1. Background/Project description

The global programme Shaping Development-Oriented Migration (MEG), commissioned by the German Federal Ministry for Economic Cooperation and Development (BMZ) and executed by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, is a pivotal initiative in the realm of migration and development. Its primary aim is to empower partner countries to harness the benefits of regular migration while actively engaging diaspora communities to drive sustainable development.

The core objective of the project is to provide support to key actors in partner countries, enabling them to make gender-responsive contributions toward the effective implementation of the Global Compact for Safe, Orderly, and Regular Migration (GCM). This commitment underscores dedication to creating migration policies that align with international standards, emphasizing human rights and gender equality.

Programme approaches

The Programme employs a multifaceted approach to achieve its objectives:

- Shaping Migration Policy: We collaborate closely with partner countries as they formulate
 migration policies that align with the principles of the GCM, ensuring the safe and orderly
 movement of people and the protection of migrant rights.
- Gender Equality and Policy Coherence: We promote policy coherence, emphasizing gender equality through an intersectional lens, and actively collaborate with civil society actors. These aspects are pivotal in achieving a harmonious and inclusive approach to migration and development.
- Diaspora Engagement: Project seeks to encourage investment, knowledge exchange, and innovation in partner countries by engaging with the diaspora residing in Germany. This dynamic connection offers a unique avenue for supporting sustainable development in countries of origin.

Fields of Action:

The Programme operates within four core fields of action, each essential to the success of our mission:

1. Regular Migration:

- *Guidance to Political Partners:* Offering guidance to political partners on regular migration, ensuring alignment with international standards.
- *Training for Labour Inspectors*: Conducting training programs for labour inspectors to raise awareness of precarious working conditions.
- *Ethical Recruitment*: Implementing measures to ensure ethical and fair recruitment standards in partner countries.

2. Diaspora Cooperation:

Diaspora Experts: Supporting migrants from selected partner countries residing in Germany
to contribute voluntarily to development in their countries of origin. This includes advice on
engagement, training in knowledge exchange methods, networking events, expense
coverage and on-site support.

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- Diaspora Organizations: Providing support for projects initiated by diaspora organizations aimed at promoting development in their countries of origin. This support includes subsidies, application guidance, planning assistance, networking events and training.
- Business Ideas for Development: Supporting business founders in leveraging their expertise gained in Germany to benefit their countries of origin. This support includes individual coaching on creating and implementing business plans, financing for start-up preparations, and networking opportunities with potential partners, business networks, and start-up centers.
 - 3. Mitigating Precarious Working Conditions Enhancing the Protection of Migrants:
- Strengthening the Capacities of State Actors: Supporting partners in strengthening the capacities of state actors to protect the rights of migrant workers, particularly in the context of global care chains, such as women in precarious working conditions and children affected by care gaps.
- Supporting CSOs: Offering financial and technical support to Civil Society Organizations (CSOs) that work to protect the rights of migrant workers and their families.
- Regional Exchange: Organizing regional exchanges to promote peer learning and enhance the protection and agency of migrants in vulnerable situations.
 - **4. Multilateral Cooperation**: Strengthening International Cooperation for Safe, Orderly, and Regular Migration:
- Supporting International Organizations: Collaborating with international organizations, such as the IOM (International Organization for Migration), to set up the Global Data Institute.
- Funding Support: Contributing to the Migration Multi-Partner Trust Fund to aid in international migration efforts.
- Good Practice Documentation: Assisting partner countries in documenting and sharing good practices to promote safe, orderly, and regular migration at the international level.

The Programme MEG is committed to achieving sustainable migration and diaspora engagement and invites stakeholders to participate in this collective effort. Together, we aim to inspire a brighter and more inclusive future, where migration serves as a force for good, contributing to the sustainable development and well-being of all involved parties. A path toward a world where migration serves as a force for good, contributing to the sustainable development and well-being of all.

2. Context

The Georgian diaspora holds a significant and indispensable role in Georgia's journey toward sustainable development. With its global presence, this community contributes profoundly to various sectors, cultural preservation and social well-being. In addition, cooperation with the

¹ Note: This component is not being implemented in Georgia.

² Note: This entire field of action is also not being implemented in Georgia.



Department for the Relations with Diaspora of the Ministry of Foreign Affairs of Georgia has a longstanding history and is a vital element of the GIZ current MEG programme.

It is worth mentioning, that landscape of diaspora organisations and individuals is very diverse. There are numerous diaspora actors, active in the different fields of different countries and regions. Being informed about current directions of activities, profile, volume and having contacts of those diaspora actors is vital for MFA. Diaspora department has accumulated significant information and data regarding above mentioned profiles of diaspora actors during last decades, but the issue is the fragmentation and unorganised structure of this data, which makes the proper and efficient usage of this data, impossible.

In this context, in November, GIZ organized a workshop with the primary objective of bolstering the MFA Diaspora Department in identifying an optimal solution for the creation of a cohesive Diaspora Data Management Tool. The primary goal was to establish a unified IT system that would serve as a central hub for aggregating, processing, analyzing, utilizing, and advancing all diaspora-related data within the department.

Following the identification of various potential solutions to address the existing challenges, and the subsequent formulation of a comprehensive technical document, the final critical step involves development of the Diaspora CRM Platform (Web application).

Developed and ready-made technical document meticulously outlines all the functionalities and intricate details necessary for the seamless development of the Data Management Tool. The document will serve as a technical task guide, providing developers with a clear roadmap and specifying every essential detail required for the successful implementation of the tool.

The purpose of the web application is to create a simple and convenient functionality of information administration and communication, which will, on the one hand, improve and systematize the process of recording data on compatriots and diaspora associations abroad, and on the other hand, create data tools for data processing and interaction with registered users.

3. Scope of Work:

The overall objective of the assignment is the development of a web application with CRM functionality for the internal use of the employees of the Diaspora Relations Department and other responsible individuals.

CRM platform should provide:

- Data recording
- Data update
- Data usage
- Data sharing

The program should provide for compatriots employed in various fields abroad, as well as diaspora organizations operating there, educational, creative and other Data recording and management of type organizations.

The data contained in the CRM module will be available to partner websites through integrations. In addition to data collection, the platform includes additional functions such as Use Management, a notification system, a marketing tool, data export, a report generator, and other features listed in the document.

Detailed description of the work/deliverables in frames of this assignment, is presented in Annex 1.1. of this document, in Georgian language. Annex 1.1. is an integral part of this



document and it describes (as an addition to the ToR) in detail the service to be provided and the results to be achieved by the contractor.

The contractor shall work closely with the Diaspora department of the Ministry of Foreign affairs throughout the assignment period.

Below is presented concrete deliverables and milestones of the assignment which the contractor has to achieve. They are all causally interconnected and can be understood as chronological order:

First set of Milestones (70% of the Assignment)

- Developing core functionalities of the CRM platform, ensuring foundational features for data aggregation, processing, analysis, and utilization are implemented.
- Setting up backend infrastructure using Java and the Spring Framework, including the establishment of a database schema with MSSQL for both test and production environments.
- Implementing centralized logging using the ELK Stack to monitor and log system activities.
- Creating the frontend infrastructure using ReactJS, developing initial user interfaces that are responsive across devices such as smartphones, desktops, and tablets, and ensuring compatibility with common web browsers like Chrome, Safari, Microsoft Edge, and Opera.
- Enhancing user authentication and security by integrating a two-factor authentication module for the control panel and encrypting sensitive information both at rest and in transit.
- Conducting initial rounds of testing and quality assurance to verify functionality, security, and performance benchmarks for read and edit operations.
- Developing comprehensive technical documentation for backend and frontend components, as well as the database schema and data flow processes.
- Aligning the initial UI/UX design with customer preferences, ensuring the application supports the Georgian language and UTF-8 font encoding.

Second set of Milestone (30% of the Assignment)

- Implementing advanced features such as notification systems, marketing tools, data export, and report generation, optimizing the application for enhanced performance and scalability.
- Refining the UI/UX design based on feedback from initial testing, ensuring the control panel's visual appeal and user-friendliness align with or exceed the standards of the Metronic Theme.
- Ensuring integration and interoperability by connecting the web application seamlessly with partner websites and other systems and testing for compatibility across different platforms such as Windows, Linux, Mac, Android, and iOS.
- Conducting thorough end-to-end testing, including load and security testing, to ensure the system meets the required UPTIME of at least 98% and handles the expected volume of user activity.
- Implementing data security and backup measures to secure data in case of deletion, with processes ensuring data integrity and availability.
- Deploying the web application to the production environment and conducting training sessions for the Diaspora department staff on how to use and manage the system.
- Completing and delivering final documentation, including user manuals and maintenance guides, along with documentation on the implemented security measures and compliance standards.
- Offering post-implementation support to address any issues that arise post-deployment, ensuring a smooth transition and handover to the Diaspora department.



The program is soliciting proposals from local, Georgia-registered private companies (Limited Companies) that possess substantial expertise, experience, and knowledge to effectively address the responsibilities required under this assignment.

4. Tasks and deliverables performed by the contractor

4.1. Deliverables relevant for the first set of milestones

To be reached until 30th of November

- 4.1.1. Development and implementation of the core functionalities of the CRM platform, ensuring foundational features for data aggregation, processing, analysis, and utilization are in place.
- 4.1.2. Establishment of the backend infrastructure using Java and the Spring Framework, including the setup of a database schema with MSSQL for both test and production environments.
- 4.1.3. Implementation of centralized logging using the ELK Stack to monitor and log system activities, ensuring effective tracking and debugging.
- 4.1.4. Creation of the frontend infrastructure using ReactJS, developing initial user interfaces that are responsive across devices such as smartphones, desktops, and tablets, and ensuring compatibility with common web browsers like Chrome, Safari, Microsoft Edge, and Opera.
- 4.1.5. Enhancement of user authentication and security by integrating a two-factor authentication module for the control panel and encrypting sensitive information both at rest and in transit.
- 4.1.6. Conducting initial rounds of testing and quality assurance to verify functionality, security, and performance benchmarks for read and edit operations.
- 4.1.7. Development of comprehensive technical documentation for backend and frontend components, as well as the database schema and data flow processes.
- 4.1.8. Alignment of the initial UI/UX design with customer preferences, ensuring the application supports the Georgian language and UTF-8 font encoding.

Detailed deliverables relevant to the first set of milestones are described in Annex 1.1 in respective subchapters: 2.1; 2.2; 2.3.1; 2.3.3; 2.3.4; 2.3.8; 2.3.6.

4.2. Deliverables relevant for the second set of milestones

To be reached until 28th of February

- 4.2.1. Implementation of advanced features such as notification systems, marketing tools, data export, and report generation, optimizing the application for enhanced performance and scalability.
- 4.2.2. Refinement of the UI/UX design based on feedback from initial testing, ensuring the control panel's visual appeal and user-friendliness align with or exceed the standards of the Metronic Theme.
- 4.2.3. Ensuring integration and interoperability by connecting the web application seamlessly with partner websites and other systems and testing for compatibility across different platforms such as Windows, Linux, Mac, Android, and iOS.
- 4.2.4. Conducting thorough end-to-end testing, including load and security testing, to ensure the system meets the required UPTIME of at least 98% and handles the expected volume of user activity.
- 4.2.5. Implementation of data security and backup measures to secure data in case of deletion, with processes ensuring data integrity and availability.
- 4.2.6. Deployment of the web application to the production environment and conducting training sessions for the Diaspora department staff on how to use and manage the system.



- 4.2.7. Completion and delivery of final documentation, including user manuals and maintenance guides, along with documentation on the implemented security measures and compliance standards.
- 4.2.8. Offering post-implementation support to address any issues that arise post-deployment, ensuring a smooth transition and handover to the Diaspora department.

Detailed deliverables relevant to the first set of milestones are described in Annex 1.1 in respective subchapters: 2.3.2; 2.3.5; 2.3.7; 2.4.

5. Results

- The Diaspora CRM Platform, a comprehensive web application, has been successfully developed and deployed. The platform serves as a central hub for aggregating, processing, analysing, and utilizing diaspora-related data.
- The platform has been developed entirely from scratch, without using any Open-Source CMS modules or SaaS platforms, ensuring a fully customized solution.

Tech Stack Implementation:

- Backend: Java with the Spring Framework hosted on an Apache Server.
- Frontend: ReactJS for a dynamic and responsive user interface.
- Database: MSSQL with separate test and production environments.
- Centralized Logging: Implemented using the ELK Stack (free version), with a centralized database for logging purposes.
- The web application has been made fully compatible and functions flawlessly on Windows, Linux, Mac, Android, and iOS platforms. It is responsive to different device types, including smartphones, desktops, and tablets.
- Compatibility with common web browsers such as Chrome, Safari, Microsoft Edge, and Opera has been ensured, providing a consistent user experience across different platforms.
- The web application is monolingual, supporting the Georgian language, with fonts compatible with the universal encoding standard (UTF-8).
- The web application architecture has been designed to accommodate future enhancements, ensuring long-term scalability and maintainability.
- A two-factor authentication module for authorization in the control panel has been integrated, utilizing email and one-time codes for enhanced security.
- The visual part of the control panel has been developed in alignment with customer preferences, using a theme similar to or better than the Metronic Theme, ensuring a user-friendly and aesthetically pleasing interface.
- Performance benchmarks have been achieved where read operations take no more than 3 seconds and edit operations take no more than 5 seconds under normal conditions.
- The system has been designed to support a maximum of 50 simultaneous users, with an average of 100 operations per minute, ensuring robust handling of user activity.
- System reliability has been ensured with an UPTIME of at least 98%. Critical errors occur in no more than 0.2% of all operations, maintaining high operational integrity.



- Measures to secure data in case of deletion have been implemented, ensuring data integrity and recoverability.
- All sensitive information has been encrypted both at rest and in transit, adhering to stringent security standards to protect user data.

6. Timeline

GIZ shall hire the contractor from 20/08/2024 until 28/02/2025.

The tender procedure enforces a maximum price limit of 85,000 GEL (net, excl. VAT) for participating bidders.

7. Qualification of the tender participant and other requirements (incl. required documents):

The tender participant shall have assignment-related experience in:

a) Development of web applications for private and/or public institutions, utilizing technologies as specified in the ToR and Annex 1.1. They should showcase <u>a minimum of 3 years of experience in IT development</u>, with a portfolio including at least 3 comparable projects of similar size and scope. The technical proposal must include a detailed list of these projects, highlighting their expertise in web application development, adherence to specified technologies (Java, Spring Framework, ReactJS, MSSQL, ELK Stack), and successful project delivery.

Experts assigned by the contractor to the executing of the tasks outlined in the ToR and its Annex 1.1., shall have demonstrated experience of (1.4.1).

- a) **Project Manager:** The Project Manager should have at least <u>4 years of experience in managing software development projects</u>, with a proven track record in overseeing the end-to-end development of web applications. They must possess strong leadership and communication skills to coordinate with the Diaspora Relations Department and ensure alignment with project objectives.
- b) **Software Architect:** The Software Architect should have <u>a minimum of 5 years of experience</u> in software development and at least 2 years in designing project architecture, with a special emphasis on database architecture. Expertise in Java and the Spring Framework is essential to design robust backend solutions, along with a strong understanding of scalability and maintainability to ensure the web application can accommodate future enhancements.
- c) **Backend Developers:** The team should include <u>two Backend Developers</u>, <u>each with at least 3</u> years of experience in backend development.
- d) **Middle Backend Developers:** There should be two Middle Backend Developers, each with at least 1.5 years of experience in backend development.
- e) **Frontend React Developer:** The Frontend React Developer should <u>have at least 5 years of experience in frontend development, with extensive experience in ReactJS to create dynamic and responsive user interfaces.</u>
- f) **QA Manager:** The QA Manager should have <u>at least 4 years of experience in software testing and quality assurance.</u>
- g) **UI/UX Designer:** The UI/UX Designer should have <u>at least 2 years of experience in user interface and user experience design.</u>

Corresponding CVs of the experts, including references to the executed projects shall be submitted together with the technical proposal.



The technical proposal of the bidder shall explain in detail (in form of a work-plan / milestone schedule) how the contractor will ensure timely provision of each of the two working stage deliverables listed in ToR;

8. Proposal Structure

The bidder shall provide the proposal in response to the subject ToR to include the following components provided below:

- 1. Short narrative on the bidder and its relevant work;
- 2. Technical proposal of the bidder, explaining in detail (in form of a work-plan / milestone schedule) how the contractor will ensure timely provision of deliverables, which are listed in the ToR and in Annex 1.1. (1.3.1)
- 3. List of 5 comparable projects of similar size and scope;
- 4. Description of cooperation experience with relevant state actors (Ministry of Foreign Affairs, etc.);
- 5. Price schedule- The specifications for pricing are defined in the attached price schedule, which must be used for the preparation of the financial offer.

9. Assessment Criteria

The assessment criteria for selecting potential bidder:

- 1. The Bidder shall be a private company registered and operating in Georgia, with minimum of 3 years' experience in IT development, with a portfolio including at least 3 comparable projects of similar size and scope (1.1.1).
- 2. The Bidder should have a demonstrated expertise in web application development, adherence to specified technologies (Java, Spring Framework, ReactJS, MSSQL, ELK Stack), and successful project delivery (1.2.1).
- 3. Experience in working with the public sector institutions will be considered as an advantage (1.2.2).

10. Payment schedule:

- **70%** of the contract value will be transferred to the contractor after accomplishment of all deliverables in range of 4.1.1. incl. 4.1.8. (expected end of November 2024)
- Final payment of the remaining **30%** after accomplishment of deliverable 4.2.1 incl. 4.2.8 after provision of the final invoice anticipated by 28.02.2025

