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Request for Proposal (RFP) – Amendment #2

Date: October 9, 2019

FROM: DELOITTE CONSULTING OVERSEAS PROJECTS LLC
                        1919 N Lynn Street, Arlington, VA 22209

Subject: Request for Proposal for Ukraine Health Reform Support Data Migration Services
                        – Amendment #2

Dear Offerors:

Deloitte under the Ukraine Health Reform Support Program, USAID Contract No. 72012118C0001 is issuing Amendment 2 in regards to the Request for Proposals for the Data Migration Services issued on September 25, 2019

Part 1 of this amendment includes the answers to Questions received regarding the above referenced RFP. Part 2 of this amendment is to incorporate administrative changes.

Thank you for your interest in this proposal. We look forward to working with your company on this opportunity.

Sincerely,

Kristan Xanders
Subcontracts Manager, Deloitte GPS Subcontracts

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Part 1 - Questions & Answers:

1. Separate technical and Cost/Price Proposals. Please clarify the way of separation. They should be sent to different persons? At different time?

Deloitte Response: Send the Technical and Cost/Price Proposals as separate documents. Email both documents to Kristan Xanders, kxanders@deloitte.com, as well as Owen Miller, owmiller@deloitte.com and Andrew Johantgen, ajohantgen@deloitte.com.

Надішліть Технічну та Цінову частини заявки окремо. Обидва документи надішліть електронною поштою Крістен Зендерс (Kristan Xanders), kxanders@deloitte.com, Оуену Міллеру (Owen Miller), owmiller@deloitte.com та Ендрю Джохантджену (Andrew Johantgen), ajohantgen@deloitte.com.

2. Complete Registration and Representations and Certifications in Deloitte's Vendor Portal System.

It should be completed before RFP submission or this part is relevant only for winner?

Deloitte Response: Vendors shall complete Representations and Certifications and registration in Deloitte's Vendor Portal before RFP submission.

Постачальники повинні заповнити форму Representations and Certifications та пройти реєстрацію на порталі постачальників Делойт (Deloitte's Vendor Portal) перед поданням своїх пропозицій.

3. As part of the requirement the offeror shall describe its approach to providing consulting services to assist and advise NHSU and SOE as they execute pre-production environment creation, recreation of the current eHealth system in the target environment.

Could you provide a description of team (quantity, roles) which will be allocated to this project from NHSU and SOE?

Deloitte Response: The SOE team includes two Development Operations, one Development Operations Lead, one Database Administrator, and one IT Security Specialist. The NHSU team includes one Development Operations, one Database Administrator, and one IT Security Specialist. The NHSU and SOE team will grow in capability and capacity throughout this effort.

Команда ДП складатиметься з двох фахівців з питань розробки та експлуатації (Development Operations), одного керівника з питань розробки та експлуатації (Development Operations Lead), одного адміністратора бази даних (Database Administrator) та одного фахівця з комп'ютерної безпеки (IT Security Specialist). Команда НСЗУ складатиметься з одного фахівця з питань розробки та експлуатації (Development Operations), одного адміністратора бази даних (Database Administrator) та одного фахівця з безпеки комп'ютерної безпеки (IT Security Specialist). Команда НСЗУ та ДП розвиватиме свої можливості та спроможності у процесі роботи.

4. As part of the requirement the Offerors must include details demonstrating their experience and technical ability in implementing the technical approach//methodology and the detailed work plan. Offerors must also provide independent documentation describing the financial stability of the company.

Could you provide examples of the mentioned independent documentation?

Deloitte Response: The vendor shall discuss it financial viability as a part of its capabilities, and then provide examples and supporting documentation as a part of an annex that will not count against the page count. Examples include a Dun & Bradstreet rating, which provides a quick and clear indication of the credit-worthiness of an organization. As required in 1.21 of the RFP, offerors shall register with Dun & Bradstreet and provide its duns number to Deloitte as part of the Registration in the Deloitte Vendor Portal and completion of the Reps and Certs.

Постачальник повинен обговорити свою фінансову життєздатність як частину своїх можливостей, а потім надати приклади та супровідну документацію як частину додатку, що не зараховуватиметься до загальної кількості сторінок. Прикладом може бути рейтинг Dun & Bradstreet, де можна швидко знайти чітку інформацію про фінансову спроможність організації. Як зазначено у п. 1.21 Оголошення про конкурс (RFP), оференти повинні зареєструватися у Dun & Bradstreet та надати Делойт свій номер DUN під час реєстрації на порталі постачальників Делойт (Deloitte Vendor Portal) та у процесі заповнення форми Representations and Certifications.

5. As part of the requirement the offerors must provide a detailed budget showing major line items, e.g. salaries, allowances, travel costs, other direct costs, indirect rates, etc., as well as individual line items, e.g. salaries or rates for individuals, different types of allowances, rent utilities, insurance, etc. Offers must show unit prices, quantities, and total price.

Please clarify how it should be incorporated into the provided Sample Budget Template

Deloitte Response: Offers must complete the Sample Budget template, which provides the vendor's proposed price to complete each milestone. The detailed budget provides the supporting justification for how the vendor calculated its proposed price in the Sample Budget template.

Оференти повинні заповнити шаблон зі зразком бюджету (Sample Budget template), у якому має бути зазначена вартість виконання кожного проміжного етапу (milestone). Детальний бюджет повинен містити обґрунтування того, як постачальник розраховував вартість, зазначену в шаблоні зі зразком бюджету.

6. In item #1.6 it's mentioned, that validity period of the proposal is 90 days. At the same time in Sample Proposal Cover Letter there is an option to choose between 60 and 90 days. What is the correct term of validity?

Deloitte Response: Offeror's proposals must remain valid for a period of 90 calendar days after proposal days as stated in 1.6 of the RFP.

Пропозиції повинні залишатися чинними протягом 90 календарних днів після дня подання пропозиції, як зазначено в п 1.6 Оголошення про конкурс.

7. According to evaluation criteria corporate capability requirements will be one the part. Could you please clarify minimal requirements to such corporate capability?

Deloitte Response: Please refer to Table d**Error! No text of specified style in document.** Past Performance Evaluation Table in the RFP. Additionally, please find an administrative change to this table in Part 2 of this amendment.

Зверніть увагу на Таблицю оцінювання результатів діяльності в минулому (Past Performance Evaluation Table) в Оголошенні про конкурс. Крім того, див. зміни в адміністративній частині цієї таблиці - Частина 2 цієї поправки.

8. According to RFP The period of performance is expected to begin approximately October 29, 2019 and end February 11, 202. How does this statement correlate with another one – Planned Schedule of RFP Events – Subcontract award (estimated) – 11/16/2019? Do you expect offeror to start work before contract signing?

Deloitte Response: The period of performance is amended to begin approximately November 16, 2019 and end March 11, 2020. Please see Part 2 of this amendment.

Терміни виконання змінено - віднині це приблизно 16 листопада 2019 року - 11 березня 2020 року. Див. Частину 2 цієї поправки.

9. According to RFP, if deemed an opportunity, Deloitte reserves the right to make separate awards per component or to make no award at all. Could you clarify your vision of such possible components?

Deloitte Response: Deloitte will make this assessment after receiving and reviewing responses to this RFP.

Делойт проведе оцінку після отримання та перевірки відповідей на це Оголошення про конкурс.

10. As part of the requirement the following deliverables before payment will be made – Source Code for all thirteen eHealth modules in the target environment, technical improvements, and system upgrades.

Could you list these 13 eHealth modules?

Deloitte Response: This requirement is amended to read, "Source Code for all eHealth modules in the target environment as described in Appendix 4 of the SOW". Please refer to Appendix 4 of the SOW and see Part 2 of this amendment.

Ця вимога змінена, тепер вона звучить так: "Програмний код для всіх модулів eHealth у цільовому середовищі, як описано у Додатку 4 до ТЗ (SOW)". Див. Додаток 4 до ТЗ (SOW) та Частину 2 цієї поправки.

11. What legal entity will sign the contract from Deloitte side?

Deloitte Response: Kristan Xanders will sign this RFP on behalf of Deloitte GPS subcontracts.

Від імені Делойт Оголошення про конкурс підпише Крістен Зендерс (Kristan Xanders).

12. What will be the language of the contract? What will be the currency of payments according to the contract?

Deloitte Response: Payment will be made in US dollars.

Оплата буде здійснюватися в доларах США.

13. Will Deloitte provide all supporting documents for VAT exemption?

Deloitte Response: As stated in section 1.19 of the RFP, Deloitte will provide all supporting documents for VAT exemption during the subcontract award phase.

Як зазначено в розділі 1.19 Оголошення про конкурс, Делойт надасть усі документи для підтвердження звільнення від сплати ПДВ під час фази оформлення субпідряду.

14. According to RFP the successful vendor shall purchase performance insurance equal to the value of the subcontract in order to mitigate the risk it might be unable to perform before contract award. If the vendor is unable to perform, Deloitte will cancel the contract with the vendor and exercise its rights under the insurance to cover the cost differential between the winning vendor and the runner up response to this RFP.

Could you specify what type of product do you mean? Insurance of professional responsibility or bank guarantee? Maybe you can provide exact examples of required insurance product in Ukrainian market?

Deloitte Response: The vendor should work with a local bank to obtain a bank guarantee for the value of the contract.

Постачальник повинен домовитися з місцевим банком про банківську гарантію вартості контракту.

15. Is it possible to define more detailed sub-phases of the proposed phases?

Deloitte Response: The vendor shall provide this information as part of its technical response to the RFP as restated below:

    a. Initial Work Plan (no page limit, not counted towards page count): The offeror shall provide its initial work plan for performing the work and achieving the milestones. The work plan shall consist of a work breakdown structure detailing the activities, tasks, and dependencies. The work to complete deliverables and project milestones shall be included in the WBS (e.g., assessments, development work, draft deliverables, deliverable reviews, deliverable and activity approvals, status reporting, etc.).

Постачальник повинен надати таку інформацію як частину технічної заявки у відповідь на Оголошення про конкурс:

    a. Попередній робочий план (без обмеження кількості сторінок, не враховується у загальній кількості сторінок): оферент повинен надати свій попередній робочий план, у якому зазначити проміжні етапи (milestones). Робочий план повинен містити структуру розподілу робіт (СРР), у тому числі детально розписані напрямки діяльності та заходи, завдання та залежність між ними. Робота з підготовки кінцевих продуктів (deliverables) і досягнення проміжних етапів (milestones) проекту повинна бути частиною СРР (наприклад, оцінки, розробки, проекти кінцевих

продуктів, перевірка кінцевих продуктів, затвердження кінцевих продуктів та заходів, звіти про стан справ тощо).

16. Datadictionary providing a centralized repository of information about data reflecting most recent updates to the eHealth system mapping data entities of respective Docker containers

Please specify what does it mean or Could you please share an example?

Deloitte Response: According to Techopedia, a "data dictionary is a file or a set of files that contains a database's metadata. The data dictionary contains records about other objects in the database, such as data ownership, data relationships to other objects, and other data."

Згідно з Технопедією (Techopedia), "словник даних - це файл або набір файлів, що містить метадані бази даних. Словник даних містить записи про інші об'єкти в базі даних, такі як право власності на дані, відносини між даними та іншими об'єктами, та інші дані".

17. Complete documentation for the eHealth system to include the following

- **Regulatory documentation with links**

What is "Regulatory documentation with links" and how it is connected to the migration scope?

Deloitte Response: If the technological solution is caused by regulatory documents, this must be indicated. Documentation shall be updated in correspondence to regulatory requirements (meaning the national standard ДСТУ 34).

Якщо технологічне рішення викликане нормативними документами, це необхідно зазначити. Документація має бути оновлена відповідно до нормативних вимог (йдеться про національний стандарт ДСТУ 34).

18. Tuning error / warning message settings that depend on performance and environment configurations

Could you please specify what is expected as this task results?

Deloitte Response: For the target environment proper configuration of error/warning messages shall be performed.

Для цільового середовища варто забезпечити відповідну конфігурацію повідомлень про помилки / попереджень.

19. In the SOW it is stated: Test all the DB migration on the actual volumes ~x10

Can we assume that itt will be provided required hardware capacity to test x10 volumes? Also it might be a complex task to generae 10x dummy data and keep data integrity. Is our understanding correct that dummy data will be prepared by the SOE/NHS team?

Deloitte

Deloitte Response: This is the task of the contractor. The mechanism and other details will be agreed by the SOE / NHSU team with the contractor.

Це завдання підрядника. Механізм та інші подробиці будуть узгоджені командою ДП / НСЗУ з підрядником.

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Part 2 – Administrative Changes to RFP:

1) In Section 1.7 Table d Past Performance Evaluation Table is hereby changed:

From:

Outstanding (100% of Maximum Score for Past Performance – 50 points)	3 enterprise level projects with past performance references include relevant experience with the following: • Setting up environments that involve Kubernetes charts and Docker containers on cloud platforms (including public and private, VMware and OpenStack) • Migrating enterprise level solutions with microservices architecture that store data in multiple instances of PostgreSQL and MongoDB.
Good (50% of Maximum Score for Past Performance – 25 points)	1 or 2 past performance references include relevant experience with the following: • Setting up environments that involve Kubernetes charts and Docker containers on cloud platforms (including public and private, VMware and OpenStack) • Migrating enterprise level solutions with microservices architecture that store data in multiple instances of PostgreSQL and MongoDB.
Unacceptable (0% of Maximum Score for Past Performance – 0 points)	No past performance references with relevant experience with one or more of the following: • Setting up environments that involve Kubernetes charts and Docker containers on cloud platforms • Migrating enterprise level solutions with microservices architecture that store data in multiple instances of PostgreSQL and MongoDB.

To:

Outstanding (100% of Maximum Score for Past Performance – <mark>30 points</mark>)	3 enterprise level projects with past performance references include relevant experience with the following: • Setting up environments that involve Kubernetes charts and Docker containers on cloud platforms (including public and private, VMware and OpenStack)

	• Migrating enterprise level solutions with microservices architecture that store data in multiple instances of PostgreSQL and MongoDB.
Good **(50% of Maximum Score for Past Performance – 15 points)**	1 or 2 past performance references include relevant experience with the following: • Setting up environments that involve Kubernetes charts and Docker containers on cloud platforms (including public and private, VMware and OpenStack) • Migrating enterprise level solutions with microservices architecture that store data in multiple instances of PostgreSQL and MongoDB.
Unacceptable **(0% of Maximum Score for Past Performance – 0 points)**	No past performance references with relevant experience with one or more of the following: • Setting up environments that involve Kubernetes charts and Docker containers on cloud platforms • Migrating enterprise level solutions with microservices architecture that store data in multiple instances of PostgreSQL and MongoDB.

2) Period and Place of Performance is hereby changed

From:

The tasks will be undertaken at the national level in Ukraine. All work shall be performed at the Government facilities of NHSU and SOE. The period of performance is expected to begin approximately October 29, 2019 and end February 11, 2020.

To:

The tasks will be undertaken at the national level in Ukraine. All work shall be performed at the Government facilities of NHSU and SOE. The period of performance is expected to begin approximately November 16, 2019 and end March 11, 2020.

3) The table in Part VI.II Deliverables of the SOW is hereby changed

From:

Milestone	**Deliverables**

Preparation for Data Migration	1) Execute all tasks defined in V.I
	2) Analysis of the hardware landscape in the new Data Center
	3) Detailed Data Migration Work Plan and schedule. For each step of the plan the vendor shall define the following:
	• Conditions for performing the procedures (which preparations should be completed before the step begins)
	• Who is responsible for the data migration step
	• The planned start date
	• The expected end date
	• Estimated time (duration) of the data migration step
	• Success criteria / validation rules
	• Required equipment and software tools to perform the procedure
	4) List of test procedures, test scenarios, test plan, test coverage / success rate for migration tests to include the overall approach and exact procedures including validation scripts and tools that will be used during test and final migrations
	5) List of mandatory procedures that precede final migration from source production environment to new production environment, including final validations for the new environment and proper backup and shutdown of the old environment
	6) Detailed list of migration procedures
	7) List of data migration tools that are planned to be applied (if applicable). If those tools (for example, specific

	custom tools, designed and developed scripts) will be developed as part of the project delivery they should also be defined in terms of type of tool, description, and application within the project 8) Risk and Issue log
Pre Migration Consulting Advisory	1) Advise, assist and facilitate NHSU and SOE personnel in the execution of tasks defined in V.II 2) Source Code for all thirteen eHealth modules in the target environment, technical improvements, and system upgrades 3) Data dictionary providing a centralized repository of information about data reflecting most recent updates to the eHealth system mapping data entities of respective Docker containers 4) List of production environment creation steps and Standard Operating Procedure for authorized Ukrainian Government personnel to execute data migration for all MPI / PHI data within 24 hours or less (if procedures are followed correctly) 5) Training for authorized Ukrainian Government personnel to execute data migration Standard Operating Procedure 6) Application configuration files, backup scripts, log creation scripts, and monitoring configuration scripts for preproduction 7) Migration scripts 8) Updates to data migration plan and schedule (as necessary) 9) List of Technical Improvement Procedures and Standard Operating

	Procedure to incorporate additional technical improvements
	10) Test report
	11) Switch / Rollback plan
	12) New environment validation results report to ensure that authorized Ukrainian Government personnel have correctly executed data migration procedures for MPI and PHI data, without directly accessing this data
	13) Complete documentation for the eHealth system to include the following:
	• System architecture
	• Infrastructure / environment
	• Configuration (demo, preproduction, production environments)
	• Microservices
	• Role model
	• Instructions
	• Glossary
	• Regulatory documentation with links
	• Post migration operating procedures including existing service level agreements (SLAs), system alerts, system operation metrics, and associated monitoring alerts/notifications
	• User guides for all monitoring tools installed for use post migration
	• Error mapping
	14) To ensure the integrity and correctness of data after migration the vendor shall develop the methodology and scripts required for NHSU and / or SOE to perform control and validation tasks, to include the

	following types of validations at a minimum:
	• Hash functions / Checksum validations shall be calculated for each data object on the source environment and after migration, validated to ensure they are the same data objects in the target environment
	• Data volumes / amounts with precision of bytes shall be calculated for each data object in the source environment and after migration validated for the same data objects in the target environment
	• Perform response time control / performance tests for all microservices - basic performance tests shall be performed to confirm the target environment performs at least as well and not worse than the source environment with the same amount of data and the same configurations. Chronometric measurements for each test shall be provided.
	• Test of backup system and of backups on new environment: After the system is migrated to the target environment new backup scripts shall be properly configured, new backup files shall be created and tested for successful restoration / rollback of the system using these new files
	• Administrator credentials test (authentication and authorization via SSH keys) shall be tested to

Milestone	Deliverables
	confirm that administrator (root) authentication and authorization using new SSH keys are be generated as part of the target environment setup and is performed successfully • Full logs of the data migration process shall be created for each data migration object during the process of migration. Logs shall be provided for further analysis by the system administrator
Final / Closing	1) Advise and assist NHSU and SOE personnel in the execution of tasks defined in V.III 2) Description of activities to be performed by vendor during post-switch support

To:

Milestone	Deliverables

Preparation for Data Migration	9) Execute all tasks defined in V.I
	10) Analysis of the hardware landscape in the new Data Center
	11) Detailed Data Migration Work Plan and schedule. For each step of the plan the vendor shall define the following:
	    • Conditions for performing the procedures (which preparations should be completed before the step begins)
	    • Who is responsible for the data migration step
	    • The planned start date
	    • The expected end date

	• Estimated time (duration) of the data migration step • Success criteria / validation rules • Required equipment and software tools to perform the procedure 12) List of test procedures, test scenarios, test plan, test coverage / success rate for migration tests to include the overall approach and exact procedures including validation scripts and tools that will be used during test and final migrations 13) List of mandatory procedures that precede final migration from source production environment to new production environment, including final validations for the new environment and proper backup and shutdown of the old environment 14) Detailed list of migration procedures 15) List of data migration tools that are planned to be applied (if applicable). If those tools (for example, specific custom tools, designed and developed scripts) will be developed as part of the project delivery they should also be defined in terms of type of tool, description, and application within the project 16) Risk and Issue log
Pre Migration Consulting Advisory	15) Advise, assist and facilitate NHSU and SOE personnel in the execution of tasks defined in V.II 16) <mark>Source Code for all eHealth modules in the target environment as described in Appendix 4 of the SOW</mark>, technical improvements, and system upgrades

	17) Data dictionary providing a centralized repository of information about data reflecting most recent updates to the eHealth system mapping data entities of respective Docker containers
	18) List of production environment creation steps and Standard Operating Procedure for authorized Ukrainian Government personnel to execute data migration for all MPI / PHI data within 24 hours or less (if procedures are followed correctly)
	19) Training for authorized Ukrainian Government personnel to execute data migration Standard Operating Procedure
	20) Application configuration files, backup scripts, log creation scripts, and monitoring configuration scripts for preproduction
	21) Migration scripts
	22) Updates to data migration plan and schedule (as necessary)
	23) List of Technical Improvement Procedures and Standard Operating Procedure to incorporate additional technical improvements
	24) Test report
	25) Switch / Rollback plan
	26) New environment validation results report to ensure that authorized Ukrainian Government personnel have correctly executed data migration procedures for MPI and PHI data, without directly accessing this data
	27) Complete documentation for the eHealth system to include the following: • System architecture • Infrastructure / environment

| | - Configuration (demo, preproduction, production environments)
- Microservices
- Role model
- Instructions
- Glossary
- Regulatory documentation with links
- Post migration operating procedures including existing service level agreements (SLAs), system alerts, system operation metrics, and associated monitoring alerts/notifications
- User guides for all monitoring tools installed for use post migration
- Error mapping |
| | 28) To ensure the integrity and correctness of data after migration the vendor shall develop the methodology and scripts required for NHSU and / or SOE to perform control and validation tasks, to include the following types of validations at a minimum:
- Hash functions / Checksum validations shall be calculated for each data object on the source environment and after migration, validated to ensure they are the same data objects in the target environment
- Data volumes / amounts with precision of bytes shall be calculated for each data object in the source environment and after migration validated for the same |

	data objects in the target environment
	• Perform response time control / performance tests for all microservices - basic performance tests shall be performed to confirm the target environment performs at least as well and not worse than the source environment with the same amount of data and the same configurations. Chronometric measurements for each test shall be provided.
	• Test of backup system and of backups on new environment: After the system is migrated to the target environment new backup scripts shall be properly configured, new backup files shall be created and tested for successful restoration / rollback of the system using these new files
	• Administrator credentials test (authentication and authorization via SSH keys) shall be tested to confirm that administrator (root) authentication and authorization using new SSH keys are be generated as part of the target environment setup and is performed successfully
	• Full logs of the data migration process shall be created for each data migration object during the process of migration. Logs shall be provided for further analysis by the system administrator

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Final / Closing	3) Advise and assist NHSU and SOE personnel in the execution of tasks defined in V.III 4) Description of activities to be performed by vendor during post-switch support

4) Annex 2 is hereby changed

From:

Sample Budget Template

Item#	Deliverable	Estimated Due Date after Kick-off	Deliverable Milestone Price
1	Preparation for Data Migration	TBP*	$TBP*
2	Pre Migration Consulting Advisory	TBP*	$TBP*
3	Final / Closing	TBP*	$TBP*
	Firm Fixed Price	**TOTAL**	$0.00

* To Be Proposed by the Vendor – final completion of all milestones is due by 11 February 2020

To:

Sample Budget Template

Item#	Deliverable	Estimated Due Date after Kick-off	Deliverable Milestone Price
1	Preparation for Data Migration	TBP*	$TBP*
2	Pre Migration Consulting Advisory	TBP*	$TBP*
3	Final / Closing	TBP*	$TBP*
	Firm Fixed Price	**TOTAL**	$0.00

* To Be Proposed by the Vendor – final completion of all milestones is due by 11 March 2020