|  |
| --- |
|  |

15 April 2025

**TERMS OF REFERENCE**

**Further development of the DWH software package
for the National Anti-Corruption Bureau of Ukraine**

# General background

The EU Anti-Corruption Initiative in Ukraine (EUACI) is the European Union’s technical support program in the area of anti-corruption in Ukraine, co-funded and implemented by the Ministry of Foreign Affairs in Denmark. The overall objective of the EUACI is to achieve significant progress in preventing and countering corruption, ensuring the coherence and systemic anti-corruption activities of state and local self-government bodies, and to empower civil society and citizens to contribute to the combatting of corruption, as well as the proper process of Ukraine’s post-war recovery. The program runs till April 2027.

The National Anti-Corruption Bureau of Ukraine (NABU) is one of the key EUACI partners, playing a crucial role in combating high-level corruption and strengthening the rule of law in Ukraine. As part of this cooperation, the EUACI supports NABU's IT capacity building, ensuring the bureau has the necessary digital infrastructure to operate efficiently and securely.

With the support of the EUACI, NABU is currently implementing three systems: the electronic case management system (eCase MS), the Information and Communication System (ICS) for exchanging information with government bodies, and the analytical Data Warehouse (DWH) system, which automates the processes of data acquisition, organization, storage, and analysis for NABU analysts.

The DWH already provides for receiving and consolidating the data from several priority public authorities, processing the accumulated arrays, also for the purpose of building a holistic informational picture based on the data collected from various sources, enabling free but controlled access to information for NABU analysts and detectives. Availability of data interchange interfaces expands the ability to unify, merge and analyse data by NABU analysts and detectives for their activities.

# Objective

The objective of this project stage is to enhance the existing DWH solution by modifying exchange formats and data structures for current sources, configuring email notifications for download errors, updating the parsing package, and improving the general DWH address directory. This stage aims to strengthen NABU's overall IT capacity, enabling it to fulfil its mandate more efficiently and effectively.

# Scope of work

The scope of work covers the implementation of all activities required for the achievement of its objective as outlined above, including but not limited to:

1. Modification of table structures for Unified Register of Tax Invoices (EDRPN) dumps:
	* Updating the deployment and loading procedure for initial and daily dumps of the EDRPN into ODS[[1]](#footnote-1).
	* Modifying the data loading mechanism from EDRPN to DWH.
2. Modification of the structure and nomenclature of the Customs Database Tables (Cargo Customs Declarations):
	* Updating the procedure for loading cargo customs declaration data and reference directories.
3. Configuring email notifications for data loading errors.
4. Modification of the procedure for filling the general address directory in DWH, including data from public procurement tables.
5. Technical support for 3 months after modification (the service description is provided in [Appendix 1](#_Appendix_1:_Description) to this TOR).

# Deliverables

1. Updated table structures for EDRPN dumps
* Revised deployment and loading procedure for initial and daily dumps of EDRPN into ODS.
* Implemented modifications to the data loading mechanism from EDRPN to DWH.
* Testing and validation reports confirming successful data loading and processing.
1. Updated structure and nomenclature of customs database tables
* Revised procedure for loading cargo customs declaration data and reference directories.
* Updated database schema and documentation reflecting changes.
* Testing and validation reports confirming correct data processing.
1. Configured email notification system for data loading errors
* Implemented email notification system for data loading failures.
* Configured SMTP settings (excluding server setup if outside contractor’s scope).
* Testing reports confirming the functionality of notifications.
1. Enhanced general address directory in DWH
* Updated procedure for integrating data from public procurement tables into the general address directory.
* Revised database schema and documentation for the address directory.
* Testing and validation reports confirming data accuracy and consistency.
1. Technical Support and Maintenance
* Availability of technical support for three months post-implementation.
* Issue tracking and resolution reports during the support period.
1. Acceptance certificate approved by NABU summarizing modifications, testing outcomes, and recommendations for further improvements.

# Team composition and qualifications

It is envisaged that the assignment will be implemented by a team of experts familiar with the context and experienced with similar assignments. By putting forward a team of experts, the Contractor shall ensure that the task will be developed with as much straightforwardness as possible, the proposed approach and the methodology shall be fine-tuned and a detailed work plan shall be elaborated.

The Contractor’s team is expected to comprise the following profiles:

* Project Manager / Team Leader
* DWH Architect
* DWH/ETL Developer

The contractor can propose a composition of an experts’ team, which, in his opinion, is most appropriate for the assignment.

The project team should be delegated for the entire duration of the project. The composition of the project team may only be modified as a matter of exception, subject to agreement of the parties; the contractor should provide a qualified replacement in a short time.

Qualifications and Competence of Key Staff:

Project Manager/Team Leader

|  |
| --- |
| General Qualifications: |
| The Project Manager must at least have a Bachelor degree in Business Administration, Economics, Engineering, Computer Science, Telecommunication, IT or other relevant fields.The Project Manager should have:* 5+ years of experience with IT projects,
* 3+ years of experience as IT PM, and
* experience with ICT solutions in the public sector institution
 |
| Adequacy for the Assignment: |
| The Project Manager should have:* Project management and planning skills and the ability to lead large and complex projects
* Experience from international IT programs
* Documented experience from leading a portfolio of projects to reach business targets
* Managerial experience in a foreign donor-funded project related to the development/management of ICT solutions for a government agency
* Managerial experience in designing and/or implementing at least one project in the area of data warehouse system for a government agency
* Experience in a foreign donor-funded project would be an asset

The Project Manager should have managerial experience in designing and/or implementing at least one project in the area of data warehouse system for a state agency. |
| Experience in the Region and Language: |
| * Relevant working experience from the region;
* Fluency in Ukrainian;
* Good knowledge of English.
 |

DWH Architect

|  |
| --- |
| General Qualifications: |
| The DWH Architect must at least have a Bachelor degree in Computer Science, Telecommunication, IT or other related technical fields.* The DWH Architect should have
* 5+ years of working experience with IT architecture
* 3+ years of experience in data modelling and/or database development, SQL and PL/SQL.
 |
| Adequacy for the Assignment: |
| The DWH Architect should have:* In-depth knowledge of relevant tools and technology, including DWH design, ETL tools, BI tools
* Experience with and ability to take partial responsibility for technically complex projects
* Ability to work independently with defined problems on a highly complex level within certain areas of expertise
* Ability to lead, train and coach other project members
* Ability to assume roles such as head integrator or specialist in specific fields
* Experience in a foreign donor-funded project would be an asset

The DWH Architect should have experience in designing and/or implementing at least one project in the area of data warehouse systems for a state agency. |
| Experience in the Region and Language: |
| * Relevant working experience from the region;
* Fluency in Ukrainian.
 |

DWH Developer

|  |
| --- |
| General Qualifications: |
| The DWH Developer must at least have a Bachelor degree in Business Administration, Engineering, Computer Science, Telecommunication, IT or other relevant fields.The DWH Developer should have:* 3+ years of working experience as an IT developer
* 3+ years of experience with IT projects
 |
| Adequacy for the Assignment: |
| The DWH Developer should have* Knowledge and practical application of the ETL tools, experience as a database developer, knowledge of SQL/PL SQL
* Ability to work independently with defined problems on a highly complex level within certain areas of expertise
* Ability to lead, train and coach other project members
* Experience with and ability to take partial responsibility for technically complex projects
* Knowledge of relevant tools and technology
* Experience in a foreign donor-funded project would be an asset

The DWH/ETL Developer should have experience in designing and/or implementing at least one project in the area of data warehouse systems for a state agency. |
| Experience in the Region and Language: |
| * Relevant working experience from the region;
* Fluency in Ukrainian.
 |

# Budget, timeframe, and location

The maximum budget for the assignment all included may not exceed EUR 30,000. The Tenderer’s financial proposal shall include all costs for a fee and project-related reimbursable expenses.

The assignment will start following a notification issued by the contracting authority, but not earlier than the date of signing the contract between the EUACI and the Contractor. The tentative start date is 28 April 2025. All activities envisaged under this contract shall be completed with a total duration of up to 5 months. The project activities are expected to take place in Kyiv.

Payment will be made in up to three instalments:

The first instalment, up to 20% of the total contract value, will be made upon receipt of the contractor’s updated work plan.

The second instalment, up to 60% of the total contract value, will be made upon receipt and approval by both NABU and EUACI of Deliverables 1–4.

The final instalment, up to 20% of the total contract value, will be made after the completion of the 3-month technical support period and NABU’s approval of the Acceptance Certificate, summarizing modifications, testing outcomes, and recommendations for further improvements.

All payments are subject to verification of deliverable completion and approval by both NABU and EUACI.

# Reporting and management

The performance of the Contractor will be judged upon reaching the purpose of this contract as well as obtaining its results, as indicated in the section “Objective” and “Deliverables” herein respectively. Moreover, the performance of the Contractor will be judged upon the successful implementation of all the specific activities indicated in Section “Scope of work” of this document

By signing the contract, the Consultant agrees to hold in trust and confidence any information or documents ("confidential information") disclosed to the Consultant or discovered by the Consultant or prepared by the Consultant in the course of or as a result of the implementation of the contract, and agrees that it shall be used only for the contract implementation and shall not be disclosed to any third party. The Consultant also agrees not to retain copies of any written information or prototypes in its archive and for its use.

In the period until acceptance, the EUACI, Contractor, and Beneficiary will hold regular project group meetings to exchange information and seek to clarify any questions of whatsoever nature. The purpose of the project group meetings is to ensure follow-up on any activities between the meetings, and to maintain a common overview of the current stage of the project at a detailed level, based on the applicable detailed schedule, and to ensure the day-to-day progress.

# How to apply

The deadline for submitting the proposals is 28 April 2025, 17.00 Kyiv time.

All interested companies or experts should submit:

* Filled and signed [Appendix 2](#_Appendix_2:_Forms) (portfolio of relevant projects, technical approach and workplan, CV of key staff, confirm readiness to provide technical support service as described in Appendix 1)
* Financial offer.

The proposal shall include the aforementioned information and should be submitted within the above deadline to serkon@um.dk сс to EUACI@um.dk indicating the subject line: **NABU DWH**.

You will receive an auto-reply from the EUACI@um.dk mailbox when the offer has been received. If you do not receive an auto-reply, your offer was not received and you should contact the EUACI by phone.

Bidding language: English.

Any clarification questions regarding the bid request should be addressed to serkon@um.dk, not later than 18 April 2025 17.00 Kyiv time.

# Evaluation criteria

Bids will be evaluated in accordance with the criteria provided below:

|  |  |  |
| --- | --- | --- |
| **#** | **Criteria** | **Weight** |
| 1 | Portfolio of projects | 20% |
| 2 | Core team members - relevant experience, skills and competencies | 40% |
| 3 | Technical approach and methodology, including workplan | 20% |
| 4 | Financial Offer | 20% |

# Appendix 1: Description and Scope of Technical Support Service

**1. General provisions**

1.1 Terms and definitions

|  |  |
| --- | --- |
| **Term** | **Definition** |
| Known error | A problem whose root cause has been determined. |
| Application | Any request submitted by the Customer’s authorized contact persons to the Contractor’s technical support service. |
| Incident resolution request | A request from the Customer’s authorized contact persons to resolve a System incident that is not part of the normal operation of the System and that has resulted or may result in an interruption in the operation of the System or reduced quality of its operation. |
| Request for Change | A screen or paper form used to record detailed information about a proposed Request for Change of any Configuration Item in the Solution or procedure or any other component of the System that requires updating/entering the necessary information into the documentation for the Solution (which Configuration Item of the System was changed). |
| Service request | A request from the Customer’s authorized contact persons to provide services within the framework of supporting the System and components of which it is comprised but which are not related to a failure of the System and not related to a change in the Configuration Item, which requires updating/entering the necessary information into the documentation for the Solution. |
| Problem | A state that has a significant impact and the cause of which is unknown. A problem may result from a single significant incident or an indefinite number of separate incidents having common symptoms.  |

* 1. General terms and conditions for provision of technical support services for the System:
		1. Services are provided by the Contractor only upon the relevant Request made by the Customer’s authorized contact persons.
		2. Services are provided at the location of the Customer or at the location of the Contractor in Kyiv.
		3. The Contractor does not provide technical support to client workstations, except for recommendations on the necessary settings for the browser used to work with the System.
		4. Technical support for the System is provided by the Contractor based on the exclusivity principle, i. e. no other individual or legal entity may provide technical support for the System within the time frames and the scope that fully or partially coincide with the terms and conditions specified in this Supplementary Agreement.
		5. In providing the Services, the Contractor uses remote VPN access to the Customer’s System via the Internet in order to analyze problems.
		6. Remote VPN access is granted via a secure channel created by the Customer. The Contractor’s personnel will only access the systems the access to which was authorized by the Customer.
	2. Functional responsibilities (roles) of the Contractor and the Customer

Table 1. Functional responsibilities (roles) of the parties

| **#** | **Category/Activity** | **Responsibility** |
| --- | --- | --- |
| **Contractor** | **Customer** |
| 1 | Monitoring System operation | S | R |
| 2 | Administering System servers | S | R |
| 3 | Administering the System  | S | R |
| 4 | Resolving System incidents | S | R |
| 5 | Fulfilling Requests for Changes | S | R |
| 6 | Advising on the System settings | R | S |
| Legend: R=Primary responsibility, S=Secondary role |

1. **Quality control of the Services provided.**

On a regular basis, within 5 working days after the end of a reporting period (1 calendar month), the Contractor provides a monthly report on the status of completed requests, including the number of man-hours spent to process requests.

1. **Description of Technical Support Services.**
	1. Resolution of incidents and troubleshooting
		1. Resolution of incidents
			1. Service Description

The Contractor provides advice on how to use the Request Registration System (RRS) by phone or by e-mail to resolve incidents that have occurred in the System. If it is impossible to resolve an incident using remote access capabilities, the Contractor shall visit the site where the System is installed. Access to the production environment is provided to the Contractor only for the period necessary to resolve an incident or carry out necessary works approved by the Customer. Access is provided according to the rules and procedures established by the Customer.

If necessary, the Contractor’s specialists make changes to the System and transfer them to the Customer for installation in the production environment.

* + - 1. Methods for registering incident resolution requests

Registration in the Request Registration System (hereinafter referred to as the RRS) of the Contractor through the client interface.

When submitting a request to the Contractor’s technical support service, the Customer’s representative shall provide the following details:

* name of the System;
* incident date and time;
* incident severity level;
* incident impact;
* all available information about an incident;
* contacts of the person responsible for resolving incidents on the Customer’s side.
	+ - 1. Procedure for providing the Services

When an incident is requested to be resolved, it must be given an initial priority.

Table 2 below shows three priority types that can be assigned.

| # | Priority | Description |
| --- | --- | --- |
| 1 | Critical | A critical situation that impacts the main business process: The primary business process (critical to essential tasks) has completely stopped and operation cannot continue as expected. |
| 2 | High | Significant negative impact on the main business process:There has been a significant loss of the opportunity to use services or significant degradation of services essential for the main business process. |
| 3 | Medium | Moderate negative impact on the business process:There has been a moderate loss of the opportunity to use services or some degradation of services essential for the business process, but operation can continue with certain limitations. |
| 4 | Low | Limited negative impact on the business process:The Customer’s business continues to operate largely with little or no disruption to services. |

Priority is determined based on:

* incident impact on the business;
* urgency of resolving an incident or making a change to the System.

Table 3. Priority determination

|  |  |
| --- | --- |
| Priority | Incident affects |
| Entire organisation | Division | Separate user |
| Urgency | High | 1 | 1 | 2 |
| Medium | 1 | 2 | 3 |
| Low | 2 | 3 | 4 |

Determining the effective priority using the table:

* The urgency of an incident is assessed objectively based on the priority of tasks that cannot be completed because of the incident. The urgency is specified in the rows of the table.
* The impact of an incident is assessed objectively based on the number of personnel affected by the incident. The impact is specified in the columns of the table.
* The intersection of a row and a column shows the priority that should be indicated when registering an incident.

Time limits for resolving incidents:

* Priority 1 requests shall be duplicated by the Customer by phone.
* The request is registered by the Contractor in the RRS. The Customer has access to the RRS to monitor the status of activities related to the incident. The system automatically notifies the Customer’s authorized representative if the request status changes.

Table 4 below shows time limits for resolving incidents depending on the request priority.

Table 4. Incident resolution time frames

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Request priority | Request acceptance period | Request resolution period | Request processing time, working hours | Service restoration time, working days | Request resolution time, working days |
| 1 | 8\*5, 9:00-18:00 | 8\*5, 9:00-18:00 | 1 | 1 | 8\*5, 9:00-18:00 |
| 2 | 8\*5, 9:00-18:00 | 8\*5, 9:00-18:00 | 2 | 2 | 8\*5, 9:00-18:00 |
| 3 | 8\*5, 9:00-18:00 | 8\*5, 9:00-18:00 | 4 | 4 | 8\*5, 9:00-18:00 |
| 4 | 8\*5, 9:00-18:00 | 8\*5, 9:00-18:00 | 8 | 9 | 8\*5, 9:00-18:00 |

3.1.1.4. Service availability.

The service is provided within the Contractor’s premises.

The service is provided during working hours from 09:00 to 18:00.

3.3. Service request, request for change

3.3.1. Advising on System settings.

3.3.2. Service description.

The service includes providing the Customer with advice and recommendations on how to operate and maintain the System in order to avoid typical problems and minimize system failure risks.

3.3.3. Service availability

The service is provided within the Contractor’s or Customer’s premises. The service is provided during working hours from 09:00 to 18:00 except for weekends and holidays.

3.4. System setup in case of changed functionality.

3.4.1. Service description

At the request of the Customer, the Contractor makes changes (modifications) related to changes in the functionality of the System.

Changes are also implemented when it is necessary to correct errors detected during operation and optimization of the System.

The activities shall result in a new state of the System in line with the changes introduced to functionality as well as in updated documentation for the system in accordance with the methodology of the manufacturer.

3.4.2. Service availability.

The service is provided within the Contractor’s or Customer’s premises. The service is provided during working hours from 09:00 to 18:00 except for weekends and holidays.

3.5. Fulfilling requests for changes in the System.

3.5.1. Service description

At the request of the Customer, the Contractor develops new functionality for the System.

The activities shall result in new System functionality, as well as in updated System documentation.

3.5.2. Service availability.

The service is provided within the Contractor’s or Customer’s premises. The service is provided during working hours from 09:00 to 18:00 except for weekends and holidays.

# Appendix 2: Forms for Letter of Tender

The tenderer must fill in fields marked with yellow and sign this Appendix 2 before submission.

The request to participate is submitted by the following:

|  |  |
| --- | --- |
| **Name** | *[insert name of company]* |
| **Street and number** | *[insert postal address]* |
| **Postcode** | *[insert postal code]* |
| **City** | *[insert city]* |
| **Country** | *[insert country]* |
| **VAT number (or national identification number)** | *[insert number]* |
| **Internet address** | *[insert URL of the company’s website]* |
| **Contact person** | *[insert name of contact person]* |
| **E-mail** | *[insert e-mail of contact person]* |

**List of similar projects:**

The applicant has performed (entered into, ongoing or finalized within the last 3 years) the following contracts of relevance to the advertised assignment (at least 3 contracts).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No.** | **Description** | **Amount** | **Contract period** | **Recipient** |
| 1. | *[insert nature and quantity of services provided by the applicant (and, if joint venture, by which member). If the performed services are provided in a joint venture or within a framework agreement with more economic operators, insert the quantity (per cent) performed by the applicant]* | *[insert contract value]* | *[insert start date and end date]* | *[insert name of organisation]* |
| 2. | *[insert nature and quantity of services provided by the applicant (and, if joint venture, by which member)]* | *[insert contract value]* | *[insert start date and end date]* | *[insert name of organisation]* |
| 3. | *[insert nature and quantity of services provided by the applicant (and, if joint venture, by which member)]* | *[insert contract value]* | *[insert start date and end date]* | *[insert name of organisation]* |

**The Supplier’s Technical Proposal**

This section to be completed by the tenderer and included in the tender.

The tenderer’s submissions will be included in the Contract and apply to the project.

**Technical approach and methodology regarding the NABU DWH development**

The completed sections regarding development of the DHW **should not exceed 2 pages**

*[The tenderer shall as part of the tender and in accordance with the requirements describe his approach and methodology in order to develop and implement the requirements to the assignment.*

*The Suppliers technical Approach and Methodology will be part of the evaluation in regard to the “Criteria and Method of Evaluation”. Thus, the Customer will evaluate the following:*

*(i) Whether the proposed approach and methodology reflects the objectives of the project*

*(ii) Whether activities of the project are coherent and well-defined*

*(iii) Whether the tenderer has identified risk and highlighted potential issues]*

*(iv) The extent to which the tender fulfils the requirements]*

**Workplan**

The completed sections regarding Workplan **should not exceed 2 pages**

*[The tenderer shall as part of the tender and in accordance with the requirements insert a work plan (overall time schedule).*

*The Supplier’s work plan will be part of the evaluation in regards the criteria stated in “Criteria and Method of Evaluation”. Thus, the Customer will evaluate the following:*

*(i) Whether the work plan and the milestones are coherent and well-defined*

*(ii) Whether the proposed work plan provide the requested outputs in a timely manner, including whether key activities have been identified, whether the assigned resources and estimated time to carry out the activities seem reasonable]*

*(iii) The extent to which the tender fulfils the requirements]*

**Curriculum Vitae for Key staff**

General Qualifications, Adequacy for the assignment and Experience in the Region and Language

The tenderer is to complete and submit a CV for each of its key employees based on the format below.

Each completed CV **should not exceed 3 pages.**

|  |
| --- |
| **Assignment:**  |
| **Proposed position on the proposed team:** |
| **1. PERSONAL DATA** |
| Family name: | First Name(s): |
| **2. EMPLOYMENT RECORD (GENERAL EXPERIENCE)** (Most recent employment first) |
| Employer's company name: | Period of service and length: | Position / nature of the tasks performed / level of responsibility:  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
| **3. EDUCATION AND TRAINING**(Most recent completed education and or training first) |
| Institution (University, etc.), city and country: | Length of educationDate: from (month/year) to (month/year) | Degree/Diploma obtained: |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
| **4. EXPERIENCE IN THE SPECIFIC FIELD DIRECTLY RELEVANT TO THE ASSIGNMENT AND THE PROPOSED POSITION**(Indicate the following information for those assignments that best illustrate the experience in the specific field relevant to the assignment and the proposed position, including the obtained results) (Add number of assignments as applicable) |
| Name of assignment |   |
| Period of service and length: from (month/year) to (month/year) |  |
| Location  |  |
| Client  |  |
| Main project features |  |
| Position held |  |
| Activities performed |  |
| Obtained results |  |
| **5. LANGUAGE SKILLS OF RELEVANCE TO THE ASSIGNMENT** (State knowledge of the language in the country of assignment and of the contract  |
| Language: | Formal Education: | Understanding level: | Speaking level: | Writing level: |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| **6. OTHER INFORMATION OF RELEVANS TO THE ASSIGNMENT** |
|  |

1. An operational data store (ODS) is a central database that provides real-time data for an organization. [↑](#footnote-ref-1)