

C. Concrete Deliverables

Quotation 1: API Development + Web Development

1) API development, implementation, security and maintenance:

- Collaborate with relevant stakeholders to understand user needs.
- Analyze existing Migration Data Portal database in terms of compatibility with Statistical Data and Metadata Exchange (SDMX) representational state transfer (REST) API technical requirements and implement required modifications to the database.
- Design and develop an API that meets the identified user needs, is language agnostic, and supports multiple data output formats such as JSON, XML or CSV. The designed API must be developed in

accordance with IOM's web development guidelines and be compliant with IOM's Global Cybersecurity Standard for Applications.

- Implement a pub/sub mechanism for event notification of new updates to the database.
- Present the proposed design to IOM's information security team and architectural review board for approval of design.
- Implement proper authentication and authorization mechanisms to access the API. Implement API Security best practices as per OWASP (Open Worldwide Application Security Project) standards.
- Perform different types of tests, including user tests and security tests, to ensure that the API functions well and does not have vulnerabilities. Additionally, submit the developed API codes to IOM InfoSec team for validation of the API.
- Obtain security certification process from IOM Information Security (InfoSec) team before deployment to production.
- Create detailed API documentation to enable third-party developers and data users to efficiently use the Portal API.
- Develop an interactive data catalogue and automatize metadata management.
- Create and maintain API client libraries to provide an easy-to-use interface for third-party developers.
- Provide technical guidance and mentorship to IOM data and technical teams.
- Coordinate with IOM ICT to deploy the API to the live server. Configure and test the API on live server and fix any potential issues after deployment.
- Troubleshoot issues and solve problems, identify process improvement areas as required.
- Track API performance metrics and work to improve the stability, scalability, and availability of the API.
- Monitor API usage to identify trends and anticipate user needs.

2) Website development, security, and maintenance, with minor new developments according to IOM web standards, templates, and guidelines:

- All development must be compliant with IOM's Global Cybersecurity standard for applications.
- Create and maintain the clone version of the up-to-date live website to present all new developments and test them before the deployment to IOM internal development server.
- Maintenance of IOM's Global Migration Data Portal: maintaining security of the Portal including all required Drupal updates, module updates, and deployment.
- Configure new modules and create blocks in Drupal to allow the embedding of web application components (such as interactive data visualizations using Svelte framework).
- Add export function (in JSON, XML and CSV formats) to the Portal dashboard's frontend user interface (UI) as well as additional filters and highlight features.
- Add data download function for national data to the admin UI.
- Facilitate the automatic update of the Portal database using data providers' public APIs, where available.
- Enable editable search engine optimization (SEO) settings for the dashboard indicators.
- Include data providers of indicators in the search result indexing.
- Replace existing Mapbox map in dashboard with updated open source map (to be provided).
- Web development for minor adjustments/changes and new features, as required.
- Monthly Support - Minimum 4 hours support from the contract start date to December 2023 based on monthly priorities, starting with contract signature.
- Full back-end and front-end testing of new developments before deployment.
- Acceptance testing for all major web browsers (latest versions).

- Deploy to the IOM development server and configure the new development for GMDAC and ICT teams review.
- Deployment assistance to Acquia production server in-house at IOM, as needed.
- Provide full documentation of the site, including new developments.
- Give IOM access to the code throughout the duration of the contract.
- Handover all code to IOM at the end of the contract.

Quotation 2: Portal Adjustment for MGI Section

1) Migration Governance Indicators (MGI) section of the Portal

- Make technical adjustments to the MGI section in order to enable MGI country reports, including an interactive navigation wheel and corresponding information, to be embedded in IOM's internal Intranet .Net Azure-based knowledge sharing platform.

D. Required Skills

- Proven experience in architecting and documenting API architectures, including:
 - a. Solid understanding of API and integration design principles.
 - b. Experience working with HTTPS protocol and REST architecture.
 - c. Experience implementing API requirements such as security, custom analytics, throttling, caching, logging, request and response modifications, etc.
 - d. Experience with API test automation.
 - e. Hands-on experience in designing and developing web services using API protocols and different data formats (REST, JSON, XML and CSV).
- Proven experience in development, testing and maintenance of products built with Drupal content management system (CMS).
- Proven expertise in JavaScript with:
 - a. React framework (required)
 - b. Svelte framework (considered a distinct advantage).
- Experience in
 - a. HTML, CSS, and SVG for creating interactive web-based visualizations
 - b. UI / UX (user-interface/user experience) principles and modern web design techniques an asset.
 - c. Development and testing of products built with Drupal CMS.
 - d. MySQL databases.
 - e. Development and maintenance of data and knowledge platforms for international organizations is desirable.
- A strong understanding of data visualization and data storytelling techniques with a good sense of design and colour theory.
- Fluency in English.
- Familiarity with SDMX or experience in developing APIs for international organizations is a distinct advantage.