Empowered lives.
Resilient nations.

Request for Proposals
RfP24/02801
Amendment no. 3

Ref. no. RfP24/02801

Date: **06/03/2024**

Subject: Development of a new contraventions management software solution "E-Dosar Contraventional" for the internal affairs system

Dear Sir/Madam,

UNDP is hereby amending the following:

1. **Additional Clarifications** to Suppliers' Questions are listed below:

	Question	Answer
1	How will the performance of any third-party integrations or external APIs (that the application relies on) be assessed during testing?	According to ToR, Annex B, Table B.19. Requirements for key activities of the acceptance testing phase, the supplier shall propose the test strategy and procedures and deliver the test scenarios according to them. The test procedures shall allow distinct identification of the response time (or other indicator) of the system and external components.
2	Are there any environment constraints or limitations that should be considered during performance testing? Will there be an environment dedicated for performance testing with production like configurations and resources?	According to requirement LCR 001 The MIA provides the operating environments for IS: - Production environment; - Test environment; - Development environment. The MIA will deliver the operating environments for the eDosar contraventional within the MCloud platform. According to the requirement CSI 2.1. the Supplier shall define the requirements for the infrastructure of the three environments. The requirements must be justified.
3	What is the volumetrics (historical data) per each service to be supported. Max volumes in the DB during testing. E.g. performance testing should support requirement PERF001(<1sec) having in DB historically data for 20 years.	According to ToR, Annex B, Table B.19. Requirements for key activities of the acceptance testing phase, the supplier shall propose the test strategy and procedures and deliver the test scenarios according to them. It is expected that the Supplier will propose tests based on the number of dossiers currently uploaded to the ISA REC. A brief description of the AIS REC is given in the annex below.
4	PERF001 - transaction response time 1< sec. Is if for any transaction? E.g. a) Click to display personal data for 1 person b) Generate complex report for multiple days/people. Both should provide response in <1sec?	According to requirement PERF 001 the response time does not also refer to the generation of reports

5	PERF006 what is the distribution for the 100K transactions per day? E.g. if we consider the peak load (100K txn) spread across 10H, TPS will be ~3TPS. More details on the load profile are needed.	According to requirement PERF 002 The system must be able to manage up to 1000 concurrent sessions (authorized user connections and external systems).
6	FLEX001 -are there any fixed configurations/view/forms what will be used for signing off? There is a risk that the performance results provided for the assumed configurations/forms will be totally different from the new once.	Requirement FLEX001 refers to the capability of the system to support CU D03.1 Configure Forms (Form Builder capability is described in Tor. Annex A5, Chapter 1. Platform Capabilities for Workflow Digitization and Record Keeping). The requirements for performance testing do not apply to forms that will be further perfected by the Beneficiary. At the same time, it is expected that the Supplier will use the Form Builder capability for the development of forms in the SIA eDosar contravențional, which will demonstrate the capability to produce forms that meet the performance requirements for the system.
7	FLEX009 - Could you please clarify if PERF001 is valid in case when the flow uses External Databases (third parties) that have their own latency.	idem to the answer to point 1
8	UI009 - Confirm please that PERF001 is applicable in any complex search and for any volumes of data to be displayed (E.g. User can search for all contraventions for over 20years? Are there any limitations in the search criteria and data retrieval?	idem to the answer to point 4
9	UI013 What are the documents limits? Size of DOC, DOCX, XLS... ? 10G file? 100G(8K resolution...)	The Supplier will propose the taxonomy for structured documents. It is expected that the Supplier will propose a data storage approach that consumes minimal space without impacting R/W performance as the data will be stored in the MCloud.
10	SM002 What do you mean by "load" and "thresholds" is it about hardware metrics? CPU? MEM? - Please provide the expected values	According to SM001 the SIA e-Dosar Contravention will have load level and operational monitoring mechanisms for all key components (e.g. business logic level and data level components).
11	SC003 Unlimited number of transactions Could you provide a limit for sign off? Clarifications required.	According to requirement SM001 the SIA e-Dosar Contravention will have load level and operational monitoring mechanisms for all key components (e.g. business logic level and data level components). Respectively, in addition to the level of use of the hardware components (CPU, RAM, etc.) the system has to allow monitoring of some logical indicators. E.g. indicators related to database: active sessions/total sessions in pool, Page Life Expectancy, Blocked Sessions, etc.; performance-related indicators: average response time, response latency of external resource, etc.
12	RC001 - Backup. Is this a frequent event? Will it overlap with the peak activity hours?	According to requirement CSI 78 The supplier will prepare and deliver a proposal for the Continuity (Maintenance) Plan, which will include the Backup and Recovery Plan
13	For Automation/Performance testing - will the system be prepopulated with a X volume of data for testing purpose? Mocks/Simulators?	idem to the answer to point 3
14	Is resilience testing in scope?	The supplier must demonstrate the resilience capability of the system in acceptance testing. The requirements for resilience and continuity are described in ToR, chapter 8.12.
15	Is failover testing in scope?	idem to the answer to point 14
16	What is the Availability NFR if any? E.g. 99.9999% of the time.	According to requirement CSI 78 The supplier will prepare and deliver a proposal for the Continuity (Maintenance) Plan, which will include the "Propose of continuity targets and KPIs: Set recovery targets such as maximum tolerated recovery time (RTO) and recovery point (RPO)." It is expected that the proposals for system performance and availability parameters will ensure the level of services specified in the ToR, Annex

		C, C.3.1 Support Services and will not be lower than the MCloud platform performance and availability parameters. See also the requirements for resilience and continuity are described in ToR, chapter 8.12.
17	What is the acceptable error rate during performance testing?	The number and type of errors allowed for final acceptance of the system are described in the ToR, Appendix B, Table B.30. Requirements for the final acceptance of the SIA e-Dosar contravențional
18	Are there any DB purging, Data warehouse migration functional and performance requirements. E.g. Data should be migrated to data warehouse every 1 second. Data older than 10y purged from operational DB etc.	There is no provision to delete data from the DB. The system must ensure storage and traceability of both user actions and recorded data/documents. Data and documents entered in the system are archived and kept in the electronic archive (CU S05 Store documents and files in archive). The archiving mechanism for audit-related data is described in ESA requirement 054.
	Data Migration Questions	
20	Should all records be imported from all time, or from a specific date / timeline?	All data from SIA REC and SIA RAR are to be migrated.
21	From what sources should the data be migrated?	The requirements for populating the system with data are described in the ToR, Annex B, Table B.16. Requirements for the key activities of the data population phase. As per the CSI 45 requirement the Supplier shall propose the approach, method and tools for performing the initial data population and data migration from existing systems into the SIA e-Dosar contravențional. The migration of data from the SIA REC and the SIA RAR is requested. (description of the SIA REC and the SIA RAR is given in the annex below) It is expected that the Supplier will include in the initial data population procedures, in addition to the completion of the nomenclatures, the retrieval of data from external resources (e.g. SIA RSP)
22	Should we migrate audit data (login/logout/update/create/edit/etc. actions) ?	User activity log events do not need to be migrated, they will be kept in the old systems.
23	How many DB servers do you have and what are they used for?	SIA REC and SIA RAR are embedded in the MCloud. MAI uses a virtual server for SIA REC and SIA RAR.
24	How many databases are, what size and what are those used for?	The architecture of SIA REC and SIA RAR is not split into levels. The application layer is integrated with the BD. Both systems use the same SQL instance. A brief description of the AIS REC and AIS RAR is given in the annex below.
25	Is there any technical documentation about the database (tables, views, procedures, triggers, jobs, connections, etc)?	There is technical documentation describing the system but this does not include a detailed description of the physical data model. MAI will provide access to the DB structure and, if necessary, to the source code of the SIA REC and SIA RAR so that the Executor can identify the data model.
26	Is there any technical documentation explaining the process of creating/editing/deleting data from the databases?	The architecture of SIA REC and SIA RAR is not split into levels. The application layer is integrated with the BD. The existing technical documentation does not explicitly describe the working mechanism with DB. Operational procedures and how users work with the system are described in internal regulations, instructions and system user guides.
27	What are the actual data storage components (relational db, non-relational-db, olap cubes, BI service, other services)?	MIA used SQL Server 2016. SIA RES and SIA RAR applications use the relational model for DB.
28	Is it possible to have data inconsistency? How should it be handled?	Concerning the cleansing of data from SIA REC and SIA RAR: the cleaning and validation of data will be carried out by MAI. The supplier will propose the methodology and tools for data migration. The proposed tools must have capabilities for data verification and transformation. The Supplier will implement/configure within the ETL tool the validation

		criteria and data transformation logic according to the criteria agreed with the Beneficiary.
29	What will be the process of data import validation?	idem to the answer to point 28
30	Are there uploaded files (what formats: pdf, images, videos, other) associated with db records? Where are they stored now, how they should be handled?	SIA REC and SIA RAR store pdf and image files that are part of work processes. They are stored on the same VM together with the DB. They are to be migrated. If there is a redactable document/data associated with the pdf file/image in the system, both sets will migrate and the relationship between them will be preserved.
31	Who is the owner of SIA RAR and SIA REC?	MIA is owner of SIA RAR and SIA REC. The holder/keeper of SIA RAR and SIA REC is the IT Service of MAI
32	Archived data and anonymized data is stored in same databases or separately? Should it be imported?	There is currently no electronic archive. All data is stored in the operational DB.

Annex 1: Description of the SIA REC and the SIA RAR

	Description
SIA Name:	**SIA REC - SIA Register of Contraventions**
SIA Name:	SIA REC - SIA Register of Contraventions
Short description:	The system aims to form and maintain the State Register of Contraventions as an information resource in the field of contraventions, and is intended for the bodies responsible for the detection, examination and/or resolution of contraventions. The system ensures the documentary record of contraventions, the record of penalty points accumulated by drivers, as well the information on the persons concerned in contravention cases. Also, the SIA REC includes information on persons and vehicles reported in the guidance.
Concept:	The SIA REC concept is described in the Government Decision no. 517 of 22.07.2022 for the approval of the Concept of the Automated Information System for recording contraventions, contravention cases and persons who have committed contraventions and the Regulation on the single record of contraventions, contravention cases and persons who have committed contraventions.
DBMS structure	
DBMS	MS SQL 2016
Number of tables	352
Data model	
Data model description	Informational objects/documents have a 1:1 reflection in the database. The RAR CIS data architecture is a symmetrical reflection of the paper-based recordkeeping model and has been designed by combining 3 types of data models with different purposes and different organizational principles: 1. 'register' - data model providing road accident records (RAR component); 2. "statistics" - data model for the analysis of the phenomenon; 3. "operational data" - intended to support operational activity The Information objects/documents have a 1:1 reflection in BD.
Informational objects:	SIA REC includes the following categories of information objects: 1. Contravention case 2. Documents 3. Persons (individuals) 4. Legal units 5. Officials 6. Transport units 7. Nomenclatures Statistical reports

Number of folders (contravention cases)	~ 6 000 000
Documents types	The CIS REC includes the following main types of documents: 1. Minutes of the contravention (Proces verbal cu privier la contravenție) 2. The report of registration of the contravention (raportul privind înregistrarea contravenției) 3. Payments 4. Statistical reports Attached documents
Number of documents registered in the DB	Verbal process on the offense ~ 10 000 000 Report on the registration of the contravention ~ 3 000 000