

Request for Proposal (RFP)

Ref. no. RFP 10/00191

Date: 6 July 2010

Dear Sir/Madam,

Subject: RFP for the Implementation of the Electronic Document Management System for the Chisinau Municipality Mayorality /CMD

1. You are requested to submit a proposal for information and communication technology services, as per enclosed Terms of Reference (TOR).
2. To enable you to submit a proposal, attached are:
 - i. Instructions to Offerors (Annex I)
 - ii. General Conditions of Contract (Annex II)
 - iii. Terms of Reference (TOR) (Annex III)
 - iv. Proposal Submission Form (Annex IV)
 - v. Price Schedule/Financial Proposal (Annex V)
3. Your offer comprising of technical proposal and price schedule/financial proposal, in separate sealed envelopes, marked with “**RFP: Implementation of the Electronic Document Management System for the Chisinau Municipality Mayorality /CMD**” should reach the UNDP office no later than **6 August 2010, 16:30**, local time.

Offers can be submitted either in hard copy or electronically.

a) Documents/offers in hard copy need to be addressed to:

**UNDP Moldova,
131, 31 August 1989 Street, MD-2012 Chisinau, Republic of Moldova
Attention: Registry Office/Procurement**

b) Offers sent electronically need to be addressed to the following e-mail address:

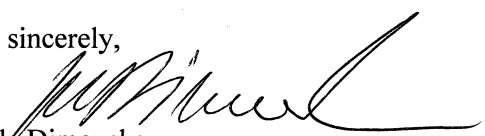
tenders-Moldova@undp.org

Offers shall be clearly marked with “**RFP: Implementation of the Electronic Document Management System for the Chisinau Municipality Mayorality /CMD**”

Contact person for clarifications: Ghenadie Ivascenco, Project Manager
(ghenadie.ivascenco@undp.org)

4. If you request additional information, we would endeavor to provide information expeditiously, but any delay in providing such information will not be considered a reason for extending the submission date of your proposal.
5. You are requested to acknowledge receipt of this letter and to indicate whether or not you intend to submit a proposal.

Yours sincerely,



Matilda Dimovska,
Resident Representative a.i.



Instructions to Offerors

A. Introduction

1. General

The purpose of this Request for Proposal (RFP) is to solicit proposals from the qualified companies **for the Implementation of the Electronic Document Management System for the Chisinau Municipality Mayoralty /CMD.**

The general objective of the requested consultancy is to increase document management efficiency within Chisinau Municipality Mayoralty (CMM) – increase the speed of information flow, reduce the period of information processing cycle and time of response, and generally optimize electronic information workflow. The Document Management System within the Chisinau Municipality Mayoralty will be a solution encouraging the cooperation of civil servants in the Departments in particular and the Mayoralty in general. The implemented Document Management Information System shall become a means of communication, consulting and cooperation at all levels of the Mayoralty, and will provide increased transparency for the citizens.

2. Cost of proposal

The Offeror shall bear all costs associated with the preparation and submission of the Proposal, the UNDP will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the solicitation.

B. Solicitation Documents

3. Contents of solicitation documents

Proposals must offer services for the total requirement. Proposals offering only part of the requirement will be rejected. The Offeror is expected to examine all corresponding instructions, forms, terms and specifications contained in the Solicitation Documents. Failure to comply with these documents will be at the Offeror's risk and may affect the evaluation of the Proposal.

4. Clarification of solicitation documents

A prospective Offeror requiring any clarification of the Solicitation Documents may notify the procuring UNDP entity in writing at the organisation's mailing address or fax number indicated in the RFP. The procuring UNDP entity will respond in writing to any request for clarification of the Solicitation Documents that it receives earlier than two weeks prior to the deadline for the submission of Proposals. Written copies of the organisation's response (including an explanation of the query but without identifying the source of inquiry) will be sent to all prospective Offerors that has received the Solicitation Documents.

5. Amendments of solicitation documents

At any time prior to the deadline for submission of Proposals, the procuring UNDP entity may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Offeror, modify the Solicitation Documents by amendment.

All prospective Offerors that have received the Solicitation Documents will be notified in writing of all amendments to the Solicitation Documents.

In order to afford prospective Offerors reasonable time in which to take the amendments into account in preparing their offers, the procuring UNDP entity may, at its discretion, extend the deadline for the submission of Proposals.

C. Preparation of Proposals

6. Language of the proposal

The Proposals prepared by the Offeror and all correspondence and documents relating to the Proposal exchanged by the Offeror and the procuring UNDP entity shall be written in the English language. Any printed literature furnished by the Offeror may be written in another language so long as accompanied by an English translation of its pertinent passages in which case, for purposes of interpretation of the Proposal, the English translation shall govern.

7. Documents comprising the proposal

The Proposal shall comprise the following components:

- (a) Proposal submission form (Annex IV);
- (b) Operational and technical part of the Proposal, including documentation to demonstrate that the Offeror meets all requirements;
- (c) Price schedule/financial proposal, completed in accordance with clauses 9 and 10 (Annex V).

8. Operational and technical documentation

The operational and technical part of the Proposal shall contain the following documents:

- **Company profile;**
- **Copy of registration certificate;**
- **Workplan and approach** (detailed description of activities, timeframe);
- **CVs of proposed staff;**
- **Confirmation of Certification ISO 9001:2000** for developing and implementing IT solutions and providing connected services, issued by accredited organization;
- **Confirmation of Certification ISO 9001:2000** for subcontractor (if applicable);
- **Reference/s** of implementation of at least one similar project developed in a Local Public Administration Institution with more than 200 system users;
- **Financial balance sheets** for the last three years (certifying that the average annual business income for the last 3 years is over 500,000.00 USD);
- Other relevant documents.

9. Proposal form

The Offeror shall structure the operational and technical part of its Proposal as follows:

(a) Management plan

This section should provide corporate orientation to include the year and state/country of incorporation and a brief description of the Offeror's present activities. It should focus on services related to the Proposal.

This section should also describe the organisational unit(s) that will become responsible for the contract, and the general management approach towards a project of this kind. The Offeror should comment on its experience in similar projects and identify the person(s) representing the Offeror in any future dealing with the procuring UNDP entity.

(b) Resource plan

This should fully explain the Offeror's resources in terms of personnel and facilities necessary for the performance of this requirement. It should describe the Offeror's current capabilities/facilities and any plans for their expansion.

(c) Proposed methodology

This section should demonstrate the Offeror's responsiveness to the specification by identifying the specific components proposed, addressing the requirements, as specified, point by point; providing a detailed description of the essential performance characteristics proposed warranty; and demonstrating how the proposed methodology meets or exceeds the specifications.

The operational and technical part of the Proposal should not contain any pricing information whatsoever on the services offered. Pricing information shall be separated and only contained in the appropriate Price Schedules.

It is mandatory that the Offeror's Proposal numbering system corresponds with the numbering system used in the body of this RFP. All references to descriptive material and brochures should be included in the appropriate response paragraph, though material/documents themselves may be provided as annexes to the Proposal/response.

Information which the Offeror considers proprietary, if any, should be clearly marked "proprietary" next to the relevant part of the text and it will then be treated as such accordingly.

10. Proposal prices

The Offeror shall indicate on an appropriate Price Schedule/Financial Proposal, an example of which is contained in these Solicitation Documents, the prices of services it proposes to supply under the contract.

11. Proposal currencies

All prices shall be quoted in **US Dollars or any other convertible currency and shall be exclusive of VAT**. For comparison purposes, all other currencies shall be converted into US Dollars using the UN Operational Rate of Exchange on the day of the competition deadline.

12. Period of validity of proposals

Proposals shall remain valid for ninety (90) days after the date of Proposal submission prescribed by the procuring UNDP entity, pursuant to the deadline clause. A Proposal valid for a shorter period may be rejected by the procuring UNDP entity on the grounds that it is non-responsive.

In exceptional circumstances, the procuring UNDP entity may solicit the Offeror's consent to an extension of the period of validity. The request and the responses thereto shall be made in writing. An Offeror granting the request will not be required nor permitted to modify its Proposal.

13. Format and signing of proposals

The Offeror shall prepare two copies of the Proposal, clearly marking each "Original Proposal" and "Copy of Proposal" as appropriate. In the event of any discrepancy between them, the original shall govern.

The two copies of the Proposal shall be typed or written in indelible ink and shall be signed by the Offeror or a person or persons duly authorised to bind the Offeror to the contract. The latter authorisation shall be indicated by written power-of-attorney accompanying the Proposal.

A Proposal shall contain no interlineations, erasures, or overwriting except, as necessary to correct errors made by the Offeror, in which case such corrections shall be initialled by the person or persons signing the Proposal.

14. Payment

UNDP shall effect payments to the Contractor after acceptance by UNDP of the invoices submitted by the contractor, upon achievement of the corresponding milestones.

D. Submission of Proposals

15. Sealing and marking of proposals

The Offeror shall seal the Proposal in one outer and two inner envelopes, as detailed below.

(a) The outer envelope shall be:

- addressed to –

**UNDP Moldova
131, 31 August 1989 Street, MD-2012 Chisinau, Republic of Moldova
Attention: UNDP Registry Office/Procurement**

and,

- marked with –

“RFP: Implementation of the Electronic Document Management System for the Chisinau Municipality Mayorality /CMD”

(b) Both inner envelopes shall indicate the name and address of the Offeror. The first inner envelope shall contain the information specified in Clause 8 (*Operational and technical documentation*) and in Clause 9 (*Proposal form*) above, with the copies duly marked “Original” and “Copy”. The second inner envelope shall include the price schedule/financial proposal duly identified as such.

Note, if the inner envelopes are not sealed and marked as per the instructions in this clause, the procuring UNDP entity will not assume responsibility for the Proposal’s misplacement or premature opening.

(c) In case of electronic submission, the Offeror shall send two messages by e-mail to the following address: tenders-Moldova@undp.org

The first e-mail message shall contain the information specified in Clause 8 (*Operational and technical documentation*) and Clause 9 (*Proposal form*) above and shall have the following subject: **“Technical Proposal for RFP: Implementation of the Electronic Document Management System for the Chisinau Municipality Mayorality /CMD”**. The second e-mail message shall include the price schedule/financial proposal and shall have the following subject: **“Financial Proposal for RFP: Implementation of the Electronic Document Management System for the Chisinau Municipality Mayorality /CMD”**.

Important Note for Offerors submitting proposals in electronic format/via e-mail.

Having prepared the Proposal in paper format as specified in Clause “D. Submission of Proposals”, hereof, the entire Proposal should be scanned or otherwise converted into one or more electronic .pdf (Adobe Acrobat) format files and attached to one or more E-mails. The Subject line of E-mail(s) should state: **“Technical Proposal for RFP: Implementation of the Electronic Document Management System for the Chisinau Municipality Mayorality /CMD”** and separate e-mail **“Financial Proposal for RFP: Implementation of the Electronic Document Management System for the Chisinau Municipality Mayorality /CMD”** - DO NOT OPEN IN ADVANCE. The opening of the financial proposal must be secured with the password protected ZIP archive by the Offeror, which will be given to the procuring UNDP entity upon its request after the completion of the technical proposal evaluation.

To assist procuring UNDP entity in the assurance of transparency, it is recommended that, prior to sending the Email(s), Offerors should open “Options”, then “Voting and Tracking Options” and select “Request a delivery receipt for this message” AND “Request a read receipt for this message”. This option path is for Microsoft Office Outlook software. Other software should offer similar options, although the path and wording might be somewhat different.

16. Deadline for submission of proposals

Proposals must be received by the procuring UNDP entity at the address or e-mail address specified under clause *Sealing and marking of Proposals* no later than **6 August 2010, 16:30**, local time.

The procuring UNDP entity may, at its own discretion extend this deadline for the submission of Proposals by amending the solicitation documents in accordance with clause *Amendments of Solicitation Documents*, in which case all rights and obligations of the procuring UNDP entity and Offerors previously subject to the deadline will thereafter be subject to the deadline as extended.

17. Late Proposals

Any Proposal received by the procuring UNDP entity after the deadline for submission of proposals, pursuant to clause *Deadline for the submission of proposals*, will be rejected.

18. Modification and withdrawal of Proposals

The Offeror may withdraw its Proposal after the Proposal’s submission, provided that written notice of the withdrawal is received by the procuring UNDP entity prior to the deadline prescribed for submission of Proposals.

The Offeror’s withdrawal notice shall be prepared, sealed, marked, and dispatched in accordance with the provisions of clause *Deadline for Submission of Proposals*. The withdrawal notice may also be sent by telex or fax but followed by a signed confirmation copy.

No Proposal may be modified subsequent to the deadline for submission of proposals.

No Proposal may be withdrawn in the Interval between the deadline for submission of proposals and the expiration of the period of proposal validity specified by the Offeror on the Proposal Submission Form.

E. Opening and Evaluation of Proposals

19. Opening of proposals

The procuring entity will open the Proposals in the presence of a Committee formed by the Head of the procuring UNDP entity.

20. Clarification of proposals

To assist in the examination, evaluation and comparison of Proposals, the Purchaser may at its discretion, ask the Offeror for clarification of its Proposal. The request for clarification and the response shall be in writing and no change in price or substance of the Proposal shall be sought, offered or permitted.

21. Preliminary examination

The Purchaser will examine the Proposals to determine whether they are complete, whether any computational errors have been made, whether the documents have been properly signed, and whether the Proposals are generally in order.

Arithmetical errors will be rectified on the following basis: If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected. If the Offeror does not accept the correction of errors, its Proposal will be rejected. If there is a discrepancy between words and figures the amount in words will prevail.

Prior to the detailed evaluation, the Purchaser will determine the substantial responsiveness of each Proposal to the Request for Proposals (RFP). For purposes of these Clauses, a substantially responsive Proposal is one which conforms to all the terms and conditions of the RFP without material deviations. The Purchaser's determination of a Proposal's responsiveness is based on the contents of the Proposal itself without recourse to extrinsic evidence.

A Proposal determined as not substantially responsive will be rejected by the Purchaser and may not subsequently be made responsive by the Offeror by correction of the non-conformity.

22. Evaluation and comparison of proposals

A two-stage procedure will be utilised in evaluating the proposals, with evaluation of the technical proposal being completed prior to any price proposal being opened and compared. The price schedule/financial proposal of the Proposals will be opened only for submissions that passed the minimum technical score of 70% of the obtainable score of 700 points in the evaluation of the technical proposals.

The technical proposal is evaluated on the basis of its responsiveness to the Term of Reference (TOR) and the Instructions to Offerors.

In the Second Stage, the price proposal of all contractors, who have attained minimum 70% score in the technical evaluation, will be compared. The **cumulative analysis scheme** will be applied with a total score being obtained upon the combination of weighted technical and financial attributes. An Offeror's response to the solicitation document is evaluated and points are attributed based on how well they meet the defined desirable criteria. Cost under this method of analysis is rendered as an award criterion, which will be 30% out of a total score of 1000 of all the desirable factors of the RFP. The contract will be awarded to the offeror obtaining the highest cumulative score. The following formula will be applied in calculating the cumulative score:

$$B = T + \frac{C_{low}}{C} \times 300,$$

where

T – is the total technical score awarded to the evaluated proposal;

C – is the price of the evaluated proposal; and

C_{low} – is the lowest of all evaluated proposal prices among responsive proposals.

Technical Evaluation Criteria

Summary of Technical Proposal Evaluation Forms		Score Weight	Points Obtainable	Company / Other Entity				
				A	B	C	D	E
1.	Expertise of Firm / Organisation submitting Proposal	30%	250					
2.	Proposed Work Plan and Approach	50%	200					
3.	Personnel	20%	250					
Total			700					

Evaluation forms for technical proposals follow on the next two pages. The obtainable number of points specified for each evaluation criterion indicates the relative significance or weight of the item in the overall evaluation process. The Technical Proposal Evaluation Forms are:

Form 1: Expertise of Firm / Organisation Submitting Proposal

Form 2: Proposed Work Plan and Approach

Form 3: Personnel

Technical Proposal Evaluation Form 1		Points obtainable	Company / Other Entity				
			A	B	C	D	E
Expertise of firm / organisation submitting proposal							
1.1	Reputation of Organisation and Staff (Competence / Reliability)	50					
1.2	General Organisational Capability which is likely to affect implementation (i.e. loose consortium, holding company or one firm, size of the firm / organisation, strength of project management support e.g. project financing capacity and project management controls)	40					
1.3	Extent to which any work would be subcontracted (subcontracting carries additional risks which may affect project implementation, but properly done it offers a chance to access specialised skills.	40					
1.4	Quality assurance procedures, warranty	40					
1.5	Relevance of: - Specialised Knowledge - Experience on Similar Programme / Projects - Experience on Projects in the Region - Work for UNDP/ major multilateral/ or bilateral programmes	80					
Total Part 1		250					

Technical Proposal Evaluation Form 2		Points Obtainable	Company / Other Entity				
			A	B	C	D	E
Proposed Work Plan and Approach							
2.1	To what degree does the Offeror understand the task?	15					
2.2	Have the important aspects of the task been addressed in sufficient detail?	15					
2.3	Are the different components of the project adequately weighted relative to one another?	15					
2.4	Is the proposal based on a survey of the project environment and was this data input properly used in the preparation of the proposal?	20					
2.5	Is the conceptual framework adopted appropriate for the task?	45					
2.6	Is the scope of task well defined and does it correspond to the TOR?	50					
2.7	Is the presentation clear and is the sequence of activities and the planning logical, realistic and promise efficient implementation to the project?	40					
Total Part 2		200					

Technical Proposal Evaluation Form 3			Points Obtainable	Company / Other Entity				
				A	B	C	D	E
Personnel								
3.1	Project Manager [<i>Minimum 5 years experience in Implementing Document Management Information Systems</i>]		70					
			Sub-Score					
	General Qualification		55					
	- Education background	10						
	- Professional experience	20						
	- International experience	15						
	- Knowledge of the region	10						
	Language Qualifications		15					
			70					
3.2	Analyst [<i>Minimum 3 years experience in implementing Document Management Systems</i>]		60					
			Sub-Score					
	General Qualification		50					
	- Education background	10						
	- Professional experience	20						
	- International experience	15						
	- Knowledge of the region	5						
	Language Qualifications		10					
			60					
3.2	Technical Leader [<i>minimum 3 years experience in developing Document Management Information Systems or minimum 5 year experience in developing Activity Management Information Systems</i>]		60					
			Sub-Score					
	General Qualification		50					
	- Education background	10						
	- Professional experience	20						
	- International experience	15						
	- Knowledge of the region	5						
	Language Qualifications		10					
			60					
3.2	System Implementation Leader [<i>minimum 3 years experience in Implementing Document Management Information Systems</i>]		60					
			Sub-Score					
	General Qualification		50					
	- Education background	10						
	- Professional experience	20						
	- International experience	15						
	- Knowledge of the region	5						
	Language Qualifications		10					
			60					
Total Part 3			250					

F. Award of Contract

23. Award criteria, award of contract

The procuring UNDP entity reserves the right to accept or reject any Proposal, and to annul the solicitation process and reject all Proposals at any time prior to award of contract, without thereby incurring any liability to the affected Offeror or any obligation to inform the affected Offeror or Offerors of the grounds for the Purchaser's action.

Prior to expiration of the period of proposal validity, the procuring UNDP entity will award the contract to the qualified Offeror whose Proposal after being evaluated is considered to be the most responsive to the needs of the organisation and activity concerned.

24. Purchaser's right to vary requirements at time of award

The Purchaser reserves the right at the time of award of contract to vary the quantity of services and goods specified in the RFP without any change in price or other terms and conditions.

25. Signing of the contract

Within 30 days of receipt of the contract the successful Offeror shall sign and date the contract and return it to the Purchaser.

Failure of the successful Offeror to comply with the requirement of Clause 25 shall constitute sufficient grounds for the annulment of the award and forfeiture of the Proposal security if any, in which event the Purchaser may make the award to the next lowest evaluated Offeror or call for new Proposals.

General Conditions of Contract**1. LEGAL STATUS**

The Contractor shall be considered as having the legal status of an independent contractor vis-à-vis UNDP. The Contractor's personnel and sub-contractors shall not be considered in any respect as being the employees or agents of UNDP or the United Nations.

2. SOURCE OF INSTRUCTIONS

The Contractor shall neither seek nor accept instructions from any authority external to UNDP in connection with the performance of its services under this Contract. The Contractor shall refrain from any action which may adversely affect UNDP or the United Nations and shall fulfil its commitments with the fullest regard to the interests of UNDP.

3. CONTRACTOR'S RESPONSIBILITY FOR EMPLOYEES

The Contractor shall be responsible for the professional and technical competence of its employees and will select, for work under this Contract, reliable individuals who will perform effectively in the implementation of this Contract, respect the local customs, and conform to a high standard of moral and ethical conduct.

4. ASSIGNMENT

The Contractor shall not assign, transfer, pledge or make other disposition of this Contract or any part thereof, or any of the Contractor's rights, claims or obligations under this Contract except with the prior written consent of UNDP.

5. SUB-CONTRACTING

In the event the Contractor requires the services of sub-contractors, the Contractor shall obtain the prior written approval and clearance of UNDP for all sub-contractors. The approval of UNDP of a sub-contractor shall not relieve the Contractor of any of its obligations under this Contract. The terms of any sub-contract shall be subject to and conform with the provisions of this Contract.

6. OFFICIALS NOT TO BENEFIT

The Contractor warrants that no official of UNDP or the United Nations has received or will be offered by the Contractor any direct or indirect benefit arising from this Contract or the award thereof. The Contractor agrees that breach of this provision is a breach of an essential term of this Contract.

7. INDEMNIFICATION

The Contractor shall indemnify, hold and save harmless, and defend, at its own expense, UNDP, its officials, agents, servants and employees from and against all suits, claims, demands, and liability of any nature or kind, including their costs and expenses, arising out of acts or omissions of the Contractor, or the Contractor's employees, officers, agents or sub-contractors, in the performance of this Contract. This provision shall extend, inter alia, to claims and liability in the nature of workmen's compensation, products liability and liability arising out of the use of patented inventions or devices, copyrighted material or other intellectual property by the Contractor, its employees, officers, agents, servants or sub-contractors. The obligations under this Article do not lapse upon termination of this Contract.

8. INSURANCE AND LIABILITIES TO THIRD PARTIES

- 8.1 The Contractor shall provide and thereafter maintain insurance against all risks in respect of its property and any equipment used for the execution of this Contract.
- 8.2 The Contractor shall provide and thereafter maintain all appropriate workmen's compensation insurance, or its equivalent, with respect to its employees to cover claims for personal injury or death in connection with this Contract.
- 8.3 The Contractor shall also provide and thereafter maintain liability insurance in an adequate amount to cover third party claims for death or bodily injury, or loss of or damage to property, arising from or in connection with the provision of services under this Contract or the operation of any vehicles, boats, airplanes or other equipment

owned or leased by the Contractor or its agents, servants, employees or sub-contractors performing work or services in connection with this Contract.

8.4 Except for the workmen's compensation insurance, the insurance policies under this Article shall:

- (i) Name UNDP as additional insured;
- (ii) Include a waiver of subrogation of the Contractor's rights to the insurance carrier against UNDP;
- (iii) Provide that UNDP shall receive thirty (30) days written notice from the insurers prior to any cancellation or change of coverage.

8.5 The Contractor shall, upon request, provide UNDP with satisfactory evidence of the insurance required under this Article.

9. ENCUMBRANCES/LIENS

The Contractor shall not cause or permit any lien, attachment or other encumbrance by any person to be placed on file or to remain on file in any public office or on file with UNDP against any monies due or to become due for any work done or materials furnished under this Contract, or by reason of any other claim or demand against the Contractor.

10. TITLE TO EQUIPMENT

Title to any equipment and supplies that may be furnished by UNDP shall rest with UNDP and any such equipment shall be returned to UNDP at the conclusion of this Contract or when no longer needed by the Contractor. Such equipment, when returned to UNDP, shall be in the same condition as when delivered to the Contractor, subject to normal wear and tear. The Contractor shall be liable to compensate UNDP for equipment determined to be damaged or degraded beyond normal wear and tear.

11. COPYRIGHT, PATENTS AND OTHER PROPRIETARY RIGHTS

UNDP shall be entitled to all intellectual property and other proprietary rights including but not limited to patents, copyrights, and trademarks, with regard to products, or documents and other materials which bear a direct relation to or are produced or prepared or collected in consequence of or in the course of the execution of this Contract. At the UNDP's request, the Contractor shall take all necessary steps, execute all necessary documents and generally assist in securing such proprietary rights and transferring them to UNDP in compliance with the requirements of the applicable law.

12. USE OF NAME, EMBLEM OR OFFICIAL SEAL OF UNDP OR THE UNITED NATIONS

The Contractor shall not advertise or otherwise make public the fact that it is a Contractor with UNDP, nor shall the Contractor, in any manner whatsoever use the name, emblem or official seal of UNDP or the United Nations, or any abbreviation of the name of UNDP or the United Nations in connection with its business or otherwise.

13. CONFIDENTIAL NATURE OF DOCUMENTS AND INFORMATION

13.1 All maps, drawings, photographs, mosaics, plans, reports, recommendations, estimates, documents and all other data compiled by or received by the Contractor under this Contract shall be the property of UNDP, shall be treated as confidential and shall be delivered only to UNDP authorized officials on completion of work under this Contract.

13.2 The Contractor may not communicate at any time to any other person, Government or authority external to UNDP, any information known to it by reason of its association with UNDP which has not been made public except with the authorization of UNDP; nor shall the Contractor at any time use such information to private advantage. These obligations do not lapse upon termination of this Contract.

14. FORCE MAJEURE; OTHER CHANGES IN CONDITIONS

14.1 Force majeure, as used in this Article, means acts of God, war (whether declared or not), invasion, revolution, insurrection, or other acts of a similar nature or force which are beyond the control of the Parties.

14.2 In the event of and as soon as possible after the occurrence of any cause constituting force majeure, the Contractor shall give notice and full particulars in writing to UNDP, of such occurrence or change if the Contractor is thereby rendered unable, wholly or in part, to perform its obligations and meet its responsibilities under this Contract. The Contractor shall also notify UNDP of any other changes in conditions or the occurrence of any event which interferes or threatens to interfere with its performance of this Contract. The notice shall include steps proposed by the Contractor to be taken including any reasonable alternative means for performance that is not prevented by force majeure. On receipt of the notice required under this Article, UNDP shall take such action as, in

its sole discretion, it considers to be appropriate or necessary in the circumstances, including the granting to the Contractor of a reasonable extension of time in which to perform its obligations under this Contract

- 14.3 If the Contractor is rendered permanently unable, wholly, or in part, by reason of force majeure to perform its obligations and meet its responsibilities under this Contract, UNDP shall have the right to suspend or terminate this Contract on the same terms and conditions as are provided for in Article 15, "Termination", except that the period of notice shall be seven (7) days instead of thirty (30) days.

15. TERMINATION

- 15.1 Either party may terminate this Contract for cause, in whole or in part, upon thirty days notice, in writing, to the other party. The initiation of arbitral proceedings in accordance with Article 16 "Settlement of Disputes" below shall not be deemed a termination of this Contract.
- 15.2 UNDP reserves the right to terminate without cause this Contract at any time upon 15 days prior written notice to the Contractor, in which case UNDP shall reimburse the Contractor for all reasonable costs incurred by the Contractor prior to receipt of the notice of termination.
- 15.3 In the event of any termination by UNDP under this Article, no payment shall be due from UNDP to the Contractor except for work and services satisfactorily performed in conformity with the express terms of this Contract. The Contractor shall take immediate steps to terminate the work and services in a prompt and orderly manner and to minimize losses and further expenditures.
- 15.4 Should the Contractor be adjudged bankrupt, or be liquidated or become insolvent, or should the Contractor make an assignment for the benefit of its creditors, or should a Receiver be appointed on account of the insolvency of the Contractor, UNDP may, without prejudice to any other right or remedy it may have, terminate this Contract forthwith. The Contractor shall immediately inform UNDP of the occurrence of any of the above events.

16. SETTLEMENT OF DISPUTES

16.1. Amicable Settlement

The Parties shall use their best efforts to settle amicably any dispute, controversy or claim arising out of, or relating to this Contract or the breach, termination or invalidity thereof. Where the parties wish to seek such an amicable settlement through conciliation, the conciliation shall take place in accordance with the UNCITRAL Conciliation Rules then obtaining, or according to such other procedure as may be agreed between the parties.

16.2. Arbitration

Unless, any such dispute, controversy or claim between the Parties arising out of or relating to this Contract or the breach, termination or invalidity thereof is settled amicably under the preceding paragraph of this Article within sixty (60) days after receipt by one Party of the other Party's request for such amicable settlement, such dispute, controversy or claim shall be referred by either Party to arbitration in accordance with the UNCITRAL Arbitration Rules then obtaining, including its provisions on applicable law. The arbitral tribunal shall have no authority to award punitive damages. The Parties shall be bound by any arbitration award rendered as a result of such arbitration as the final adjudication of any such controversy, claim or dispute.

17. PRIVILEGES AND IMMUNITIES

Nothing in or relating to this Contract shall be deemed a waiver, express or implied, of any of the privileges and immunities of the United Nations, including its subsidiary organs.

18. TAX EXEMPTION

- 18.1 Section 7 of the Convention on the Privileges and Immunities of the United Nations provides, inter-alia, that the United Nations, including its subsidiary organs, is exempt from all direct taxes, except charges for public utility services, and is exempt from customs duties and charges of a similar nature in respect of articles imported or exported for its official use. In the event any governmental authority refuses to recognize the United Nations exemption from such taxes, duties or charges, the Contractor shall immediately consult with UNDP to determine a mutually acceptable procedure.
- 18.2 Accordingly, the Contractor authorizes UNDP to deduct from the Contractor's invoice any amount representing such taxes, duties or charges, unless the Contractor has consulted with UNDP before the payment thereof and UNDP has, in each instance, specifically authorized the Contractor to pay such taxes, duties or charges under protest. In that event, the Contractor shall provide UNDP with written evidence that payment of such taxes, duties or charges has been made and appropriately authorized.

19. CHILD LABOUR

19.1 The Contractor represents and warrants that neither it, nor any of its suppliers is engaged in any practice inconsistent with the rights set forth in the Convention on the Rights of the Child, including Article 32 thereof, which, inter alia, requires that a child shall be protected from performing any work that is likely to be hazardous or to interfere with the child's education, or to be harmful to the child's health or physical mental, spiritual, moral or social development.

19.2 Any breach of this representation and warranty shall entitle UNDP to terminate this Contract immediately upon notice to the Contractor, at no cost to UNDP.

20. MINES

20.1 The Contractor represents and warrants that neither it nor any of its suppliers is actively and directly engaged in patent activities, development, assembly, production, trade or manufacture of mines or in such activities in respect of components primarily utilized in the manufacture of Mines. The term "Mines" means those devices defined in Article 2, Paragraphs 1, 4 and 5 of Protocol II annexed to the Convention on Prohibitions and Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects of 1980.

20.2 Any breach of this representation and warranty shall entitle UNDP to terminate this Contract immediately upon notice to the Contractor, without any liability for termination charges or any other liability of any kind of UNDP.

21. OBSERVANCE OF THE LAW

The Contractor shall comply with all laws, ordinances, rules, and regulations bearing upon the performance of its obligations under the terms of this Contract.

22. AUTHORITY TO MODIFY

No modification or change in this Contract, no waiver of any of its provisions or any additional contractual relationship of any kind with the Contractor shall be valid and enforceable against UNDP unless provided by an amendment to this Contract signed by the authorized official of UNDP.

**Terms of Reference
(TOR)**

„Chisinau Municipality Development” Project

Implementation of the Electronic Document Management System for the Chisinau Municipality Mayoralty /CMD

1. PERIOD OF IMPLEMENTATION

The analysis and implementation of the project should not exceed 4 calendar months.

The applicants shall include qualified personnel from the Chisinau Municipality Mayoralty in the development team, to configure the Document Management Information System quickly and qualitatively, and to efficiently deliver the information solution to the Beneficiary.

When signing the delivery-acceptance act of works, the applicant will provide warrantee and technical support for a period of 12 calendar months.

2. OBJECTIVES

Among the main objectives set for the information solution, the following should be mentioned:

- increase document management efficiency within Chisinau Municipality Mayoralty (CMM), increase the speed of information flow, reduce the period of information processing cycle and time of response, optimize electronic information workflow;
- provide a mechanism for electronic assignment of tasks of the Mayoralty staff and monitoring their activities, increase control of how received and issued directives are executed;
- provide an effective mechanism for digitizing printed documents;
- reduce the time needed to create and execute decisions;
- prompt and on-time informing of the municipal council (and each councilor) on the incoming documents to be examined and approved
- improve the efficiency of the Chisinau Municipality Council (CMC) activity, increase its analysis and decision making performance level;
- maintain a single information space between the CMM Departments and central public authorities. Implement advanced information technologies in the mutual interaction of CMM Departments (implement a feedback service based on modern communication technologies and direct marketing strategies);
- prompt informing on the execution status of decisions;
- provide the Chisinau citizens the opportunity to monitor the decision making process with regards to issues of interest;
- generate premises for a possible integration of the CMM information subsystem in the national information system, proceeding from the strategy of building the information society;
- ensure the future implementation of the digital signature option in the activity of CMM and CMC;
- provide the possibility to add traditional documents, stored in the CMM archive, to the Document Management System containing the related requisites;
- provide the opportunity to implement the quality management standard ISO 9001 within the CMM.

3. OUTCOMES, ACTIVITIES AND PERIOD OF IMPLEMENTATION

#	OUTCOMES	ACTIVITIES
Stage I: Diagnosis and Assessment		
1.	<p>Outcome 1: Detailed analysis of the CMM information system, documentation, registers and principles of drafting documents and their flow within the Mayoralty.</p> <p>Outcome 2: Determine hardware and software restrictions for the optimal operation of Document Management Information System (SIGEDOC). Register recommendations on the optimal configuration of hardware and software of the solution delivered.</p> <p>Outcome 3: Develop the „Detailed Analysis of the workflow and types of documents”, containing detailed information on workflow, users and roles, all types of documents and related issues, security principles based on user rights and roles, the plan on information security from the logical and physical point of view.</p> <p>Period of implementation: 1 month</p>	<p><i>Estimate workflow in the Mayoralty:</i> determine activity objectives, restrictions concerning certain management activities, deadlines, classify key workflows in the Mayoralty.</p> <p><i>Assign users and user roles:</i> describe each user’s role in the document management system and their rights, determine the main user groups based on their roles.</p> <p><i>Analyze type of documents and issues:</i> describe current activities in the Mayoralty, ways of assigning tasks in the workflow, classify incoming and outgoing documents used in the Mayoralty.</p> <p><i>Determine security rights according to the user roles in the Information System:</i> define the security policy regarding each user group, determine for each type of user the access and data operation rights, the level of access to the system interface.</p> <p><i>Define the physical security policy in regards to the information system:</i> describe procedures and mechanisms of ensuring physical integrity of data and 24/7 operation of the information system.</p> <p>Submit a report on “Detailed Analysis of the workflow and types of documents”, to the CMM and the UNDP Project “Chisinau Municipality Development” (<i>The report will be drafted in Romanian</i>).</p> <p>Finalize the report on “Detailed Analysis of the workflow and types of documents” based on the comments and suggestions of the CMM and the UNDP Project “CMD”.</p> <p><i>Organize a seminar</i> at the CMM on the results of the analysis conducted.</p>
Stage II: Installation and Configuration		
2.	<p>Outcome 4: Install and configure the document management system.</p> <p>Outcome 5: Information migration from the existing information subsystems to the SIGEDOC.</p> <p>Outcome 6: „named user” license delivery, for each user. „Concurrent user” or „shared user” licenses are not accepted because all users will be actively using the system, which can load the system up to 95% during work hours. 100 user licenses are requested to be applied in the document management system.</p> <p>Outcome 7: delivery of 2 licenses for the Data Base Management System (DBMS) used for the functioning of the information system (unless the DBMS is GPL’ed) (licensing based on processor)</p> <p>Outcome 8: system operation in test regime.</p> <p>Outcome 9: deliver project documentation (user’s guide and information system</p>	<p><i>Install the information system:</i> the installation of the information system on the server and client sides will be performed.</p> <p><i>Configure the information system:</i> server and system configuration will be performed. Main system elements will be configured and defined (standard workflows, used registers, document templates, user groups, etc.). Server and client side functioning will be ensured.</p> <p><i>Information migration:</i> the subdivisions with information subsystems that automatize their activity will suffer migration of the information stored in those subsystem databases to SIGEDOC.</p> <p><i>System operation in test regime:</i> The most prepared organizational entity, in terms of IT, shall be chosen for this matter.</p> <p><i>Organize a seminar</i> at the Mayoralty on the testing results of the document management system.</p>

#	OUTCOMES	ACTIVITIES
	administrator's guide) Period of implementation: 2 months, including 0.5 months in test regime.	
Stage III: Staff Training		
3.	Outcome 10: training material for the Information System administrators. Outcome 11: training material for the Registry and Secretariat user groups Outcome 12: training material for simple users Outcome 13: training material for the user groups to manage workflows Outcome 14: train at least 25 users selected from the Mayoralty unit and award appropriate certificates. Outcome 15: launch the information system. Period of implementation: 2 weeks.	<i>Train administrators.</i> Build capacities needed to install, configure, and administrate the information system <i>Train users from the Registry and Secretariat user groups.</i> Build capacity to register documents, manage registers and archive them, manage the archive. <i>Train simple users.</i> Build general capacities to use the information system (upload/download folders, generate reports, activity management, document version management, approve documents, etc.) <i>Train workflow coordinators.</i> Build capacities to supervise workflows (monitor, task assignment) and extract of report son the activity of the Departments or the Mayoralty as a whole (considering the coordinator status: head of Department, mayor, etc.)
Stage IV: Testing the Information System		
5.	Outcome 16: provide technical assistance in operating the system Period of implementation: shall be performed together with the activities in groups 4 and 5 + 0.5 months at the end of training	<i>Technical assistance during the testing period.</i> For 1,5 months the applicant's technical staff will actively assist the Mayoralty staff in using the information system (including its implementation in the Mayoralty Departments). <i>Technical assistance in operating the system after launching it.</i> When activity group 4 is implemented, the applicant shall provide technical assistance in operating the systems throughout the Mayoralty Departments. The assistance shall be provided for 1 calendar month.
Stage V: Post-Implementation Support		
6.	Outcome 17: post-implementation technical assistance. Period of implementation: 12 calendar months from the moment the acceptance-delivery act is signed.	<i>Centralized technical assistance.</i> This kind of support shall be offered through email, telephone, fax or instant messengers. This kind of assistance shall comprise all the technical issues detected by the Information System users. <i>On-Site Interventions (Mayoralty Headquarters).</i> If technical issues detected by the users cannot be solved using the methods mentioned in 6.1, the applicant shall delegate authorized specialists to the Mayoralty. Deadline to react to the users' requests – 8 hours, deadline to solve the issue – 72 hours.

The Document Management System is delivered to the CMM in two stages, i.e.:

Delivery during implementation: at the end of each project milestone (Detailed Analysis of workflows and types of documents; Information System Configuration and Installing; Train IS users and administrators; Technical assistance in operating the system), there shall be signed a milestone acceptance act.

Information System Final Delivery: When the acceptance acts for each milestone have been signed (activity groups 1-5), and all the technical issues have been solved, a final acceptance act shall be signed (Information System acceptance)

4. INFORMATION SYSTEM TECHNICAL REQUIREMENTS

4.1. Terms and Abbreviations

SIGEDOC - Document Management Information System within the Chisinau Municipality Mayorality;

CMM – Chisinau Municipality Mayorality;

CMC – Chisinau Mayorality Council;

Information System - a set of processes and means of collecting, processing, and sending information necessary for the management of companies, institutions, ministries, etc.;

Computer System – a set of programs and equipment (a division of the information system) that ensures automated data processing;

Intranet - A private computer network that uses Internet Protocol technologies, to securely share any part of an organization's information or operational systems within that organization.

Metadata - a way of attributing semantic value to data stored in databases (data about data);

Data storage – object-oriented data, integrated and temporarily non-systematic, designed to substantiate decision making at management level;

Document management – the management of documents during their lifetime, from the start, as they are generated, then revised, stored, shared, distributed, archived and up to the moment they are deleted.

Electronic archiving - secure storage of the conversion result, normally on a storage space not subject to modification like WORM (write-once-read-many) with the access/possibility to retrieve data by content search or index fields associated to documents.

Workflow – automatic cooperation between the participants running a business process (document processing, revising, automatic routing, etc) and the monitoring of the progress/completion of processes, with interventions for eliminating delays and increasing efficiency.

Electronic document management – a sequence of operations of generating, processing, sending, transferring, receiving, storing, modification and/or deleting electronic documents, with the use of information technologies;

Electronic document – electronic information, generated, structured, processed, stored, transferred by a computer, other electronic equipment or software and hardware, signed with digital signature.

Document consignee - physical and juridical entity, or the state, to whom the document is addressed;

Internal consignee – the consignee of the internal division of SIGEDOC;

External consignee - a consignee outside the internal division of SIGEDOC;

Electronic document lifecycle – a sequence of operations of generating, modifying, coordinating, registering, approval, publishing, storing and deleting electronic documents, as approved beforehand.

Security – an appropriate level of integrity, selectivity, accessibility and efficiency for data protection from loss, deterioration, damage and unauthorized access. System security proves the fact that the system is secured from attacks, the information is confidential, complete and in working condition, both at the level of system and data, contained in the information;

Scalability – the property of a system, network or process featuring the ability of the system to handle growing amounts of work in correctly or to be readily enlarged or expanded. A data processing system is scalable if it behaves normally, without deficiencies, when the amount of processed data grows. Also, a system is scalable when able to show better results when other resources are added (typically hardware).

Log folder – electronic register where all actions performed by users on the computer system are recorded.

Classifier – a systemic list of objects with homogenous characteristics, that have a code assigned;

Software and hardware – a sequence of programs and equipment that ensure the implementation of information processes;

Data integrity – the state of data when identically maintained during any operation. Integrity is ensured when data are not damaged or deteriorated (suppressed or distorted);

Data veracity – compliance of data, stored in the computer memory or documents, the actual state of an object in a certain division of the system, reflected by these data.

QBE editor – editor featuring forms of visual database queries without requiring knowledge of SQL query language.

E-mailing – extensively used method of direct marketing strategy that consists in providing a mechanism for automatic transmission and personalized emails and their outcome analysis.

4.2. Legal framework for the information system

The legal framework to guide the development of the Document Management Information System consists of the national legislation in force and the international recommendations and standards in the field. The

principles of designing, implementing and basic functionality of SIGEDOC are regulated by the following normative and legal acts:

The Law of the Republic of Moldova on digitization and state information resources, no.467-XV of 21.11.2003;

Law of the Republic of Moldova on electronic communications, no.241-XV of 15.11.2007; Law of the Republic of Moldova regarding registers, no.71-XVI of 22.03.2007; Law of the Republic of Moldova regarding the electronic document and digital signature, no.264-XV of 15.07.2004; Law of the Republic of Moldova on informatics, no.1069-XIV of 22.06.2000; Law of the Republic of Moldova on access to information, no.982-XIV of 11.05.2000;

The Decision of the Government of the Republic of Moldova to approve the Instruction on secretariat service in the local public administration of the Republic of Moldova, no.115 of 28.02.1996; Government Decision regarding the National Strategy on Building the Information Society – „Electronic Moldova”, no.255 of 09.03.2005; Government Decision regarding the Electronic Governance Concept, no.733 of 28.06.2006; Government Decision regarding the special telecommunication system of the Republic of Moldova; Government Decision regarding a series of actions to implement Government Decision no.735 of 11.06.2002, no.1487 of 12.12.2003; Government Decision regarding a series of actions to develop the Telecommunication System for the Public Administration Authorities, no.256 of 09.03.2005; Government Decision regarding the development; of the Telecommunication System for the Public Administration Authorities; Government Decision regarding Public Key Certification Centers, no.945, of 05.09.2005; Government Decision to approve the Regulation of applying digital signature in electronic documents of public authorities, no.320 of 28.03.2006;

Government Decision to approve the Regulation regarding the e-mail system of the public administration authorities, no.969 of 23.08.2007; Government Decision to approve the Concept of the Integrated Document Management System, no.844 of 26.07.2007; Government Decision to create state automatic information systems and resources, no.562 of 22.05.2006; Government Decision regarding the Concept of the State Portal, no.916 of 06.08.2006; Government Decision regarding the official websites of public administration authorities in the Internet, of.668 of 19.06.2006; Order of the Ministry of Information Development to approve the Standard Requirements to the official websites of public administration authorities in the Internet, no.46/33 of 17.04.2007; Government Decision to approve the Regulation regarding the implementation of the Action Plan „Electronic Moldova”, no.27 of 06.01.2006; Order of the Ministry of Information Development to approve the technical regulation „Software lifecycle processes” RT 38370656-002:2006, no. 78 of 01.06.2006;

The design, development and implementation of SIGEDOC shall be realized in accordance with the technical regulation „Software lifecycle processes” approved by order of the Ministry of Information Development no.78 of 01.06.2006.

The information system (the sequence of document management processes and workflow administration and monitoring principles) shall be developed to a standard where the system can be implemented according to the quality management system ISO 9001.

4.3. Defining the issue regarding the development of SIGEDOC of the CMM

▪ 4.3.1. CMM Information System Characteristics

The CMM owns a traditional document management system, that involves generating and managing (mostly manually) a series of registers and forms in 40 units. As the registers and forms are being filled in, information is doubled and data redundancy isn't under control.

Only two departments of the CMM manage the most significant share of registers and forms, 17 units, through an information system with limited possibilities to track electronic documents. The two Departments are:

- Correspondence, Petition and Complaint Department;
- Control Department.

All this considered, the CMM supply rate is 92 employees to 100 computers and servers.

The CMM has a local computer network with a Star topology and interconnected branches of 2 switches and 10 routers. The access to the local network is ensured through the UPT cable and Wi-Fi connection.

All the computers connected to the local computer network have access to the Internet. The Internet channel capacity is of 8 Mbps (external, except Moldova).

The mayoralty possesses the following hardware and software:

Computers – more than 90, most of them *Pentium IV*;

XEON Servers, 1GB RAM, 3 * 146 GB RAID – 5;

Compaq Proliant Servers 400 Mhz, RAID 13 GB – 2.

Operating systems: Windows XP, Windows NT, Windows 2003 Server, Open SuSe;

Database Management Systems: *Oracle*

It is clear that the hardware available at the Chisinau Municipality Mayoralty (especially the servers) does not ensure functioning in optimal conditions of a modern document management system.

For these reasons it is requested that the applicant lay down recommendations for optimal software and hardware configuration of the CMM infrastructure able to ensure functionality and scalability of the information system to be delivered.

▪ 4.3.2. Defining principles and basic functionality of the implemented solution

Basic principles to be considered during the development and functioning of the Document Management Information System to be implemented in the Chisinau Municipality Mayoralty:

Principle of multi-layer architecture – consists in independent development of SIGEDOC subsystems in accordance with standards of level interface.

Principle of legality, which consists in developing and operating SIGEDOC in accordance with the national law and international norms and standards in the field;

Principle of public information accessibility, which implies the implementation of procedures to ensure citizen access to public information delivered by SIGEDOC.

Principle of transparency – implies development and implementation according to the modular principle, with the use of transparent standards in the Information Technologies and Communications

Principle of first person priority/ of a single center that implies the presence of a responsible high official with sufficient rights to take decisions and coordinate activities in order to develop and operate the system;

Principle of information security that involves ensuring an appropriate level of security, selectivity, accessibility and efficiency to protect data from loss, deterioration, damage and unauthorized access;

Principle of scalability – implies ensuring similar performance of the information solution for small data and requests and large amounts of data and requests;

Principle of integrating with the current applications – implies the SIGEDOC ability to integrate and interact with applications previously implemented at the CMM or other public administration authorities (Ministry of Information and Communication Technologies, National Bureau of Statistics, Ministry of Local Public Administration, etc.);

Principle of simplicity and convenience of use – involves the development and implementation of applications, technical and software resources accessible to the System users, based on visual, ergonomic, and logical design principles.

The Document Management Information System to be implemented in the Chisinau Municipality Mayoralty shall include the following functions:

Ensure registration and record keeping of documents – implement registry activities (all the procedures of registering and keeping record shall be automatic, the information system will automatically assign a registration number and shall keep record of the changes and document authorization, etc.);

Efficient document storage and access – the information system shall ensure storage of all electronic documents and their versions and shall allow retrieving them quickly and easily, regardless of their approval or expiration date. The information system shall ensure document storage on database and file system.

System navigation and document dissemination – the information system shall have an ergonomic and user-friendly interface that shall enable easy navigation and user-friendly document management. Also, the system shall have efficient and automatic mechanisms for document dissemination;

Ensure the control of document implementation – the information system will allow decision makers to view and efficiently monitor the process of elaborating and managing documents, including positive effects (documents designed within legal term) and negative effects (documents and decisions that have exceeded the deadlines and persons in charge);

Support for processing and approval of documents – the information system shall ensure automatic workflow and monitoring of documents. The users shall be notified and receive automatic access to the document once they are in charge of processing a certain document. For this purpose, the staff will have a board with daily tasks to be executed and all activities that haven't been executed with the deadline;

Implement automatic electronic archiving of documents – the information system shall serve as an archive of the Mayoralty. All documents processed and designed within the system shall be easily retrieved later (there will be no need to search for paper folders in the CMM archive) in the electronic document archive;

Graphic dictionary definition – the info system shall ensure dictionary creation, which can be used through document and folder metadata. The information system shall provide dictionary versioning.

Ensure efficient and automatic extraction of statistics and reports – the information system shall allow generating activity reports to view the activity of certain servants or Mayorality Departments, the execution status of a decision or a sequence of processes (workflows) that aren't executed within deadline;

Implement certain management functionality for the petitions and requests to access public information – the information system shall have a mechanism for electronic receipt of petitions and shall ensure solving petitions and informing about the results;

Ensure support for drafting and approving internal normative acts – the information system shall allow not only the elaboration of documents related to the municipal population or business, but drafting internal Mayorality documents (regulations, orders, decisions, notes, etc) and their automatic dissemination;

Efficient configuration of the system during its management – the information system shall contain universal procedures to adapt SIGEDOC to modifications related to methodology and procedure. In this respect, there shall be installed mechanisms to define the lifecycle route of each document. In case of legal or procedure modifications the administrator shall configure the new system to comply with new requirements;

Implement modules to ensure configuration and dynamic additions of electronic forms and document templates – the system shall be able to adapt to changes. Thus, it shall ensure configuring various general document templates (contracts, authorizations, decision, etc.) for each Department and extracting documents with personalized data based on these templates;

Formalization of incoming and outgoing documents and automatic printing based on the system information – the information system shall allow formalizing of all documents related to the CMM activity and its Departments. Thus, once the document template is in the system, all Departments shall benefit of it and shall extract the information in the same format;

Automatization of activity and workflow management – the information system shall have efficient workflow management mechanisms. In this case, workflow is the route of the document from the request to its final version. The information system shall ensure automatic movement of the document through all the points and the supervisors shall monitor its movement;

Launch a forum for discussions about user activities – in elaborating documents or using SIGEDOC a series of issues may occur, thus for solving the issues or for saving solutions described before the Mayorality staff will have access to a forum where they shall find answers to relevant questions (not necessarily related to the system, but also legal, procedure wise issues, etc.);

Notifying users within the system and by email regarding their work tasks – the information system will automatically notify the user both in the system and by Email regarding the new tasks they have been assigned;

Automatic notification of beneficiaries and document supervisors regarding their evolution – the supervisors and beneficiaries shall be automatically notified by email or other system options on the evolution of the document status. Thus, the beneficiary will not disturb the servants with useless questions and will have an appropriate answer regarding their issue;

Provide a WEB interface for the municipal citizens to monitor their folder status submitted to the Mayorality – the Mayorality citizens or business will have access through a WEB interface to monitor how relevant documents or decisions are drafted. The user shall connect to the interface with a secret code known by the user to view the status of their document or decision.

Ensure efficient access to relevant information for the servants of the Mayorality – the information system shall have an efficient mechanism of assigning rights and roles to each servant. Thus, considering the type of activity, the servant shall have access to documents and related actions, work related only.

Ensure interconnection with information systems of the state authorities – the Chisinau Municipality Mayorality isn't an isolated institution, but interacts with other local and central public authorities. The information system shall allow the integration of other authority information systems with SIGEDOC.

Ensure integration options with other applications installed within the CMM Departments (Microsoft Office, Autocad, etc.) – the Mayorality staff that uses various software for generating documents shall be able to download folders from the document management system directly to their software (Word, Excel, etc.) and vice-versa;

Automatic publishing of public information on the Mayorality website (<http://www.chisinau.md>) – all the public information generated within the information system shall be automatically transmitted on the Mayorality's website. Thus, Internet users shall access finalized documents once they are approved (documents have gone through all stages of the workflow);

▪ 4.3.3. CMM Departments needs Analysis

The Chisinau Municipal Mayorality is very well equipped with hardware and software. Almost each employee has a computer connected to the local CMM network that could be a means of access to SIGEDOC.

Considering the CMM information system complexity it is impossible to implement modern management principles of document flow within all CMM Departments in the time reserved for the implementation (up to 7 calendar months). Thus, it is supposed that first of all the CMM office and main Departments should be connected to SIGEDOC. However, the information system must allow integration of other subdivisions without requiring code or data model modification. Considering the situation described above, the following digitization activities are specific for the Mayorality subdivisions:

The Chisinau Municipality Council shall be provided with the appropriate information support required for all the documents analyzed and approved within CMC. Consequently, municipal councilors and CMM Office staff shall have access to all documents under discussions entered from all the CMM subdivisions and elaborated within CMC.

The activities of the Correspondence, Petitions, Complaints Department are to manage official correspondence (correspondence of physical/juridical entities, petitions, notifications, decisions and orders, interaction with higher institutions) in approximately 12000 documents per year, plus the document management addressed to the *Petition and Complaints Service*, with the annual amount of 11000 documents.

The Correspondence, Petitions, Complaints Department requires the implementation of the following electronic registers: Register of mail distribution, Register of court decisions, CMM Correspondence Register, Register of governmental and higher institution correspondence. The same Department, namely the Petitions and Complaints Service, requires the implementation of the Petition Register;

The Control Department manages external document, internal documents or petitions to the CMC. The Department works at analyzing laws, President's decrees, indications, assignments and letters to the President, notifications from Administrative Control Departments, appeals and complaints from the Prosecutor's Office, special instructions. The IT solution must define terms of resolution (such as: *very urgent, urgent, normal*).

The Control Department requires the implementation of the following registers: *Registers of documents received from the Prosecutor's Office, Register of Documents from Higher Courts, Register of Documents from other courts, Register of Decisions, Register of Orders*;

The Local Public Administration Department requires the implementation of functionality that would allow management of documents resulting from the coordination of prices, coordination of assignments, drafting protocols, the activities conducted by the Local Public Administration Department. The following registers are to be implemented: *Register of incoming documents, Register of outgoing documents, Register of Proposals from CMC meetings*;

The Department of Social and Humanitarian and inter-ethnic relationships requires the implementation of functionality that would ensure the management of the following type of documents: *letters with a resolution for execution, requests to organize meetings, requests regarding the delivery of certain services*. Also the following registers are to be implemented: *Register of incoming documents, Register of outgoing documents, Register of Veterans and Register of Civic Organizations*.

The Accounting and Economic Analysis Department requires the automatization of generating and managing internal documents and reports drafted by the Department. Thus, the Department requires the implementation of the following electronic registers: *Registry of incoming documents, Registry of outgoing documents, Register of public tender offers*.

The Public Relations Department requires the supervising and managing of activities related to media, decisions and orders, letters with the Mayor's resolution, letters coming from other CMM Departments. This is why the Department requires the implementation of the *Registry of incoming correspondence and Registry of outgoing correspondence*.

The Information Technologies and Systems Department requires the implementation of mechanisms that would generate and manage documents like *quarterly and annual activity reports*. Also, the Department requires the implementation of the following type of registers: *Register of incoming correspondence, Register of outgoing correspondence, Registry of current appeals*.

The Department of External Affairs, Regional Cooperation and European Integration requires the automatization of generating and managing folders and documents, so that they can be classified according to the region/objective. The system should contain the following folders: *folder for orders/decisions, embassy folder, MIA folder, CMM Departments folder, European Council folder, cooperation agreements folder, folder with contracts and contract copies with foreign companies, folder of twin cities*. Also, the Department requires the implementation of *Electronic Register of Outgoing Documents*.

The Administrative Department should implement procedures of management and service of the following type of documents: CMC decisions, Mayor's orders, transcripts. Also, the Department requires the implementation of the following: Register of CMC decisions and Register of incoming correspondence. The Building Permits and Discipline Department requires the implementation of automatic procedures of management and generating relevant documents: citizen petitions, building permits, acceptance protocols, and internal documents. The system shall implement management flows to monitor the route of documents inside the institution. The Department requires the implementation of the following type of registers: *Register of incoming correspondence, Register of outgoing correspondence, Register of activities at Counter no.3, Register of Building Permits, Register of final acceptance protocols;*

4.4. Defining the Document Management Information System

▪ 4.4.1. SIGEDOC Architecture Requirements

Given the experience in the field, we conclude that the information system must represent a Web solution, accessible through a Web browser. Client-server IT solutions, run through a desktop application installed on the client computers or a mixed version (client-server with partial Web exposure) are not accepted. From the functional point of view, the applicant shall provide a reliable and scalable solution both for the growing number of concurrent users that access the SIGEDOC resources, and the growing amount of information managed by the system.

The applicant should not limit the offer to specific software platforms. The information system should function both on Windows and Unix (*Linux, Free BSD, Solaris*, etc.). The information solution should be developed using FOSS solutions, specific for Web-based applications (*XML, XSL, XHTML, WSDL, SOAP, LDAP, J2EE*, etc. or similar)

Since the information system of CMM is not a isolated one, but interacts with other subsystems of other public authorities (both local and central), the IT solution should support the integration of other computer subsystems and WEB-based applications – a modern technology trend, or *COM/ATL* interfaces – dedicated and generic method of interfacing.

Since the nature of information processed by SIGEDOC is both public and restricted data (information covered by the law on state secrets, the law on commercial secrets or which may affect the privacy of citizens)the IT solutions must allow secure *SSL* connection between the client stations and server applications. The computer system should allow a user to open multiple simultaneous work sessions, on separate computers.

Given the objectives and functionality set forth the Document Management Information System in the Chisinau Municipality Mayoralty, it is appropriate to implement a client-server architecture of at least 3 levels.

Boundaries between levels are logical, not physical, and can run on the same server. The condition is that the systems is well structured and has defined level boundaries which are represented by interfaces of object components. They are required by the system manager depending on the conditions specific for each application.

SIGEDOC is to be developed based on up-to-date Internet/Intranet technologies. The interaction of all actors of the information system is presented in Figure 2:

As seen in Figure 2, the client-server resource cooperation for the SIGEDOC management consists of two distinct types of nodes:

SIGEDOC Server – the server that will store the Document Management System within the CMM;

Client computers – user's computers that may access certain SIGEDOC functionality (based on their rights and roles).

The interface and functions delivered to each user depend on the user's level, rights and roles.

From the functional point of view 2 main user categories are distinguished: authorized users and internet users, the latter having access to public information only, accessible through a WEB location of the CMM of personal information (if the users wants to see the status of their document processed in SIGEDOC).

Users with access to SIGEDOC can be divided according to the following levels of access:

1. CMM officials access level. These are the users with access to SIGEDOC from the CMM Intranet. Their type of access is different: from super users to operators (depending on their roles and rights). It is possible that this category of users to access the computer system outside the CMM Intranet through the Internet. In this case security and integrity of data should be ensured by implementing a sequence of procedures in this respect.

2. Subordinated public authority access level. It is necessary to ensure the possibility of access via the public data network of SIGEDOC of the institutions within Chisinau Municipality (counties, Mayoralties, municipal enterprises), as it is not excluded a both-way document flow for authorizations or execution of Mayor's or CMC decisions. To include more territorial structures (located in other regions than the CMM), the information system should be able to process certain activities in a distributive manner (different nodes/locations).
3. Internet user access level. Users outside the Mayoralty that under the legislation in force will have access to public information through the Mayoralty website (<http://www.chisinau.md>). These users will be able to access decisions, public CMC decisions, Mayor's decisions. Also, Internet users shall have limited access (through access codes, document codes, etc.) in order to track their documents status that are processed in SIGEDOC.

Authorized users shall have limited access to SIGEDOC, through authorization with a user name, password and IP address of the access computer or VPN. All system users' connections shall be made through SSL encrypted sessions.

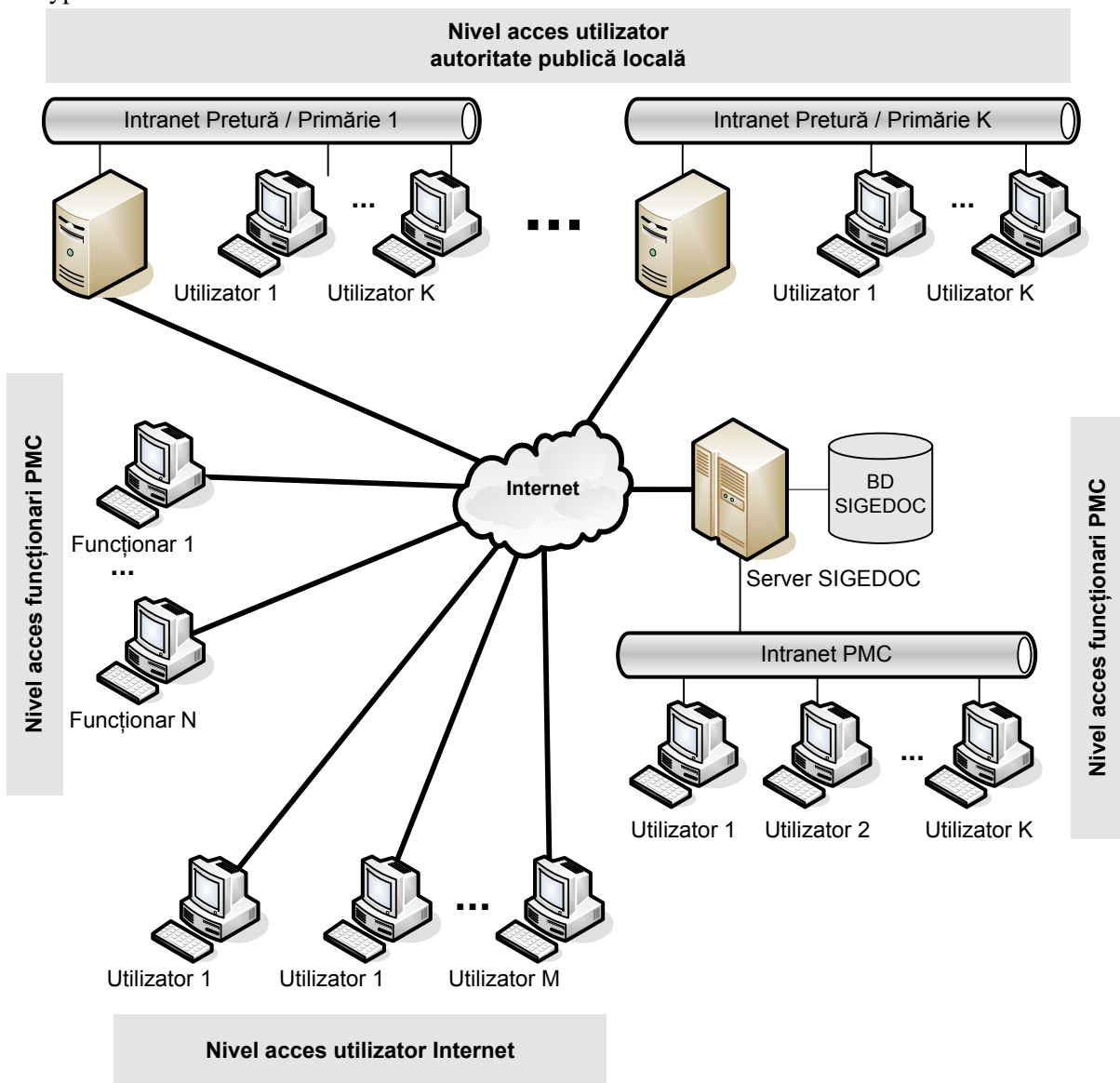


Figure 2. SIGEDOC operating environment.

- 4.4.2. Database and data modeling requirements

The computer system will be used to store information and document content in a database management system (DBMS). The information system should be platform independent (portable on both *UNIX* and *Windows*).

SIGEDOC should be build to use at least any of the following solutions as server application: *Oracle, Websphere Application Server, Apache Tomcat, Orion.*

Information in the Database must be stored in Unicode format (UTF-8), which will allow simultaneous view of Latin-alphabet characters used in Romanian and Cyrillic characters without having to restart the computer. Information in the Database can be divided into three distinct categories.

Metadata – information that describes the meaning of data in the database. This information shall describe documents stored in the system (the information will determine the document status, features, related workflow, the person in charge for its processing or execution, etc.) and will define any information stored in the database. Mostly, the system will automatically add this information to certain actions of managers and users of SIGEDOC.

Content information – represents all content information within the IT solution: workflow, folders, documents, tasks assigned to the CMM officials, libraries, users, user groups. Only visual means shall be used to edit and manage content information.

System information – information collected by the system automatically. This category of information concerns the system logs and other relevant information needed to perform information audit.

The computer system will enable the classification of data (attributes describing documents, folders and workflows), in order to have them displayed as organized, structured, logically linked in the user interface. Any document or folder stored in the SIGEDOC database will have the following attributes do describe them:

- Registration number (it should be possible to automatically generate these numbers and register a document or folder in several registers);
- Registration date;
- The author of each version of the document;
- The date of each version;
- Issuing authority (if it is an external institution);
- Number of issued document (if applicable);
- The addressee (if the document is to be sent outside the system).

In designing the database, the developers should apply a object-oriented, extensible model to efficiently store the content and metadata associated with documents. The computer system must be flexible enough to allow, for example, adding new fields to index documents.

The number of registers, types of documents, folders, attributes and attribute groups that can be defined in the system must be unlimited. The computer system should make it possible to define those registers, types of documents, folders and associated attributes that are used by the Mayoralty in its activity.

The solution shall offer the possibility to associate and define attributes (metadata) of documents and folders. The attribute set should be common for documents and folders and be inherited from folders to documents.

- Types of metadata attributes:
- Numeric;
- Calendar date;
- Text;
- List of values predefined by the administrator;

The reference to an entity in a database – can be both proprietary database and a different system or subsystem database. It should be possible to access and integrate database of at least the following database management systems: *Oracle, Microsoft SQL Server, Microsoft Access, PostgreSQL, DB2.* The information system should be able to connect to any number of database management systems necessary to completely and correctly determine the attribute values for documents and folders.

Attribute that has a value linked with the value specified for another attribute of a certain document (for example, selecting a particular compartment will lead to automatic populating the value of the compartment of which it is a part of, as per organizational structure).

The reference to an entity in a dictionary – the informatics system shall ensure data selection from an existing dictionary.

The computer system should make it possible to define automatic processing, specifically defined for the Mayoralty, to be launched automatically once a particular attribute value is modified. This function should work as a system event, triggered by the change in the value of the attribute.

A document can have attribute reference to other entities, either from its own database system, or other databases from external applications, for possible a integration of SIGEDOC with other applications like ERP systems (*Enterprise Resource Planning*). The computer system will store unique information related to

both systems for a particular entity and relevant information, retrieved from the other database, in order to search documents based on this information.

The computer system should allow the definition of custom forms of presentations that include special validation on the client computer. Custom forms must be stored and updated in a dedicated administration base. The final version of the form will constitute an electronic document with attributes that have values extracted from forms.

▪ 4.4.3. SIGEDOC interface requirements

The information system should provide an ergonomic, intuitive and accessible interface at all user levels. The system should have a unique, pleasant, balanced and distinctive graphic design. For user friendly system, the information solution shall provide an online contextual help system (Romanian version – compulsory), at the level of each interface.

The information system shall be organized as a portal/site that is accessed through a WEB browser.

Depending on the user access level, the system shall provide an appropriate interface.

The system users shall have 3 levels of access to the interface:

Authorized user access level – level of access of Mayoralty officials that will allow access by user name + password and, eventually, physical connection location. This level, depending on the security level defined for each user, shall have a dynamic interface and access rights to the interface and database information;

Level of public access – the level of access for Internet users through the CMM website (www.chisinau.md) where public information can be accessed in SIGEDOC (CMC decisions, Mayor's Instructions, Orders, Regulations, etc.)'

Public conditional access level – represents an interface on the www.chisinau.md website used by citizens to monitor their file evolution at the Mayoralty (by using a code and personal data, users can access the file status – function similar to the one offering information on the persons, document status on the website of the Ministry of Information and Communication Technologies, etc.).

The computer system must have an interface designed in Romanian. It is welcome (but not compulsory) to have either the Russian or the English versions of the interface. The Romanian version is compulsory.

The information system must have integrated full-text search functions. In this regard it is recommended to have a mechanism for indexing the content of stored documents or the possibility of dynamic definition of a metadata set that describes the document to be used in the retrieval of documents.

Retrieval of information and documentation shall be performed through simple search (by specifying the search string) or a higher complexity search through a filter that can achieve more accurate information.

Regardless of the type of information searched, the user shall apply the same query and retrieval method for any compartment of the product.

The system shall ensure integration with a QBE forms system, which shall allow that will make it possible to define sophisticated visual queries, the interface should make it possible to purify the search results by ensuring a filtering of information in the search result list. The extern QBE system might be a web module or a desktop one.

Users must be able to find documents both by attached metadata, and keywords from the document content.

For example, one can find at least:

- particular types of documents;
- documents with particular metadata value associated;
- documents with a particular keyword associated;
- documents generated or authorized by a particular author;
- documents recorded in a particular register;
- documents with a particular registration number;
- documents registered at a particular date.

The computer system shall allow the retrieval of folders with documents. The interface should allow a two-way navigation hierarchy file – content and content – file.

The information system shall ensure filtering documents presented to users according to their access rights. Access rights must be granted for at least performing the following actions: viewing, modifying, changing the security settings of the document, deletion, document archiving.

The indexed packs (classifiers, libraries) must be filtered by selecting the value from the default list. For numeric or calendar dates fields the filtration should be done according to the exact value of the search parameter (*for example: 01.01.2009*) or logical parameters (*for example: <01.01.2010 – all the records older than 01.01.2010, >01.01.2008 – all records registered later than January 1, 2008*).

The contents of any table of results can be exported either in XLS or PDF or CSV or RTF format.

Given the extensive use of *Microsoft Office* in the Chisinau Municipality Mayoralty, the information system should integrate with Microsoft Office tools to allow specific document management actions within the Microsoft Office applications (for example check-in and check-out libraries).

In order to perform like an easy-to-use system, SIGEDOC must integrate with *Microsoft Windows Explorer* through a virtual directory of data storage from the document management application.

The user shall have access directly from *Microsoft Windows Explorer*, through contextual menus, to various functions of the document management system.

To increase usability, the user shall have a message board similar to the one used in the quality management system MANTIS, where they can observe the current situation of their activity: a sequence of workflows and tasks assigned; a sequence of workflows and tasks under supervision; daily, weekly schedule; a sequence of workflows and finalized tasks and their status, etc.

- 4.4.4. Workflow management

- 4.4.4.1. Principles of workflow management

Analysis of data flow in an organization results in the identification of document flow: the entry, approval or revoking by the hierarchical leaders and eventual return of document to the person that generated it.

These routes made by documents in an organization are called workflows and can have a graphic representation. Electronic documents shall flow through a document's route.

SIGEDOC users as supervisors shall have functions to define workflows visually. Workflow management shall be performed through the system Web interface where users work as usually. A separate interface for this kind of operations is not acceptable.

Workflows must be defined by specifying the processing steps (steps in the evolution of the workflow) taken both by defined users and generic workstations. In this regard a workflow must be designed as a series of activities performed sequentially or parallel. The number of steps that can be included in a flow should not be limited. Thus, the computer solution shall be adaptable to modifications of CMC activity methodology.

The computer system shall have the ability to manage predefined models of workflows and hierarchical workflows. A document shall be subject to being processed on multiple workflows, if necessary, according to the typology.

Considering the peculiarity of workflow processing, the system shall register and display the following information:

- The steps taken through the workflow up to the moment;
- The date the document was received at each processing step. These can be either roles within the organization (head of department, secretariat, a particular department) or assigned persons, depending on the defined workflow;
- The final date of each step;
- Messages sent by users during processing;
- The current stage of the document within the workflow (document traceability)
- The deadline.

A workflow shall have a coordinator (supervisor) associated. The coordinator must be able to receive warning messages (notifications) generated by the workflow. The user submitting a document or a file to be processed by a workflow must be able to specify who the workflow coordinator is.

A workflow shall be described by the following information:

- the stages a document can go through while being processed in a workflow;
- the person in charge – may be assigned, but there shall be specified roles within the organization, for the purpose of generalization;
- a starting point of activities to take place within the workflow.

According to a workflow description, the Information System shall be able to operate activities launched by users that shall be limited by the default regime within a workflow. An activity shall contain elements determined by a person in charge of completing an assignment in good conditions and on time. The system shall record a person that had launched the activity and information on its course along the workflow (for example moments when the document advanced to the next point, documents received and passed further).

For activities and workflows of document with the same objective in different departments, the system shall allow defining a work team for each department. Further it shall be used as a single workflow.

Launching a workflow activity shall determine automatic generation of a discussion topic on the system forum. This topic can contain messages exchanged between the persons responsible for the assignment.

The computer system shall allow defining of „multi-level” workflow, in order to refine processing at any level, in case it is desired for the process specifications to stop at the level of a department or compartment or the processing to be defined at user level.

The computer system should include mechanisms designed to monitor the stages of processing a particular document graphically, by visual highlighting on the workflow definition scheme the stages of the document up to the moment. In addition to the graphical representation of the document flow, the computer solution should display a detailed description of the activity undergone by the document when processed.

4.4.4.2. Principles of organizing and processing documents

The main objective of SIGEDOC is to ensure an efficient mechanism to organize work with documents within the CMM. Proceeding from this idea, the document and operations performed represent the main functions of the information solution.

SIGEDOC must enable reading of bar codes on paper or scanned documents, accept documents as attributes, classify and search documents by scanned bar codes, generate and print bar codes, etc. Any printout of the system shall have a bar code that shall identify the document. Bar codes reading shall be possible using bar codes readers or by manually filling in the code (if bar codes readers are not available).

The IT solution shall provide a complete set of content management services, including library functions (check-in and check-out), version control and archiving options. Everyday documents shall be managed different compared to archived documents.

The computer system shall enable manual or automatic removal of documents or registers from the daily use zone to the archive zone. After the documents or files are sent to the archive, they cannot be modified anymore. The archive shall be one of the main modules of the computer system.

The system shall ensure document preview without having the necessary program installed. The system shall offer an integrated internal document viewer, which shall support the usual text and image document formats.

SIGEDOC shall allow the registration of documents and files of any nature (traditional media or paper).

Therefore it can define any number of registers, according to the activity of the contracting authority.

Documents and files shall be assigned any amount of default registration numbers. The Solution shall ensure generating and printing receipts associated to registration of a complaint (document/file). The system shall ensure generating a single receipt for multiple registered documents (in case a citizen registers 10 documents, he will receive one single receipt, on which all registered documents are mentioned). It will be possible to use a system defined document template for receipt generation, so that format modifications can be made by the system administrator by changing the template.

User access to registers must be restricted so that they can register documents only in particular registers they have been granted rights.

Files, representing document content must be stored either in the files systems or as BLOB in the relational database. If it is desired to store document content in the Information System, the system shall use the relational database that stores the rest of the information used by the system.

SIGEDOC should allow organization of documents in hierarchical structures, similar to dedicated file systems, such as *Microsoft Windows Explorer*. Objects contained in that particular structure shall replicate the organization and storage of documents in physical format (for example documents are organized in folders which are logically grouped in cabinets). The hierarchy of objects, containing documents on the lower level, must take place at any level. A particular case of this principle would serve to organize the documents in a hierarchical structure by grouping them in logical folder (directory) structures. The structure should not be limited to a particular number of levels.

In hierarchical structures that have organized documents, there should be the option to perform copying or moving directories with a minimum number of clicks (drag & drop). One should be able to make local replicas of the server structure and documents stored in the document management system.

Users should be able to associate appropriate values to metadata that can be associated to documents and files they are contained in. If the same attribute is found both at the folder level and document content level, changing the folder value shall determine assigning the value to the document attribute.

The computer system must provide the ability to create an unlimited number of types of documents, possible states of a document, document indexing information, keywords that might be used at searching. The Information Solution shall support XML being able to separate the information content from the presentation format.

Integrating the working environment of a Mayoralty staff member with SIGEDOC is considered appropriate. The computer and its resources shall become a part of the information system. Proceeding from this

principle SIGEDOC should make it possible to monitor the local file system directories, at user's choice, so that once created in this particular location, the document:

- can be automatically retrieved and loaded in the document management system;
- can be released on a processing flow, depending on the document type;
- the file saved in a particular location can be the descriptor of more documents that can be loaded in the document management system. It shall contain the type of the document, combinations of attributes and values, as well as its location. The system shall analyze the descriptor document content and shall load the documents and their attribute values.

The computer system must be able to retrieve documents created with any document generating tools used by the Mayorality (*Microsoft Office* package, web page generators, XML files, CAD files).

The parallel use of traditional documents on paper together with the electronic documents (files) is not excluded. In this case the information solution should allow storing a localization reference of the printout, keeping the same management mechanisms as for the electronic documents.

The information system must enable storage of any type of document. The system shall allow storing different versions of different formats of a document (for example, the first version of the document in printed format and its location, the second version, its scanned version, the third version – text extracted from the image).

Version management of documents stored in the system is a primary function of SIGEDOC. To ensure this, there should be the option to keep a version log of documents and each version should have an associated description. Each content modification of a document must be done only after the check-out, and the check-in operation shall result in saving the changes in the system and generating a new version of the document. SIGEDOC should provide support for electronic signature management. There should be the technical option for the future integration with electronic signature mechanisms in order to be able to sign each version of the document, by one or more persons (which could mean the approval or authorization of a document).

The computer system shall allow the user to generate, import, manage, publish and archive documents.

There must be facilities to define archiving policy based on the type of document, as well as mechanisms to search and retrieve documents from the archive.

The system shall, also, have the ability to manage a physical document archive on paper by making electronic reference (mirroring) in the system, even if it captures or not the electronic documents from the archive. The system shall manage the information on the location of documents in the archive.

The computer system shall enable the association of documents relevant to a particular document and must properly manage the integrity of the document collection so as not to allow deletion of a document if the document is referred to.

Documents managed by the Information System may be documents that need solving or information documents. The documents registered within the organization shall automatically be sent the appropriate workflows, according to their typology, to be processed.

The information system shall allow defining layouts (columns, types of data) for libraries and loading content (XML import/export). The custom libraries can be used to define specific attributes for their type of documents/files.

4.4.4.3. *CMM staff interaction requirements*

The Document Management System within the Chisinau Municipality Mayorality will be a solution encouraging the cooperation of civil servants in the Departments in particular and the Mayorality in general. Thus, SIGEDOC shall become a means of communication, consulting and cooperation of a Department, between Departments or the hierarchical level of the Mayorality.

In order to implement the SIGEDOC functionality, wider use of Internet/Intranet technologies shall be encouraged. Also, the CMM decision beneficiaries (physical and juridical entities) shall be included in the system as observers.

The computer system shall have a system of notifications regarding the workflows, with the use of system mechanisms and notifications on email. SIGEDOC shall notify users automatically once they have been assigned a new task and when the activity has deviated from the normal course: a user has refused to work or the activity has exceeded the deadline (similar principles with the quality assurance systems MANTIS, BUGZILLA).

The information system shall provide the possibility to assign tasks for a given organization. The IT solution shall also allow associating of documents from the collection of documents with the workflow and shall automatically notify about these documents, making them available to users that carry out such activities.

The system user shall have a user-friendly interface (dashboard) for a quick view of tasks associated according to active workflows and to access them for execution (or supervising).

The system shall allow the rejection of a task. Any rejection shall automatically generate a message to the supervisor. The progress tracking interface shall highlight the rejections.

States of a document must be configurable. The information system shall not limit the number of configurable states of a document. SIGEDOC administrators will have the option to extend the status list when new types of documents are added.

It shall allow simultaneous electronic distribution of certain documents for information addressed to several Mayorality points (departments, persons).

As mentioned, the direct beneficiary of a decision (documents processed within CMM) must be part of the process (that is, a process observer). The implementation of automatic notification mechanism by email is welcome, in order for the file to advance (pass from one stage to another) or the high official or notification regarding the date and time when the printed document can be picked up.

▪ 4.4.5. Reporting System Requirements

The Document Management System of the Chisinau Municipality Mayorality shall have an advanced mechanism for generating traditional documents (on paper). In this regard, 2 categories of documents shall be standardized:

Incoming documents – each incoming document shall have a format (template) used for printing. Thus, data defining documents and its content together with metadata, the CMM header and footer, number of registration + the bar code, etc. shall be used to create a template. Thus, a series of documents shall be standardized.

Outgoing documents – each outgoing document shall have a template that shall define the rules of generating a document in traditional format. This category includes all documents that make up the final stage of a workflow.

The computer system shall enable automatic generation of documents based on predefined templates.

Certain types of documents, configured according to specified activities as described above, shall be assigned predefined formats. When creating a document of the type, the user shall be able to specify certain information, having the system generate a template corresponding to a particular document.

The computer system shall enable generating reports that would provide information on the tasks at a certain moment connected to a particular role in the system.

Concerning reports printed by SIGEDOC, we could define 3 categories of reports:

Incoming documents – a template shall be created for each type of documents, used at printing relevant information;

Performance reports – represent a category of static reports (usually implemented physically in the information system content) used for auditing and analyzing the activity of the CMM Information System. This category of reports includes: *charting workflows*, *servant activity report*, *Department activity report*, *general performance of CMM staff* (number of assigned tasks, number of sent tasks, number of delayed tasks, productivity indicators, etc.); critical task report, that shall extract tasks exceeding the deadline having the blocking point marked, persons in charge, etc. This category of reports should be inspired from similar reports delivered by quality management systems (MANTIS, BUGZILLA, etc.).

The system shall provide a graphical reports generator. The system administrators will use the generator to graphically create reports, without the intervention of a computer programmer. Given the principle of ensuring CMM transparency, the administrator must be able to define workflows, with a result that refers to public information. Based on these settings, the computer system shall have the ability to publish the documents to the CMM Website (ensured the presence of compartments or interfaces of access to documents from www.chisinau.md).

▪ 4.4.6. Information Security Requirements

By information security we mean protection of information resources and infrastructure of intended or accidental actions, of natural or artificial nature, with outcomes causing harm to the parties involved in information exchange.

Ensuring information security for SIGEDOC shall include a sequence of legal, organization, economic, and technological actions, aimed at preventing the system from security and information infrastructure threats.

The main issues regarding information security provided for the information system are as follows:

- Information confidentiality (prevent information retrieval by persons who do not have the rights and powers to do so);
- logical integrity of information (prevent unauthorized entering, updating and deleting of data or entering distorted data);
- information infrastructure security from attempts to damage or modify its functioning;

The information system should provide integrated security services including at least the following basic functions:

- user authentication;
- encrypt passwords and information;
- security class association to documents and restricting user access;
- define necessary permissions within a certain object (document, file, directory, workflow) at the level of users or user groups;
- documents may have security classes assigned;
- provide the option to inherit access rights specified for objects hierarchically superior (for example inheriting access rights from a folder to the contained documents);
- register the user activities and auditing;
- definition of rights to access application modules and functionalities within the system modules;

User authentication must be performed using any of the following methods:

- integrated with a LDAP system;
- using the system interface and mechanisms. Managing information about users and authentication data will be performed through the administration module within the system, accessible for the Administrator through the system Web interface;
- native authentication on Windows workstations of users within the Mayoralty.

Considering the experience and statistics, the most risk sensitive part in the security system is the human factor. For these reasons, staff training in threat security management is very important. In this context, the development of a CMM regulation would be appropriate.

Given the increasing use of data transport technologies and, in particular, public data transport networks, SIGEDOC shall offer the option to increase information security through SSL encrypted communication between the client stations that access the system via the Internet browser and the application server.

Proceeding from the ideas mentioned above, access to SIGEDOC resources shall be provided and granted through a user login and password system. The users shall have distinct access rights according to the appropriate security level. Each group of access must have the option to define user roles and rights (even up to the available user interface). These roles shall be used for building workflows on documents.

Access to database information should be restricted based on the roles and rights of particular access groups in general and users in particular. Each user group shall have a different interface to view and manage database information and operate data.

The system shall distinguish different categories of users that shall be dynamically defined by administrators. Database and interface access rights are determined according to user categories.

Due to the option to have concurrent Mayoralty users (including with the rights to make changes) with the same documents and files, the system shall ensure logical and physical integrity through mechanisms ensuring information consistency when multiple users access the system simultaneously.

5. RECRUITMENT QUALIFICATIONS

- Juridical entity or a group of entities specialized in providing information services with a minimum 5 years experience.
- Qualified personnel trained in document management systems:
- The Project Manager – Minimum 5 years experience in Implementing Document Management Information Systems;
- Analyst – Minimum 3 years experience in implementing Document Management Systems;
- Technical Leader – minimum 3 years experience in developing Document Management Information Systems or minimum 5 year experience in developing Activity Management Information Systems;
- Manager responsible for the System implementation – minimum 3 years experience in Implementing Document Management Information Systems;

- Evidence of experience with the implementation of similar activities. The applicant shall present references of implementation for at least 1 project developed in a Local Public Administration Institution with more than 200 system users.
- Experience with international organizations and local and central public administration institutions of the Republic of Moldova would be an added advantage.
- The applicant shall submit documents issued by accredited organizations confirming the applicant's certification according to at least the quality system ISO 9001:2000, for developing and implementing information technology solutions and providing connected services.
- The subcontractor certification in the quality system ISO 9001:2000 is also necessary (if applicable).
- The applicant shall submit documents certifying that the average annual business income for the last 3 years is over 500,000.00 USD.

Annex 1 to the Terms of Reference: Assessment of the Workflow (approx) within the CMM

Nr.	Department	Activity	The staff involved	Types of documents		Registers
				Incoming	Outgoing	
1.	Correspondence, Petitions, Complaints	<p><i>Official Correspondence Service</i> Examines up to 12000 documents yearly. Activities:</p> <ul style="list-style-type: none"> ▪ correspondence with juridical entities ▪ correspondence with physical entities ▪ CMC legal advisory ▪ Processing decisions/orders from higher courts 	<p>Head of Department – 1 person Main specialist – 2 persons Coordinating specialist – 1 person Total: 3 persons.</p>	<p>1. Incoming documents form (recto and verso) 2. Petition registration form</p>	<p>1. Outgoing document form 2. Outgoing register</p>	<p>1. Correspondence Distribution Register 2. Register of Higher Courts Documentation 3. Mayoralty Outgoing Correspondence Register 4. Register of Government and Higher Courts correspondence to the Petitions and Complaints Service 5. Petition Register 6. CMC document Register</p>
		<p><i>Petitions and Complaints Service</i> Examines up to 12000 documents yearly. Documents subject to examination:</p> <ul style="list-style-type: none"> ▪ court citations ▪ decisions 	<p>Head of Department – 1 person Main specialist 1 – 2 persons Consultant – 1 persons Total: 4 persons.</p>			
2.	Control Department	<p>Documents:</p> <ul style="list-style-type: none"> ▪ external; ▪ internal; ▪ requests to CMC . <p>Notes to documents:</p> <ul style="list-style-type: none"> ▪ very urgent; ▪ urgent; ▪ prompt. <p>Examines the following:</p>	<p>Head of Department – 1 person Main specialist– 2 persons</p>	<p>1. Normal form fro documents under control or documents under supervision:</p> <ul style="list-style-type: none"> ▪ laws; ▪ queries <p>;</p>	<p>1. Electronic form for decisions and instructions. 2. Reports on register content. 3. Statistical reports.</p>	<p>1. Register of documents from the Prosecutor’s Office. 2. Higher Courts Document Register. 3. Register of documents from other courts. 4. Decision Register. 5. Instruction Register.</p>

Nr.	Department	Activity	The staff involved	Types of documents		Registers
				Incoming	Outgoing	
		<ul style="list-style-type: none"> ▪ laws, decrees, Government decisions; ▪ President instructions, assignments and letters; ▪ Administrative Control Department notifications; ▪ Appeals and complaints from the Prosecutor's Office; ▪ Special instructions. <p>Activity result:</p> <ul style="list-style-type: none"> ▪ appeal - warning; ▪ appeal to extend deadline. 		<ul style="list-style-type: none"> ▪ appeals ; ▪ complaints; ▪ etc. 		
3.	Local Public Administration Department	<p>Main activity + internal activity.</p> <p>Coordination the activity of counties and mayoralties within Chisinau municipality, including:</p> <ul style="list-style-type: none"> ▪ coordinating assignments; ▪ supervising mayor's verbal instructions; ▪ analyzing protocols; 	<p>County activity – 5 persons</p> <p>CMC activity coordination – 4 persons</p> <p>Total: 9 persons.</p>		<ol style="list-style-type: none"> 1. "Issues proposed to specialized commission" 2. Reports to Counties and Mayoralties 3. Informative Reports 	<ol style="list-style-type: none"> 1. Incoming Document Register. 2. Outgoing Document Register. 3. Register of CMC meeting proposals. 4. Register of interpellations, proposals, and registration protocols. 5. Register of Mayor's instructions.

Nr.	Department	Activity	The staff involved	Types of documents		Registers
				Incoming	Outgoing	
		<ul style="list-style-type: none"> ▪ managing registers. 				
4.	Social, humanitarian and inter-ethnic relations Department	<p>Internal activity, including:</p> <ul style="list-style-type: none"> ▪ letters with the resolution for execution; ▪ requests for meetings; ▪ requesting types of activity. 	<p>Head of Department – 1 person Main specialist – 5 persons Total: 6 persons.</p>			<p>1. Incoming Document Register. 2. Outgoing Document Register. 3. Veteran Registers. 4. Civic Organizations Database.</p>
5.	Accounting and Economic Analysis Department	<p>Main activity + internal activity:</p> <ul style="list-style-type: none"> ▪ economic analysis; ▪ accounting. 	<p>Head of Department – 1 person Head of the Accounting Service – 1 person Head of the Economic Analysis Service – 1 person Economic analysis specialist – 3 persons Total: 6 persons.</p>	<p>1. Internal documents. 2. Activity reports</p>	<p>1. Internal documents 2. Tender reports</p>	<p>1. Incoming Document Register. 2. Outgoing Document Register. 3. Register of Public Tender Offers.</p>
6.	Public Relations Department	<p>External activity. Correspondence management:</p> <ul style="list-style-type: none"> ▪ the press; ▪ decisions and orders; ▪ letters with the Mayor's resolution. ▪ Letters to other Departments. 	<p>Head of Department – 1 person Deputy chief – 1 person Main specialists - 3 persons Coordinating specialist – 2 persons. Total: 7 persons</p>			<p>1. Incoming Document Register. 2. Outgoing Document Register.</p>
7.	Information technologies and systems	<p>Internal activities:</p> <ul style="list-style-type: none"> ▪ 30-40 requests per week; 	<p>Head of Department – 1 person. Main specialist – 3 persons</p>		<p>1. Quarterly Activity Report. 2. Annual</p>	<p>1. Incoming Document Register. 2. Outgoing Document Register. 3. Register of Current Requests.</p>

Nr.	Department	Activity	The staff involved	Types of documents		Registers
				Incoming	Outgoing	
	Department	<ul style="list-style-type: none"> ▪ Maintenance of 100 computers. 	Total: 4 persons.		Activity Report.	
8.	External Relations, Cooperation and European Integration Department	Documents processed over the year – over 100. Processed documents are received by email, fax or Special Mailing Service.	Head of Department – 1 person. Main specialist– 4 persons Total: 5 persons.			1. Incoming Document Register. 2. Arranging documents in folders: <ul style="list-style-type: none"> ▪ 27 twin cities; ▪ 14 countries; ▪ 2 files for Europe / Asia; ▪ Orders /decisions files; ▪ Embassy files; ▪ MIA files; ▪ CMM Departments files; ▪ Council of Europe files; ▪ Cooperation agreement files; ▪ Files with contracts signed with companies from other states.
9.	Administrative Department	Internal activity. Examines the following categories of documents: <ul style="list-style-type: none"> ▪ The Council Decisions; ▪ The Mayor's orders; ▪ Transcripts; ▪ Protocols; 	Total: 6 persons			1. CMM Decision Register. 2. Register of incoming correspondence.
10.	Building Permits and Discipline Department	Main activity + internal activity. <ul style="list-style-type: none"> ▪ citizen requests; ▪ building permits; ▪ acceptance protocols; ▪ internal documents; ▪ counter no.3 – final accept 	Head of Department – 1 person. Authorization service – 3 persons Discipline services – 6 persons Total: 10 persons.			1. Incoming Document Register. 2. Outgoing Document Register. 3. Register of Counter no.3 activity. 4. Building Permit Register. 5. Final Acceptance Protocol Register

PRICE SCHEDULE/FINANCIAL PROPOSAL

The Contractor is asked to prepare the Price Schedule/financial proposal and submit it in a separate envelope from the rest of the RFP response as indicated in Section D paragraph 15 (b) of the Instruction to Offerors.

All prices/rates quoted must be exclusive of all taxes, since the UNDP is exempt from taxes as detailed in Annex II, Clause 18. '

The Price Schedule/financial proposal must provide a detailed cost breakdown. Provide separate figures for each functional grouping or category.

Estimates for cost-reimbursable items, if any, such as travel, and out of pocket expenses should be listed separately.

In case of an equipment component to the service provided, the Price Schedule should include figures for both purchase and lease/rent options. The UNDP reserves the option to either lease/rent or purchase outright the equipment through the Contractor.

The format shown on the following pages should be used in preparing the price schedule. The format includes specific expenditures, which may or may not be required or applicable but are indicated to serve as examples.

In addition to the hard copy, if possible please also provide the information on diskette (IBM compatible).

Price Schedule*:				
Request for Proposals for Services				
Description of Activity/Item		Number of Staff	Monthly Rate	Estimated Amount
1.	Remuneration			
1.1	Services in Home office			
1.2	Services in Field			
2.	Out of Pocket Expenses			
2.1	Travel			
2.2	Per Diem Allowances			
2.3	Communications			
2.4	Reproduction and Reports			
2.5	Equipment and other items			

* Additional budget details explaining the calculations are welcomed.