



Request for Proposal (RFP)

Ref.no. *RFP 11/00468*

Date: *9 Nov. 2011*

Dear Sir/Madam,

**Subject: RFP for Development of the Information System designed for the Joint Information and Service Bureaus**

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1. You are requested to submit a proposal for consulting 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)
  - vi. System Concept Design (Annex VI)
3. Your offer comprising of (1) technical proposal and (2) price schedule/financial proposal, in separate sealed envelopes, marked with "RFP: Information System for JISBs /UN Women WEE" should reach the UN Women Moldova office no later than 5 December 2011, 12.30 (Chisinau time) at:

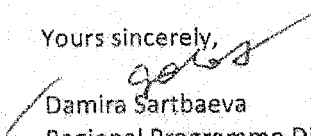
UN Women Moldova  
131, 31 August 1989 Street, MD-2012 Chisinau, Republic of Moldova  
Attention: UN Women Gender Advisor

Contact person for clarifications: Natia Cherkezishvili, Programme Manager ([natia.cherkezishvili@unwomen.org](mailto:natia.cherkezishvili@unwomen.org))

UN Women Moldova will organize on the premises of WEE programme a pre-bidding conference on 15 November at 10:00. Representatives of all interested applicants are invited to attend. To confirm participation, please send a message to [galina.corgoja@unwomen.org](mailto:galina.corgoja@unwomen.org) by COB on 14 November 2011.

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,

  
Damira Sartbaeva  
Regional Programme Director  
UN Women Sub-Regional Office  
for Eastern Europe and Central Asia

**Instructions to Offerors****A. Introduction****1. General**

The purpose of this Request for Proposals (RFP) is to solicit proposals from the qualified companies to develop information systems for Joint Information and Service Bureaus in four pilot rayons (Nisporeni, Cantemir, Singerei and Telenesti), according to TOR ANNEX III.

The offers must be composed of two parts: *technical* and *financial*. Each part is presented in sealed envelopes. The Offers from Consortia formed by foreign companies and companies registered in Moldova will be accepted for evaluation. The Contract will be awarded to the Company (Consortia) with the proposal that will obtain the highest score according to evaluation criteria stipulated under p.22 of Instructions to Offerors.

**2. Cost of proposal**

The Offeror shall bear all costs associated with the preparation and submission of the Proposal, the UN Women 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 UN Women entity in writing at the organisation's mailing address or fax number indicated in the RFP. The procuring UN Women 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 UN Women 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 UN Women 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 UN Women 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, 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:

- Description of the organization (experience, human resources, technical and managerial capacity in the related field, including company's litigation and arbitration history);
- Copy of registration certificate of the organization and licenses to perform project activity;
- Company's portfolio regarding successfully implemented similar assignments;
- Company's list of customers/beneficiaries of services for the past years;
- CVs and certificates of staff proposed for implementation of this project and their role, in accordance with clause 10 of the Annex III (ToR);
- Work-plan and approach (detailed description of activities, timeline, agenda);
- Implementation plan and indication of the required licensing system operation throughout the contract;
- Risk Log;
- Warranty period for the proposed IT solution;
- Detailed budget for the implementation of the assignment (**presented in a separate envelope**);
- 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 UN Women 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 and shall be VAT exclusive. 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 one hundred and twenty (20) days after the date of Proposal submission prescribed by the procuring UN Women entity, pursuant to the deadline clause. A Proposal valid for a shorter period may be rejected by the procuring UN Women entity on the grounds that it is non-responsive.

In exceptional circumstances, the procuring UN Women 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**

UN Women shall effect payments to the Contractor after acceptance by UN Women 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 –

**UN Women Moldova**  
**131, 31 August 1989 Street, MD-2012 Chisinau, Republic of Moldova**  
**Attention: UN Women Gender Advisor**

and,

- marked with –

**“RFP: Information System for JISBs /UN Women WEE”**

- (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 duly identified as such.

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

**16. Deadline for submission of proposals**

Proposals must be received by the procuring UN Women entity at the address specified under clause *Sealing and marking of Proposals* no later than **5 December 2011, 12:30 pm**, Chisinau time.

The procuring UN Women 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 UN Women 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 UN Women 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 UN Women 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 UN Women 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 is utilised in evaluating the proposals, with evaluation of the technical proposal being completed prior to any price proposal being opened and compared. The price 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				
				A	B	C	D	E
1.	Expertise of Firm/Organisation submitting Proposal	30%	210					
2.	Proposed Work Plan and Approach	50%	350					
3.	Personnel	30%	140					
<b>Total</b>			<b>700</b>					

Evaluation forms for the technical proposals follow. 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
<b>1.</b>	<b>Offeror's Expertise and Capacity, including:</b>		
1.1	Reputation of Organisation and Staff (Competence/Reliability)		40
1.2	Litigation and Arbitration history		15
1.3	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)		30
1.4	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)		15
1.5	Quality assurance procedures, warranty, ISO, certificates for IT		20
1.6	Relevance of:		90
	- Specialized Knowledge and experience in related areas	20	
	- IT licences and certificates	15	
	- Experience in similar Projects	20	
	- Experience on projects in the Region	15	
	- ICT & software development experience	20	
<b>Total Form 1</b>			<b>210</b>

Technical Proposal Evaluation Form 2			Points Obtainable
<b>Proposed Work Plan and Methodology</b>			
2.1	The task is well understood, properly addressed and correspond to the ToR		30
2.2	Important aspects of the task are addressed in sufficient detail		20
2.3	Different components of the project are adequately weighted relative to one another		20
2.4	Proposal is based on a survey of the project environment and data are properly used in the development of the proposal		30
2.5	Adopted conceptual framework is appropriate for the task		50
2.6	Scope of task is well defined and corresponds to the ToR		110
2.6	Efficient and realistic work plan corresponding to the needs/specifics stipulated in the TOR (sequence of activities is realistic and will ensure effective implementation of the work plan, plan is falling in indicated under the ToR time frames)		90
<b>Total Part 2</b>			<b>350</b>

Technical Proposal Evaluation Form 3			Points Obtainable
<b>Personnel</b>			
3.1.	<b>Task Manager/Team leader</b>	Sub-score	<b>70</b>
	Education and general qualification	60	
	- ICT project management experience	20	
	- Experience in implementation of e-projects at central and local levels	30	
	- Knowledge of the region	10	
	Language qualifications: Fluency in Romanian, English and Russian	10	
	Sub-Score	<b>70</b>	
3.2	<b>Team members/experts</b>	Sub-score	<b>70</b>
	Education and general qualification	60	
	- ICT development experience	20	
	- Experience in implementation of e-projects at central and local levels	30	
	- Knowledge of the region	10	
	Language qualifications: Fluency in Romanian and English or Russian	10	
	Sub-score	<b>70</b>	
		Total Part 3	<b>300</b>

The nominated Task Manager must be the employee who will be responsible for the overall management and coordination of the project inputs and distribution of operational tasks among the other consultants/experts the entire period set for this contract.

#### **F. Award of Contract**

##### **23. Award criteria, award of contract**

The procuring UN Women 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 UN Women 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 UN Women. The Contractor's personnel and sub-contractors shall not be considered in any respect as being the employees or agents of UN Women or the United Nations.

**2. SOURCE OF INSTRUCTIONS**

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

**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 UN Women.

**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 UN Women for all sub-contractors. The approval of UN Women 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 UN Women 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, UN Women, 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 UN Women as additional insured;
  - (ii) Include a waiver of subrogation of the Contractor's rights to the insurance carrier against UN Women;

(iii) Provide that UN Women 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 UN Women 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 UN Women 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 UN Women shall rest with UN Women and any such equipment shall be returned to UN Women at the conclusion of this Contract or when no longer needed by the Contractor. Such equipment, when returned to UN Women, 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 UN Women for equipment determined to be damaged or degraded beyond normal wear and tear.

**11. COPYRIGHT, PATENTS AND OTHER PROPRIETARY RIGHTS**

UN Women 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 UN Women'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 UN Women in compliance with the requirements of the applicable law.

**12. USE OF NAME, EMBLEM OR OFFICIAL SEAL OF UN WOMEN OR THE UNITED NATIONS**

The Contractor shall not advertise or otherwise make public the fact that it is a Contractor with UN Women, nor shall the Contractor, in any manner whatsoever use the name, emblem or official seal of UN Women or the United Nations, or any abbreviation of the name of UN Women 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 UN Women, shall be treated as confidential and shall be delivered only to UN Women 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 UN Women, any information known to it by reason of its association with UN Women which has not been made public except with the authorization of UN Women; 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 UN Women, 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 UN Women 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, UN Women 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, UN Women 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 UN Women reserves the right to terminate without cause this Contract at any time upon 15 days prior written notice to the Contractor, in which case UN Women 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 UN Women under this Article, no payment shall be due from UN Women 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, UN Women may, without prejudice to any other right or remedy it may have, terminate this Contract forthwith. The Contractor shall immediately inform UN Women 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 UN Women to determine a mutually acceptable procedure.
- 18.2 Accordingly, the Contractor authorizes UN Women to deduct from the Contractor's invoice any amount representing such taxes, duties or charges, unless the Contractor has consulted with UN Women before the payment thereof and UN Women has, in each instance, specifically authorized the Contractor to pay such taxes, duties or charges under protest. In that event, the Contractor shall provide UN Women 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 UN Women to terminate this Contract immediately upon notice to the Contractor, at no cost to UN Women.

## **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 UN Women to terminate this Contract immediately upon notice to the Contractor, without any liability for termination charges or any other liability of any kind of UN Women.

## **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 UN Women unless provided by an amendment to this Contract signed by the authorized official of UN Women.

## Terms of Reference

### Development of the Information System designed for Joint Information and Service Bureaus

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## Abbreviations and Acronyms

NEA	National Employment Agency
CPA	Central Public Authority
LPA	Local Public Authority
DB	Database
NSIF	National Social Insurance Fund
G2B	Government to Business
G2C	Government to Citizens
IS	Information System
JISB	<i>Joint Information and Services Bureaus</i>
JISBIS	<i>Joint Information and Services Bureaus Information System</i>
IT	Information Technology
ICT	Information and Communications Technology

## Introduction

This document describes the general requirements for development of pilot *Joint Information and Services Bureaus Information System (JISBIS)* in Nisporeni, Telenesti, Sangerei and Cantemir.

This document outlines the whole set of basic components of the information system that will serve as the primary tool for work and reporting of the Joint Information and Services Bureaus (*JISB*) and will enable improving the quality of services provided to beneficiaries of *JISB* and creating a knowledge database applicable to all local public authorities involved in the project. Thus, it will encourage using the *JISB*'s experience (information on any request made by beneficiaries and the way it is addressed will be available to all *JISB* service providers).

Given the fact that the functional and nonfunctional requirements of this system can be implemented on various HARD and SOFT platforms, which means different costs, it is recommended to use free and portable information solutions, which do not entail user licence procurement costs and can run both on Windows and UNIX servers.

The *JISBIS* will reduce the bureaucracy, as well as time and costs required to consult the population. This information solution will also serve as the key tool for fast retrieval of data on the *JISB*'s activity. This goal will be achieved by transition from a bureaucratic approach, which is closed and time consuming, to an integrated, fast and transparent electronic mechanism of responding to citizens' requests.

Three categories of benefits are expected from the implementation of the *JISBIS*:

### **I. Benefits for the business environment and citizens:**

- Online access to the public content of the information system (knowledge database), by which citizens will find answers to all problems falling within the *JISB*'s competence.
- Reduction of inconveniences related to obtaining consultation and information as part of the *JISB*'s activity.
- Reduction of costs related to consultation in areas of interest for citizens.

### **II. Benefits for service providers from Joint Information and Services Bureaus:**

- Provision of fast and quality services.
- Enhancement of transparency of the Local Public Authorities' work.
- Optimisation of work flow and reduction of operating expenses.
- Improvement of the quality of information provided by *JISB*.
- Alignment of the *JISB*'s work to relevant European and international standards.

### **III. Benefits for the UN Women:**

- Efficient monitoring of the work of Joint Information and Services Bureaus.
- Fast preparation of reports on the work of *Joint Information and Services Bureaus*.

These Terms of Reference set forth a general vision of the information solution, including aspects related to aim and goals, principles, basic features, functionality and concept architecture, etc. of the information system.

The details of the *JISBIS* implementation will be defined during the information solution design and development process and will depend on the company contracted for implementation.



## 1. Overview

The *JISBIS* is an information system expected to produce immediate benefits and impact for legal entities and individuals from the districts of the Republic of Moldova. This service is part of *Government to business (G2B)* and /or *Government to citizens (G2C)* service category and is intended to provide the local public authorities officers with an efficient information toolkit that would enable automation of information and consultation services for citizens and business from the territory.

The implementation of the information system will reduce the bureaucracy, corruption and time required for information and consultation of citizens and legal entities on subjects falling within the *JISB*'s competence.

### 1.1. Notions Used in the Terms of Reference

**Database** – the whole set of data organized in accordance with the concept structure describing the basic features and relations between entities.

**Data** – basic units of information on persons, subjects, facts, events, phenomenae, processes, bojects, situations, etc. shown in a form that enables notifying, commenting and processing them.

**Data integrity** – the quality of data implying preservation of their content and their unambiguous construction in case of random actions. The integrity is deemed preserved if the data were not altered or deteriorated (erased).

**Metadata** – the manner of attaching semantic values to data stored in the database (data about data).

**Information object** – a virtual representation of existing material and immaterial entities.

**Information resource** – a set of documented information in the information system maintained in accordance with the requirements and legislation in force.

**Information system** – a set of software and hardware (component of the informaiton system) ensuring automated data processing.

**(Legacy) information systems** – a set of methods and means for collection, processing and transmission of information necessary for the management of enterprises, institutions, ministries, etc.

**Information and Communitions Technology** – is a common term referring to all technologies used to share and handle information.

**Information technology** – a set of information processing and transferring methods, procedures and ways as well as rules on their application.

**Data veracity** – the level of compliance of data stored in the computer memory or in documents with the real state of objects from the respective area of the system reflected by these data.

### 1.2. Legal References and Aspects related to the Information System Development

Creation, implementation and use of the *JISBIS* shall not infringe the relevant regulatory and legislative acts in force on development of information solutions designed for CPA and LPA.

This category of regulatory acts includes:

1. Standard of the Republic of Moldova SMV ISO CEI 15288:2009 “*Systems and Software Engineering. System Lifecycle Processes*”.
2. Technical regulation RT 38370656-002:2006 “*Software Life Cycle Processes*”, Official Gazette No 95-97/335 of 23.06.2006.
3. *Order No 94 of 17.09.2009 of the Ministry of Information Development on Approval of Some Technical Regulations (record keeping of electronic public services, provision of electronic public services, ensuring information security when providing electronic public services, calculation of cost for development and implementation of automated information systems)*, Official Gazette No 58-60 of 23.04.2010.
4. *Law No 467 –XV of 21.11.2003 on Informatization and State Information Resources*, Official Gazette No 6-12/44 of 01.01.2004.
5. *Law No 71-XVI of 22.03.2007 on Registers*, Official Gazette No 70-73/314 of 25.05.2007.

6. *Law No 17 of 15.02.2007 on Personal Data Protection*, Official Gazette No 107-111 of 27.07.2007.
7. *Law No 1069-XIV of 22.06.2000 on Computer Science*, Official Gazette No 073 of 05.07.2001.
8. *Law No 982-XIV of 11.05.2000 on Access to Information*, Official Gazette No 88 Article 664 of 28.07.2000.
9. *Government Decision No 1132 of 14.12.2010 on Approval of Requirements for Ensuring Security of Personal Data during Processing by Information Systems for Personal Data*, Official Gazette No 254-256 of 24.12.2010.
10. *Government Decision No 255 of 09.03.2005 on the National Strategy on Building Information Society „e-Moldova”*, Official Gazette No 046 of 25.03.2005.
11. *Government Decision No 916 of 06.08.2007 on Government Portal Concept*, Official Gazette No 127-130/952 of 17.08.2007.
12. *Government Decision No 668 of 19.06.2006 on Official Webpages of Public Administration Authorities in the Internet*, Official Gazette No 98-101/726 of 30.06.2006.
13. *Government Decision No 733 of 28.06.2006 on e-Government Concept*, Official Gazette No 106-111 of 14.07.2006.
14. *Government Decision No 632 of 08.06.2004 on Approval of the Policy for Creation of Information Society in the Republic of Moldova*, Official Gazette No 96-99 of 18.06.2004.
15. Other laws, regulatory acts and standards in force on ICT.

Under Law No 467 –XV on Informatization and State Information Resources, Article 11, the development of the *JISBIS* is included in the category of the state information resources and, hence, according to Article 21 of the same law, the policy on state information resources, developed by the *Ministry of Information and Communications Technology* and approved by the *Government of the Republic of Moldova*, shall be taken into account. Article 19 of the same law requires certification of the *Joint Information and Services Bureaus Information System* and its registration in the **State Register of State Information Resources and Systems**, managed by the *Ministry of Information and Communications Technology*. After registration the owner is issued an information system descriptor.

Another legal restriction that shall be complied with consists in ensuring the protection of personal data by means of *JISBIS*. Law No 17 of 15.02.2007 on Personal Data Protection stipulates the compulsory nature of ensuring the protection of personal data.

Moreover, under this law the owner of a *JISBIS* is obliged to register the information system in the **State Register of Personal Data Holders** managed by the *National Center for Personal Data Protection*.

In the context of ensuring citizens' access to the state information resources or to services provided by state institutions using electronic equipment or resources the Government of the Republic of Moldova issued Decision No 916 of 06.08.2007 on Government Portal Concept, which enforces certain requirements and standards in order to achieve an efficient, fast and qualitative information interaction between the components of the society (the Government, citizens, the business environment, the civil society). This decision stipulates that the interaction between public authorities, citizens and the business environment during provision of public services by electronic means shall be carried out through a single government gateway – a so-called “*Government Portal*”.

*The Government Portal* is a support tool for e-government, that ensures the possibility to share information between individuals, legal entities and public authorities by means of communications networks, including the Internet, and represents a gateway to information services.

*The Government Portal* concept also reflects the vision on the way of access and provision of information by citizens, businesses or other categories of users. Thus, *the Government Portal* provides the user with a tool of access to multiple services provided by public institutions on the basis of a one-stop-shop principle and should allow the citizen to use a single state identification system, i.e. to have access to the whole range of services provided by the Portal without having to use different authentication data for each accessed service.

The basic conclusions following from the concept of *the Government Portal*, which shall be taken into account when developing *the JISBIS*, are as follows:

- Any information or electronic service public institutions provide to citizens shall also be accessible through *the Government Portal*.

- There shall be a single identification system for all services available on *the Government Portal*.

### 1.3. Basic Principles of the Information System

When designing, developing and implementing *the JISBIS* the following general principles shall be taken into consideration:

- **The principle of architecture division by levels.** This principle means that the *JISBIS* subsystems shall be designed separately in line with the standards on interface between levels.
- **The principle of legality.** This principle implies creation and use of the information system in line with the national legislation in force and the acknowledged relevant international norms and standards.
- **The principle of reliable data.** This principle stipulates introduction of data in the system only through authorized and authenticated channels.
- **The principle of information security.** This principle implies ensuring an adequate level of integrity, selectivity, accessibility and efficiency for protection of data against loss, alteration, corruption and unauthorized access.
- **The principle of accessibility of public information.** This principle implies the implementation of procedures ensuring the access of citizens of the Republic of Moldova to public information provided by information solution.
- **The principle of transparency.** This principle implies design and development in line with the modular principle, using transparent standards in the area of information and telecommunications technologies.
- **The principle of expansibility.** This principle stipulates the possibility of extension and addition of new functions to the information system or improvement of the existing ones.
- **The principle of first person /single center priority.** This principle implies the existence of a high rank responsible person with sufficient rights necessary to take decisions and coordinate activities in order to create and use the system.
- **The principle of scalability.** This principle implies ensuring the information system is capable of the same performance both in case of small data amounts and accesses and in case of large data amounts and accesses to the system.
- **The principle of integration with already in-place software.** This principle implies the possibility of the information solution to integrate and interact with software that is already implemented in *the JISB*.
- **The principle of simplicity and user-friendliness.** This principle implies design and development of all applications, hardware and software means accessible to users of the information system on the basis of exclusively visual, ergonomic and logical principles of conception.

Particularly for *the JISBIS* architecture the emphasis shall be made on compliance with the following paramount principles:

- The implemented client-server solution shall have three levels at least.
- Ensuring autonomous functionality of the information system on the local consultants' computers without necessitating an Internet connection.
- Appropriate security of the system shall be ensured to protect the information and the component subsystems against unauthorized use or against disclosure of personal information or information that is a business or state secret.
- Information shall be considered as a property and shall be managed appropriately.
- Information solution shall be developed and implemented so as to provide for the possibility of re-using it for other processes or of developing new functionalities.

- The number of various technologies and products providing the same functionalities or with similar purposes shall be reduced to the minimum.
- The system shall be capable of adequate reaction to beneficiaries.
- The information solution shall provide for the possibility of restoration after disasters (ensuring physical security of the information solution) as a component part of the implementation plan.

#### **1.4. Purpose and Goals of the Information System**

The primary purpose of the *JISBIS* consists in development of an information solution which will enable centralizing all used information in order to ensure efficiency of *JISB*'s work.

Based on systematization of theoretical results, practical achievements, gained experience and software used in this area worldwide, recommendations and solutions focused on efficient promotion of the respective areas will be proposed for the respective information solution, taking into account the particularities of the Republic of Moldova. In this context the information subsystem shall have the following primary goals:

- Efficient and intensive use of computer equipment from the *JISB*.
- Centralization of information on citizens' needs in order to develop their full profiles with metadata stored in dynamic nomenclatures (statistical classifiers, contacts, provided products and services, solved or pending problems, etc.) and history of services provided by the *JISB*.
- Ensuring the possibility to interconnect the *JISBIS* with databases of the central public authorities (NSIF, NEA, etc.) or the local public authorities required to service citizens.
- Creation of a centralized knowledge database for local consultants' work, where the experience on solution of citizens' problems will be stored so as to serve as an information tool for public officers and which will enable citizens to access consultation or to obtain information on solution for his /her problems.
- Provision of a handy and efficient toolkit for defining queries in the database on the principle of a QBE (Query by Example) editor, which will enable formulating search queries for information stored in the database by various criteria. The system shall also allow refining the search by filtering information obtained in response to user's queries.
- Development of a mechanism for aggregation of data and extraction of reports intended for fast analysis and planning of consultants' and public authorities' work or identification of citizens' problems.
- Adoption of efficient solutions for use of data collections in order to obtain all required outputs.
- Ensuring the veracity of output information.
- Facilitation of information management, which entails automated creation of outgoing documents with minimal intervention by the user.
- Enabling information sharing between the *JISB*, government's central and local institutions (bidirectional flow of information).
- Increase of information flow speed, reduction of information processing cycle duration and response time.
- Control of data access and ensuring of enhanced security and confidentiality of data collections and user data by implementing a differentiated access to database through access groups. For each access group it should be possible to define the rights of data handling and access to the system interface functionalities.
- Implementation of advanced information technologies for interaction between citizens and the *JISB* (implementation of a feedback request practice on the basis of modern communications technologies and direct marketing strategies).

- Implementation of procedures for automated publication of publicly relevant information on a webpage from which citizens would send requests and receive answers.

The designed information system shall meet the usage requirements that determine quantitative and qualitative parameters of the whole system, its components and functions covering the users' needs. Compliance with these goals during the *JISBIS* design and development stage will:

- increase the efficiency of information processing,
- contribute to the exactness of stored and processed information,
- allow a more appropriate presentation of information to the end user.
- contribute to a high level of security.

The *JISBIS* shall meet a set of requirements the most important of which are listed below.

- The system shall be created in line with the requirements of the modern processes for statistics collection and processing.
- The database shall enable accumulation and storage of primary data, of methods and restrictions used for statistics calculation as well as of typical applications and reports.
- The structure and content of information accessible for users shall be generated dynamically depending on the awarded rights.
- All categories of users shall have one single interface for access to the information system resources.
- Given the informational connections with other information subsystems belonging to external structures (central public authorities, local public authorities, NGOs, etc.) a flexible system of interaction interfaces and protocols shall be integrated and its components shall be developed in line with unification requirements.

To meet these requirements it is important to develop and implement the following components:

- **The component for administration of beneficiaries' profiles.** The purpose of this component is to visualize and edit the records on citizens and their requests.
- **The component for sharing consultants' experience (knowledge database).** It shall store the support information on solutions for citizens' problems. This database represents a tool whose content shall be supplemented by all authorized users (consultants will be encouraged to use other consultants' experience in their work).
- **The component for search of information in the database.** The purpose of this component is to allow search and retrieval of relevant information by any search criterion.
- **The component for aggregation of the primary data and generation of reports.** This component is intended for analysis of primary information and generation fast reports for analysis or submittal to supervisors or potential beneficiaries.
- **The component for direct marketing procedures.** This component is intended for segmentation of beneficiaries and interaction with them by means of such modern procedures as: email, automated generation of letters in windowed envelopes, lists of addresses, etc.
- The component for users administration (creation of groups, defining rights and roles, etc.) and logical and physical security of the information system.
- **The component for administration of nomenclatures of the database.** The purpose of this component is to manage the metadata stored in the database. Both statistical classifiers (CUATM, FOJ, CFP, CAEM, etc.) and the nomenclatures related to the *JISB*'s work shall serve as metadata.
- **The component for tasks management.** This component is intended for formulation and assignment of tasks for consultants of *the JISB* and monitoring of their fulfillment.

- **The public web interface for access to the database.** It will enable generating reports of any level of detail, accessing the knowledge database and send online requests. This component shall allow all actors of the designed information system to see and process the public information of the database (for instance, the district authorities will be able to see the general situation from other districts).

## **2. Business Model of the Automation Object**

### **2.1. Subsystems of the information solution**

The information solution designed for activity of *the JISB* shall be formed of a set of information subsystems that shall cover all work of the local and regional consultants and needs of the beneficiaris of *the JISB*.

Given the nature of problems it shall solve, *the JISBIS* shall be formed of three information subsystems described below.

#### **I. Web application designed for computerization of the JISB's work.**

The web interface of *the JISBIS* shall cover the whole set of functionalities related to *JISB's* work. Depending on the group the user belongs to the solution shall open a distinct interface for access to functionalities and content of the database.

The website shall request user authentication by means of the user name, the password and possibly the access IP address or the digital certificate of the user.

The website shall use the central database of the *JISB* network where all information related to work of all local and regional consultants shall be stored.

#### **II. Information solution for the local consultant designed for offline functioning.**

This application shall be a Standalone version of the information system designed for local consultants to enable them to work offline (when traveling in the territory consultants do not always have access to the Internet with acceptable speed for work with the web interface).

In this regime, the information system shall contain only functionalities related to local consultants' work and additional modules for synchronization of the information system with web solution (import of information from the server, export of information to the server and information system upgrade).

#### **III. Knowledge Database.**

This database shall be a web solution with public access and contains records of all problems local consultants respond to and the responses to them (including issues related to legislation, typical form blanks, etc.). During development of this database knowledge will be pooled in it and made available for any Internet user without the need to directly address the local consultant.

### **2.2. Information Objects of the Information System**

Analysis of the modelled area identifies all information objects that shall be taken into account when developing *the JISBIS*.

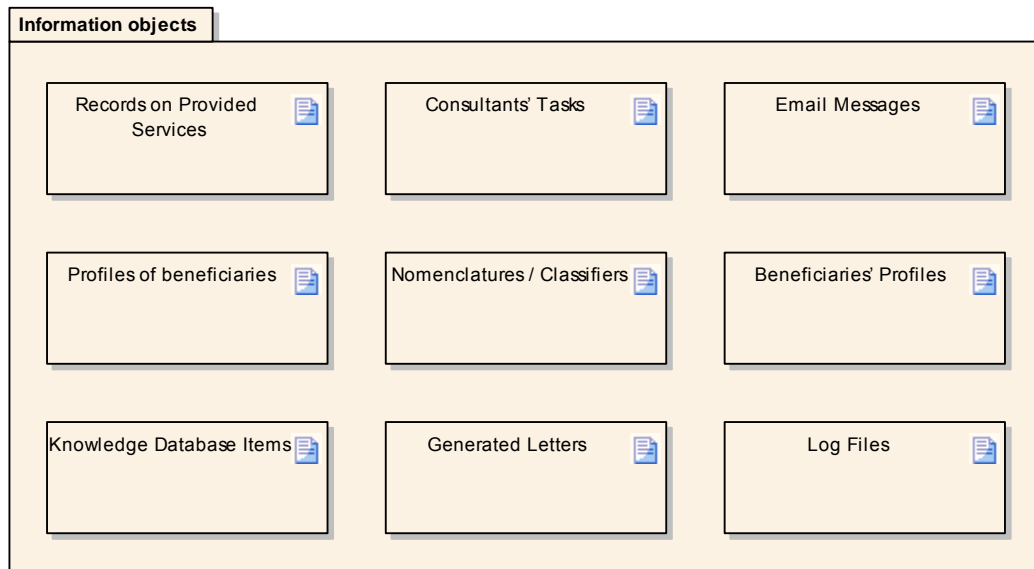
Figure 2.1 shows all information objects that will underpin the conception of the information solution. As shown in this figure, there are 9 categories of information objects which shall be taken into account when designing and implementing *the JISBIS*: records on provided services, beneficiaries' profiles, components of the knowledge database, consultants' tasks, nomenclatures /classifiers, generated letters, edited and sent email messages, consultants' profiles and system logs.

#### **1. Records on Provided Services**

These represent the main element of the *JISBIS* database, since it is formed of all data describing the local and regional consultants' work – services provided to citizens. When documenting the provided service all data describing the nature of the provided service, the period of service provision, the consultant who provided the service and the beneficiary of the service shall be entered so as to display all provided services in the beneficiary's profile. On the basis of these primary data on the provided services reports on performance of the *JISB's* work shall be generated.

## 2. Beneficiaries' Profiles

The beneficiary's profile represents an information object formed of all data related to the beneficiaries of services provided by *JISB*. The beneficiary's profile shall contain all contact details of the beneficiary collected in the course of his /her visits for consultation (surname, name, identification data, postal address, telephone number, email, etc.) and services this person has benefited. The beneficiary's profile shall deliver the history of the citizen's interaction with *the JISB*.



**Figure 2.1. Information objects of the Joint Information and Services Bureaus Information System.**

## 3. Components of the Knowledge Database

The components of the knowledge database represent an information object designed for consultants and contain the information related to a certain area of consultation. De facto a *Knowledge Database* unit shall represent the answer to a problem relevant for the beneficiary of *the JISB*.

## 4. Consultants' Tasks

This is an information object consisting of all tasks assigned to consultants which the latter should fulfill and report on implementation.

## 5. Nomenclatures /Classifiers

This is an information object formed of all metadata related to the information system. It shall contain both the national classifiers (relatively static) managed by the *National Bureau of Statistics (CAEM, CUATM, CFP, FOJ, etc.)* and the internal nomenclatures of the information system and knowledge database that will be developed and updated in the course of development of *the JISBIS*.

## 6. Consultants' Profiles

The beneficiary's profile represents an information object consisting of all data related to consultations of *the JISB*. The beneficiary's profile shall contain all information related to the consultant (information for authorization in the system, surname, name, identification data, postal address, contact telephone, email, etc.) and the services provided by the consultant. The beneficiary's profile shall deliver all history of the consultant's work in *the JISB*.

## 7. Generated Letters

These represent an information object formed of all letters and address lists generated by the system and intended to be printed and sent to the beneficiaries.

## 8. Email Messages

This is an information object formed of all email messages generated by the system and sent to the beneficiaries.

## 9. Log Files

These represent information objects intended for information audit and implementation of information security policy. Any potentially dangerous alteration – creation, modification, marking for deletion, change of the status, etc. – shall be registered in special registers (log files) showing the time and the user who has made the potentially dangerous alteration and the user location (IP address of this persons' computer). If potentially dangerous alterations do not imply physical alteration of data for each file it shall be possible to see the user that has performed the latest alteration.

### 2.3. Information Flows and Operating Levels

To ensure the operation of *the JISBIS* it is necessary to implement 5 categories of information flows available for different categories of users of the information system.

Consequently, the following information flows shall be implemented:

- **Updating of the knowledge database.** The local and regional consultant shall use this flow to fill in or update the fields of the knowledge database (adding new responses to citizens' requests or making alterations generated by legislative amendments) and to approve these updates.
- **Documentation of the local consultant's work.** The local consultant shall use this flow to fill in the information related to his /her work (*i.e.* to enter every provided consultation in the system).
- **Communication with the beneficiaries.** The regional consultant shall use this flow to select the target beneficiaries, edit, generate and send letters or email messages.
- **Generation of reports.** The users' supervisory hierarchical levels (regional consultants, UN Women, etc.) shall use this flow to retrieve performance reports on the work of local consultants', *the JISB's* or the network on the whole quickly.
- **Updating the information system.** Consultants shall use this flow to update the Standalone version of the information system, the central database or to synchronize the *JISBIS* with the CPA's databases related to the local consultant's work (*NSIF, NEA, etc.*).

▪

## 3. Architecture of the Information System

*The JISBIS* shall be developed on the basis of a client-server solution formed at least of three levels of access to data through a web interface. The implementation of a client-server architecture of three levels for *JISBIS* ensures the possibility to implement the client level (the most dependent on the software and hardware platform) easily, for instance, by means of a browser.

Consequently, the following architecture levels are recommended:

- **The client level** of the system. It shall have the role of presenting data, capture events from user and control the interface with the user. Possible algorithms present here in 2 levels architecture were mostly moved to the next level – the application server.
- **The application server** shall not have an explicit form. This level is the key of the system. The objects implementing algorithms shall be stored here. This level shall protect data from direct access by the clients (ensuring an advanced level of security). It shall also contain components that can be accessed at the client level.
- **The data storage data level.** It shall have the role of storing the data. Various types of systems may be used from relational databases to the object oriented ones.

The levels shall have logical boundaries, not physical, and shall be able to run on the same server computer. As the condition the system must be well structured and boundaries of every level must be well defined and practically represented by interfaces of component objects. These shall be imposed by the system administrator depending on the specific conditions of each application.

The three-level architecture has the following advantages:



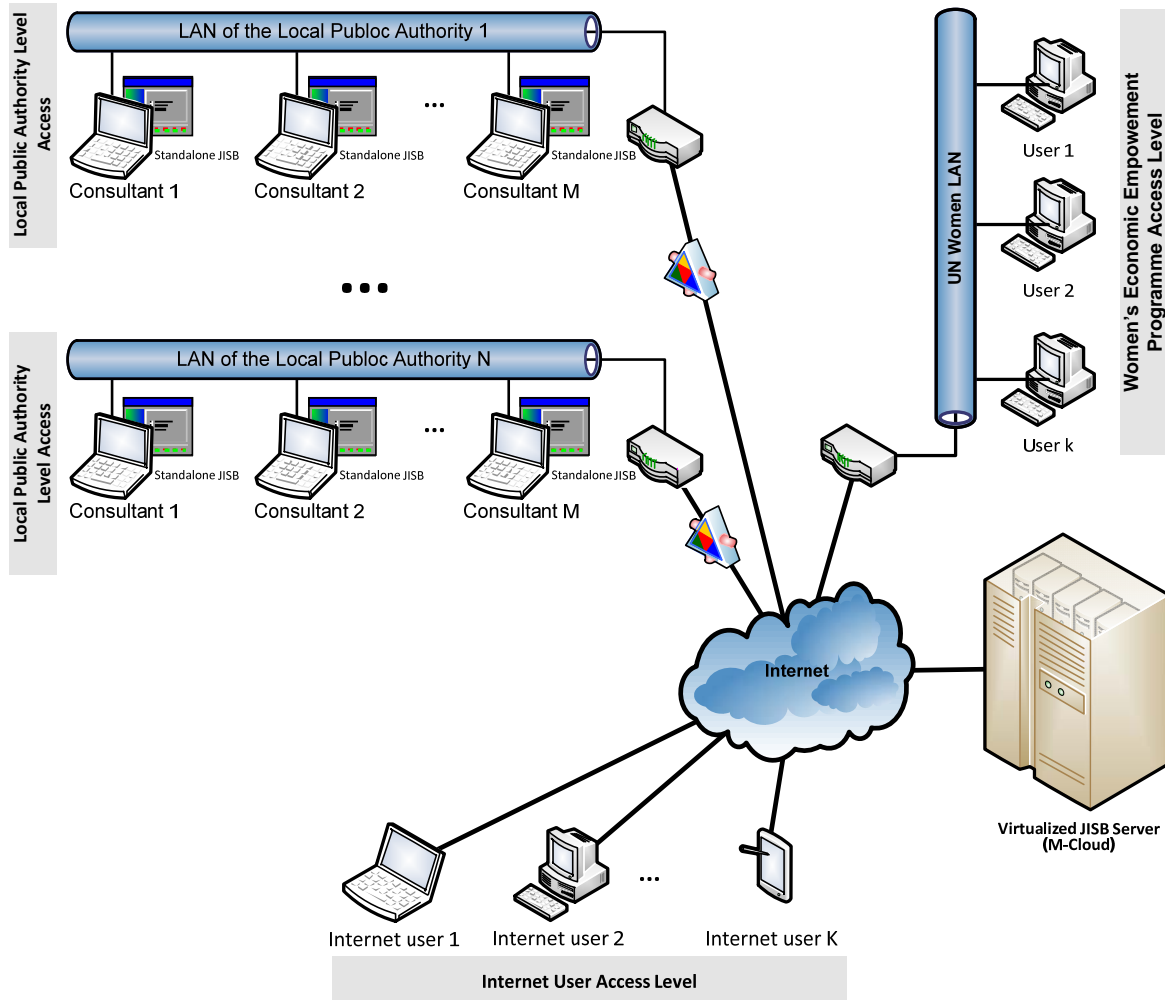
1. **Clear separation between the three levels.** This separation shall enable more clients to have access to a large diversity of server applications. The main advantages for the client applications are fast development by re-use of algorithm components and a shorter test stage since the server components are already tested.
2. **Redefinition of data storage strategy.** It does not affect the client, since he /she accesses data through a well designed interface embedding all storage details.
3. **Objects handling data processing algorithms.** They shall be as close physically to the data storage environment as possible, ideally on the same computer. In this way the overloading of network is decreased because this is an area of intensive traffic.
4. Unlike the two levels client-server model, where only data are publicly available, the three levels architecture **enables the public with access to services.**
5. Since **servers** are more reliable systems, data protection and security **is simpler to implement and maintain.** Yet, as the applications are distributed, data protection and access control are important elements. In a simple form, 0 security level, that is: authentication, authorization and encryption.
6. As for updating of the system, **it is easier to change a software component on the server** than to provide numerous clients with new versions of the software.

As a result we have an increased speed of data processing, an enhanced handiness in further development of the information system (by development and implementation of additional services) as well as a more reliable mechanism for ensuring the information security.

Besides, it does not exclude the possibility to use and implement services of other local or central public authorities' information systems, for instance, by implementing the principle of one-stop-shop for access to information system resources of national importance by means of *the Government Portal* developed by *the e-Government Center*.

Since the consultants have to work in the territory, where the Internet connection for use of the information system may not be available, a *Standalone* version of *the JISBIS* shall be developed with functionalities designed strictly for local consultants' work. This application shall be capable to operate autonomously and when the Internet connection becomes available it shall synchronize the local database with the one on the server.

*The JISBIS* shall be developed on the basis of the currently existing Internet /Intranet technologies. The interaction of all actors is shown in Figure 3.1.



**Figure 3.1. Architecture of the Joint Information and Services Bureaus Information System.**

As shown in Figure 3.1. the *JISBIS* shall interact with the following hubs:

- **JISB server.** This is the server where *the JISBIS* (the central database) and the knowledge database designed for consultants' work shall be installed.
- **Client computers.** These are computers from which users shall access *the JISBIS* (depending on their rights and roles).

In terms of the level (rights) of access, two general system user categories shall be distinguished: authorized users and internauts, the latter having only access to the public information generated by the information system (the authorized users shall also have internauts' rights) and to contact details of the *JISB*.

The authorized users with access to *the JISBIS* server may be divided in the following access categories:

1. **Authorized users at the UN Women access level.** These are users with access to *the JISBIS* from *the Women's Economic Empowerment Programme*. The nature of their access shall vary from superusers to operators.
2. **Users at the local public authority level.** This means a possible access by local public authorities to view or update the information of the *JISBIS*.

Access to *the JISBIS* shall be limited, with authorization obtained through a user name, a password and possibly the IP address or a certificate of digital signature of the accessing computer.

#### **4. Services Provided by Information System**

*The JISBIS* is an information service that aims mainly at providing citizens with public online access to relevant information and key toolkit in the *JISB*'s work.

Giving the nature of users who will request access to *the JISBIS* resources, depending on their rights and roles, they shall be able to benefit of the following services:

1. Provision of citizens with public access to an efficient information toolkit that will enable surfing through a knowledge database containing answers to all citizens' problems and specific typical form blanks requested by the CPA and LPA.
2. Provision of citizens with possibility to post online requests to *JISB* from their district of residence and receipt of answer to the request sent through electronic services.
3. Provision of local and regional service providers with an information toolkit designed for automation of their work and an enhanced handiness and speed of work and access to information.
4. Enabling automated data sharing between *the JISB* and the relevant CPA (*NSIF, NEA, etc.*).
5. Enabling efficient supervision of the *JISB's* work through a flexible mechanism of reporting and aggregation of the primary information.

## 5. Stakeholders and Roles

### 5.1. Business Roles of the Information System

The following entities are interested or shall be involved in development and proper operation of the *JISBIS*:

- **District councils of Nisporeni, Sangerei, Cantemir and Telenesti** as the main bodies involved pilot implementation, in charge of administration and record keeping of information on *the JISBIS's* work.
- **UN Women, Women's Economic Empowerment Programme** as the body *responsible* for financing and monitoring of the *JISB's* work in Nisporeni, Sangerei, Cantemir and Telenesti.
- **Citizens and businesses** from Nisporeni, Sangerei, Cantemir and Telenesti as *direct* beneficiaries of the *JISBIS*.
- **e-Government Center** as the body empowered to carry out e-transformation work. *e-Government Center* shall participate actively during the implementation and *commissioning* of the information system, including in validation and acceptance of solution proposals and of the delivered solution. *The e-Government Center* shall also coordinate work related to *Government Portal* and the *M-Cloud* solution *JISBIS* shall take into account of.
- **Ministry of Information and Communications Technology** as the main body in charge of policies and regulations on development and implementation of the state information resources.
- **Centrul de Telecomunicatii Speciale State Owned Enterprise** as the entity that will provide technical assistance and means required for the implementation and *operation* of the *JISBIS*. *Centrul de Telecomunicatii Speciale SOE* shall also represent the entity that will assist the implementation and administration of the information system.

### 5.2. Owner of the Information System

The owner of the information resource is ***the UN Women, Women's Economic Empowerment Programme***. The role of an owner reflects the administrative and the technological aspects that fall within the competence of the *UN Women, Women's Economic Empowerment Programme*. *The UN Women /WEE* shall be responsible for monitoring of the *JISB* network and further transmission of *the JISBIS* for full usage.

### 5.3. System Owner and Service Bidder

The JISBIS will be contracted by UN Women /WEE. Once JISBIS design /development /implementation processes have been finished, it will be transmitted in possession of the JISB network (it will be taken by the LPA where the JISB operates).

The knowledge database of the JISB shall be made available to the Internet users on the basis of the available resources of the LPA where the pilot project is implemented, namely:

- qualified consultants of the JISB.
- staff of the ICT subdivision in charge of availability, runability and integrity of the service.
- equipment necessary for the system to function or for organization of the service in the M-Cloud.

### 5.4. Administrator of the Information System

The JISBIS shall be hosted in M-Cloud and the administration of the service shall be shared by the M-Cloud administrator and JISB. Responsibilities of the M-Cloud shall be regulated under an SLA (Service Level Agreement).

The system administrator shall have full access to all functionalities of the system, files and databases related to the system, rooms with the hardware and the equipment which runs the JISBIS software or ensures data security.

The administrator shall:

- ensure normal operation of the information system and accessibility, security and integrity of data;
- manage digital certificates for user access (approval, rejection, etc.);
- monitor users' activity in the system;
- change functionalities of the system (within the limits admitted by the system) on a written demand of the JISBIS owner, etc.;
- carry out technical administration of the information system infrastructure, which includes:
- administration and maintaining the functionality of hardware running the software, including the equipment designed to safeguard the security of the network perimeter and access to data;
- apportionment or hiring channels of broadband access to the Internet and the government network;
- administration of the web server with applications by which the services included in the JISBIS are provided.

### 5.5. Users and their Roles in the System

Roles of people or other system interacting with the JISBIS are shown in Figure 5.1. and can be described as follows:

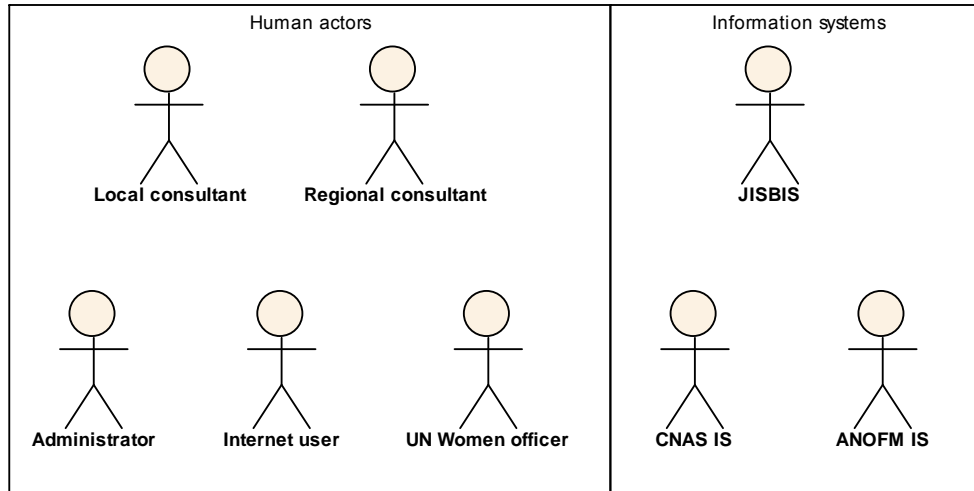
**Internet user.** A human actor accessing the public interface of the JISBIS in order to search through the knowledge database or send online requests to the JISB. These actors shall have the following distinct roles:

- to access web interface for searching in the knowledge database;
- to formulate queries for solutions to his /her problems;
- to send requests to the JISB consultants.

**Local consultant /service provider.** A human actor authorized to update the database related to the JISBIS and having the following distinct roles:

- view the database information;

- update the database information;
- delete the database information;
- search through the *knowledge database*.



**Figure 5.1. Joint Information and Services Bureaus Information System roles.**

**Regional consultant.** A human actor authorized to supervise the local consultants' work and having the following distinct roles:

- to have access to all functionalities accessible to local consultants;
- to approve alterations made in the knowledge database;
- to send automated email messages and to retrieve letters sent in windowed envelopes;
- to generate performance reports on consultants' and bureaus' work.

**UN Women officer.** A human actor authorized to supervise the work of *the JISB* with the following distinct roles:

- to send automated email messages and to collect letters sent in windowed envelopes;
- to search in the knowledge database;
- to generate performance reports on consultants' and bureaus' work.

**Administrator.** A human actor authorized to define the system users, the *JISBIS* configuration as well as to start the system components. If the technological environment where the *JISBIS* will operate includes sufficient capabilities to carry out administration, their implementation in the system shall be optional. This category of actors shall have the following distinct roles:

- to use all *JISBIS* functionalities unconditionally;
- to view any record in the database;
- to administer the applications server;
- to administer the production database;
- to administer users' profiles;
- to administer the system of nomenclatures and metadata;
- to create backup copies of the database.

The **JISBIS** is the information system that shall be developed (*the Joint Information and Services Bureaus Information System*).

The **NSIF IS** is the information system of the *National Social Insurance Fund* by which beneficiaries are informed and provided services specific for this institution.

The **NEA IS** is the information system of the *National Employment Agency of Moldova* by which beneficiaries are informed and provided services specific for this institution.

## 6. Functionalities of the Information System

### 6.1. Business Functions of the Information System

The business functions of the web version of the *JISBIS* are shown in Figure 6.1. and those of the *Standalone informatics system*– in Figure 6.2. These two components of the information solution shall have common functionalities and the client application shall be confined strictly to functionalities necessary to local consultants.

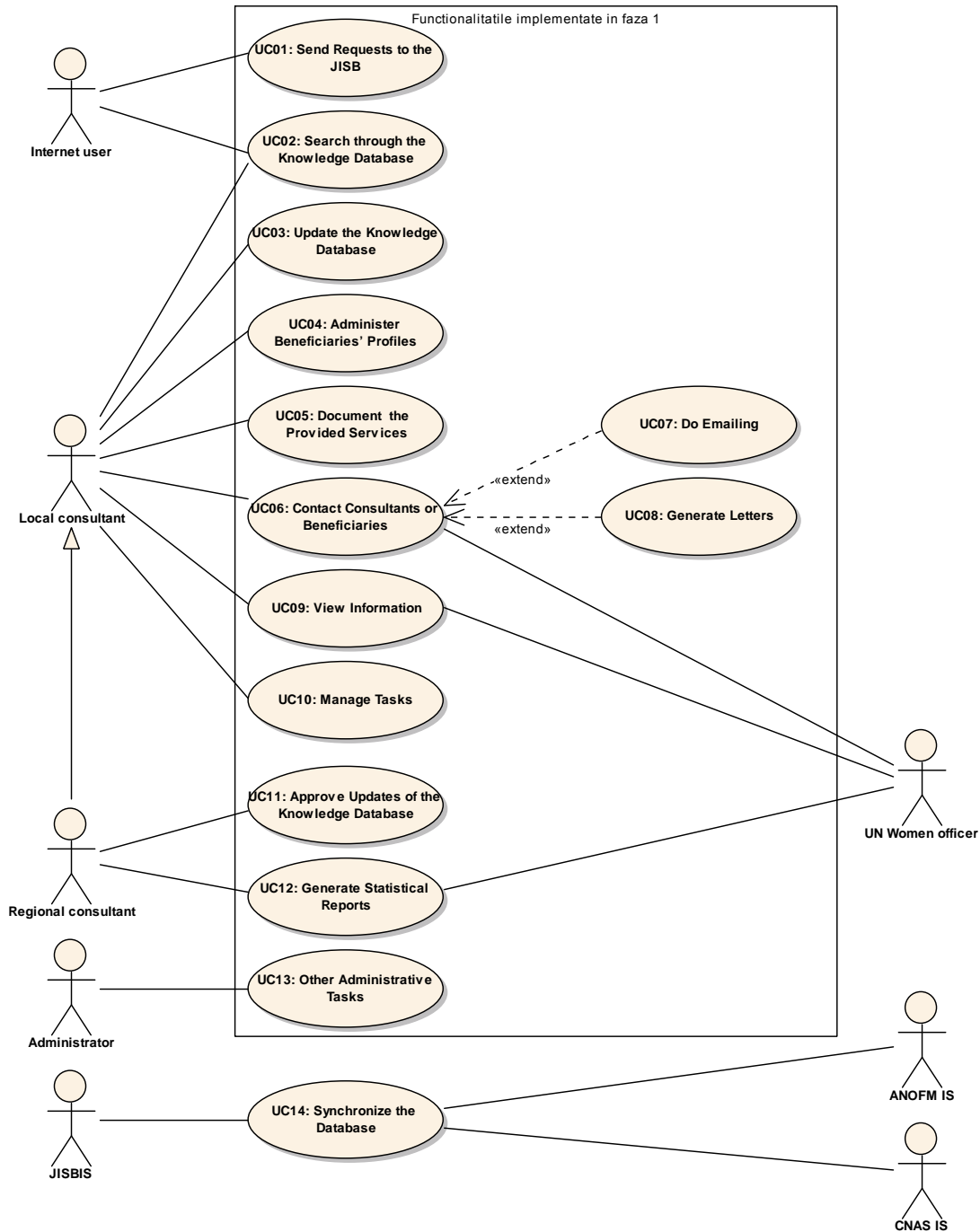


Figure 6.1. Business functionalities of the web version of the information system.

The frame in Figure 6.1. describes functionalities that shall be mandatory. Synchronization with the *NEA*'s and *NSIF*'s databases shall be performed only if these *CPA* provide interconnection interfaces or shall be implemented in a subsequent stage of development and upgrading of the information system.



**Figure 6.2. Business functions of the Standalone version of the information system.**

**UC01: Send Requests to the JISB**

This is a case of use available to all users of the Internet which will enable connection between the beneficiaries and *the JISB*. By means of this mechanism the beneficiaries shall formulate and send online requests to relevant local consultants. Thus, for this category of beneficiaries consultants shall not have to travel in the territory or to interact directly with the beneficiary. Instead the request and the answer to the requests shall be sent online.

**UC02: Search through the Knowledge Database**

This is a case of use available publicly to all users of the Internet which will enable access to a knowledge database related to areas of work of *the JISB*. Accessing this knowledge database the potential beneficiaries shall find the answer to their questions themselves without contacting the local or regional consultants.

**UC03: Update the Knowledge Database**

This case of use offers the whole set of functionalities available to local and regional consultants necessary to update the knowledge database. These functionalities shall enable creating and updating a knowledge database that shall contain all problems and solutions related to the work of *the JISB*.

**UC04: Administer Beneficiaries' Profiles**

This case of use shall offer all functionalities necessary to administer the profiles of the *JISB*'s beneficiaries. For each beneficiary that has addressed the *JISB* at least once a profile shall be created that in the course of time shall be supplemented by information. This profile shall contain full data about the beneficiary and history of his /her interaction with *the JISB* (the whole range of provided services and the achieved results).



**UC05: Document the Provided Services**

This is the case of use that shall enable the local consultants to document all services provided to beneficiaries (to enter the information related to each consultation mentioning the consultant who has serviced and the beneficiary who has been serviced). On the basis of this primary information the reporting system shall generate performance reports of the consultant, the bureau or shall retrieve the history of interaction with the beneficiary.

**UC06: Contact Consultants or Beneficiaries**

This is a case of use that shall enable implementation of some modern mechanisms of contacting and interacting with persons based on modern direct marketing procedures. On the basis of user's and beneficiary's profiles criteria defining the target groups that shall be contacted by emails or letters shall be formulated.

**UC07: Email**

This is a way to contact users and beneficiaries through email messages. These functionalities shall offer all means for editing and personalization of emails and interaction with the email server in order to send messages. *The JISBIS* shall contain predefined templates for email messages.

**UC08: Generate Letters**

This a case of use applied to contact users or beneficiaries by means of letters printed on paper that offers all functionalities for editing, personalization and generation of letters in windowed envelopes (and /or generation of lists of recipients' addresses for letters sent by post). *The JISBIS* shall offer predefined templates for letters.

**UC09: View Information**

This case of use shall offer all functionalities for searching through the content of the database and handling the records in order to view their content. The system shall offer mechanisms for searching and filtering records based on classification mechanisms related to metadata attached to records and the content of the records fields. Moreover, an advanced system for information search by all possible criteria shall be ensured.

**UC10: Manage Tasks**

The tasks management system shall offer the work groups a flexible management tool offering access to all current and historic information associated with their tasks. The information solution shall allow synchronizing with *MS Outlook* or similar software products.

If the users uses a specialized software for planning of a task agenda it is recommended to ensure synchronization of the agenda stored on the computer with the one in *the JISBIS* (data sharing) to keep the set of tasks updated.

Since the tasks management system shall support direct cooperation, it shall considerably improve the efficiency of communication. An efficient management of tasks implies the management of all aspects related to an activity, including its status, priority, time, apportionment of human resources and financial resources, recurrences, notifications, etc.

**UC11: Approve Updates of the Knowledge Database**

This is a case of use available to regional consultants and advanced users by which they can access functionalities for approval or rejection of insertions or updates made by local consultants in the knowledge database.

**UC12: Generate Statistical Reports**

This is a case of use accessible to users of different levels that contains all functionalities for generation of planned and ad-hoc reports on the information content of the information system and users' activity. These reports are useful for analysis of the system's information base, performance of the public officers' work in particular and of the LPA in general and anticipation of information security problems.

**UC13: Other Administrative Tasks**

This is a case of use intended for administrators, describing all functionalities available to them for administration and audit of the *JISBIS*: maintenance of the list and integrity of users' credentials, which are communicated by means of a digital certificate, extraction of reports from the system registers in order to analyze and detect possible logical and physical security problems for *the JISBIS*, etc.

The administrator of the *JISBIS* shall be able to use a mechanism for administration of *local and regional consultants'* profiles. This mechanism shall enable defining parameters for access to the interface, services, files and content of the records database.

The *JISBIS* administration shall implement all functionalities for ensuring sustainability and integrity of the information system (generation of backup copies, data restoring, service start, end and restoration, etc.)

**UC14: Synchronize the Database**

This is a case of use that shall offer all automated procedures designed for synchronization (mutual updating) of the databases of *the JISBIS, NSIF* and *NEA*. It shall include all procedures for configuration of the automated launches schedule and of the strategies for updating of the database content. It shall be implemented if the *NSIF* and the *NEA* shall present interoperability interfaces.

**UC15. JISBIS Updating**

This is a case of use that shall include all functionalities for updating the local consultant's information system Standalone version. Integrated modules shall allow updating the software product, import of the latest updates from the server for the consultant and upload of the latest updates made by the consultant in the Standalone version.

**UC16. Update the Software Product**

This is a case of use specific exclusively for the information system Standalone version. It shall enable the to check for new software versions on the server, download the files necessary for update of the software or the database patch and install the downloaded updates.

**UC17. Update the Local Database**

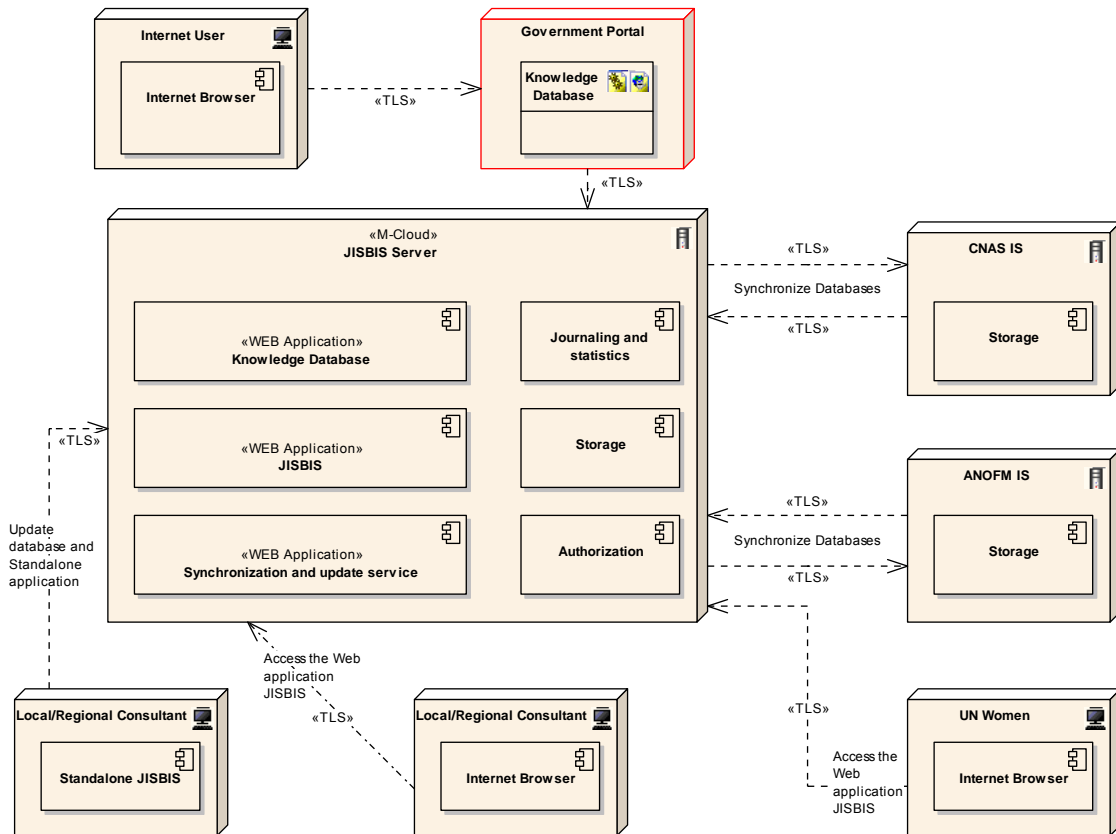
This case of use shall enable updating the database with the latest additions from the server. When these functionalities are launched the local database shall be updated or supplemented with data from the *knowledge database* and information related to the local consultant's work. Only records that are part of the update shall be downloaded.

**UC18. Update the Server Database**

This is a case of use that shall include functionalities necessary for transfer of information related to the local or regional consultant's work from the information system Standalone version to the server. Only records that are part of the update shall be uploaded in the server.

## 6.2. Information System Components

For operation of the *JISBIS* 7 operational hubs illustrated in Figure 6.3. shall be required.



**Figure 6.3. Interaction of the JISBIS components.**

The internal perimeter of the *JISBIS* shall be formed of three hubs:

- **JISBIS server.** This is the server on which the whole set of components of the *JISBIS* shall be installed and configured (the knowledge database, the web interface of the *JISBIS*, the update and synchronization service, the database, etc.).
- **Local/regional consultant of the JISB.** This is the consultant's client computer on which the information system Standalone version shall be installed or which shall connect to the web interface of the *JISBIS* by means of a browser.
- **UN Women/WEE.** This is the client computer of the officer from the *UN Women* by means of which he /she shall access the web interface of the *JISBIS* in order to monitor their work.

The external perimeter of the *JISBIS* shall be formed of 4 hubs:

- **Computer of the Internet user.** This is the Internet user's client computer by means of which he /she shall search the *knowledge database* resources and send online requests to the *JISB*.
- **Government Portal.** This is the information solution that shall enable the Internet user to access the public services of the *JISBIS* server (search through the *knowledge database* and sending of online requests to local and regional consultants).
- **NSIF server.** This is the server the databases synchronize with in order to receive the primary information required for the *JISBIS* operation and the reference information entered in the *JISBIS* is sent to.

- **NEA server.** This is the server the databases synchronize with in order to receive the primary information required for the *JISBIS* operation and the reference information entered in the *JISBIS* is sent to.

### **6.3. *JISBIS* User Interface**

The designed information system shall offer an ergonomic interface accessible to users of all levels. The system shall have a novel, pleasant, well-balanced and distinctive graphic design.

The information in the database shall be stored in UNICOD (UTF-8) format, which will allow concomitant view of Latin letters specific for Romanian language and Cyrillic letters without the need to restart the computer. The designed information system shall have a bilingual interface: Romanian and Russian.

In addition to the search modules designed on the QBE principle, which will enable defining visually sophisticated queries, the interface shall offer the possibility to refine the search results by filtering of the information in the search results list.

Thus, the user shall be able to refine the search results. Each column of the results table shall have a special field for filtering. In terms of character values the user shall be able to define the filtering principles by means of a mask (e.g., *“services”\** – all files for which the field contains the word *“services”*).

The indexed values (classifiers, nomenclatures) shall offer the possibility to be filtered by selecting a value from predefined lists.

For numeric or calendar dates fields one shall be able to filter either by the exact value of the searched value (e.g. **200000**) or by logical criteria (e.g. **<200000** – all records where the value of the field is larger than **200000**).

The content of any table with results shall offer the possibility to be exported either in .XLS format or in .CSV format and tables shall contain special buttons for fast processing of files: mark for deletion, unmark for deletion, general modification, etc.

The interface shall enable personalization of users’ preferences by implementing a bin of preferences where users shall be able to store their references to records they work with. Thus, every user shall be able to put aside the necessary files either to make some changes or for some other reasons.

### **6.4. Reporting, Audit and Statistics Module**

The audit and statistics module shall ensure the informational support necessary to audit the information security of the *JISBIS* (recording users’ actions, extraction of reports on users’ behavior, etc.) and the *JISB* consultants’ work.

For that purpose, this module shall offer a mechanism for extraction of reports retrieved from the database logs or content.

All nomenclatures of the database shall serve as structure elements of the mechanism. In case of aggregation of data for further analysis, the following calculations shall be possible: sums, average value, medians, maximal element, minimal element, and count of elements (SUM, AVG, MED, MAX, MIN, COUNT).

Thus, *UN Women* and the *JISB* shall have an efficient mechanism for dynamic configuration and generation of reports that shall quickly provide authentic information for audit of the reporting system and decision making.

### **6.5. Business Functions of the “Users” Role**

The system users shall be represented by the following roles:

- **Internet user.** The one who shall access the public web interface in order to search the *knowledge database* and to send online requests to the *JISB*.
- **Local consultant.** The one who shall consult citizens and document the results of the provided consultations in the database.
- **Regional consultant.** The one who shall consult citizens and document the results of the provided consultations in the database and supervise the local consultants’ work.

- **UN Women officer.** The one who shall monitor the operation of the entire network of the *JISB* and shall extract reports on their operation.

#### **6.6. Business Functions of the “Administrator” Role**

The system administrator shall discharge his /her duties using the existing means of the technological environment and those implemented in the *JISBIS* functionalities.

The administrator’s main function in the *JISBIS* shall consist in ensuring good operation of the information system. Besides, the administrator’s functions relating to good operation of the system and continuity of the service shall include:

- starting and ending the service for planned maintenance works;
- performance of procedures for creation of backup copies and ensuring their integrity;
- regular extraction of reports from the log in order to anticipate information security issues;
- development of statistical reports on operation of the system;
- management of changes made by the development team in case of applied corrections;
- monitoring of the technological environment in terms of use of the memory and calculation resources, the data collection in order to prevent the overloading of the system;
- etc.

#### **6.7. Business Functions of the “Data Source Owner” Role**

The owner of the information resource shall ensure the integrity of data in the system. The integrity shall be ensured by means of procedures, which include:

- testis for the integrity and security of data;
- correction of identified flaws;
- provision of technical and time resources for the system administrator in order to comply with the data backup and integrity check procedures.

These duties shall be carried out within the organization.

## **7. Requirements for the Information System**

### **7.1. Requirements for Business Functions**

#### **7.1.1. UC01: Send Requests to the JISB**

- CF 01.01. The information solution shall have a web interface that will enable the *JISB* beneficiaries to send online requests.
- CF 01.02. The information system shall use the Turing test (CPACHA) to check whether the request has been sent by a human or a robot.
- CF 01.03. All the sent requests shall be stored in the database.
- CF 01.04. The beneficiaries shall be able to formulate requests, to show the reference area of the problem and to enter their identification data.
- CF 01.05. The information system shall notify the consultant relevant for the beneficiary and the beneficiary through an email on the acceptance and processing of the request.
- CF 01.06. The consultant shall be able to formulate and send an online answer to the request of the beneficiary of *JISB* services.

### **7.1.2. UC02: Search through the Knowledge Database**

- CF 02.01. The information solution shall enable searching through a knowledge database containing answers to problems reported by the beneficiaries.
- CF 02.02. The information system shall provide public access to the knowledge database either from the web interface of the information system or in offline mode from the information system Standalone version of the local consultant.
- CF 02.03. The information system shall offer a mechanism for search in the knowledge database by a QBE form or by its classifiers.
- CF 02.04. The information system shall provide a mechanism of indexing and indexed search of information in the content of the Knowledge Database.
- CF 02.05. The information system shall enable defining a user's bookmark for the most requested entities (the most frequent subjects requested by citizens).
- CF 02.06. The information system shall enable export of items contained in the knowledge database into an external file.

### **7.1.3. UC03: Update the Knowledge Database**

- CF 03.01. The information solution shall have a mechanism enabling to update the knowledge database.
- CF 03.02. The local consultant shall be able to update the knowledge database (add new items or change the existing items).
- CF 03.03. Once the change has been entered, it shall become active only after the approval of the regional consultant or the system administrator.
- CF 03.04. The information system shall save and attach to the record on the update of the knowledge database the identifier of the user who has made the latest changes in it.
- CF 03.05. The information system shall log all potentially dangerous actions with the content of the knowledge database (creation, change, marking for deletion and physical removal) with the personalization of the user who has made the potentially dangerous change.

### **7.1.4. UC04: Administer Beneficiaries' Profiles**

- CF 04.01. The information solution shall have a mechanism enabling administration of the *JISB* beneficiaries' profiles.
- CF 04.02. The local consultant shall supplement with personal data the profile during the beneficiary's visits if the beneficiary shall agree to give these data.
- CF 04.03. The information system shall offer a preference bin where the references to beneficiaries' profiles shall be stored (usually the consultant shall store in the bin the set of records he /she works for the time being). When the record is placed in the bin the system shall show the summary content of each record.
- CF 04.04. The information system shall enable various actions with records from the bin (removal from the bin, physical removal or records, etc.).
- CF 04.05. The information shall not allow direct removal of records. The physical removal shall be anticipated by marking them for deletion.
- CF 04.06. The information shall not allow marking the beneficiary's profile for deletion if at least one other record in the database makes reference to it.
- CF 04.07. The information system shall enable formulation of criteria for filtering of the beneficiary's profiles directly in the table with their list.

- CF 04.07. The information system shall save and attach for record the identifier of the user who has created the profile and the identifier of the user who has made the latest change in it.
- CF 04.08. The information system shall log all potentially dangerous actions with the profiles (creation, alteration, marking for deletion and physical removal) personalizing the user who has made the potentially dangerous change.

**7.1.5. UC05: Document the Provided Services**

- CF 05.01. The information solution shall have a mechanism enabling the local consultants to document services provided to citizens.
- CF 05.02. The local consultant shall document his /her work on the basis of the metadata set related to the information system.
- CF 05.03. The information system shall offer a preference bin where references to records related to the local consultant's work shall be stored (usually the consultant shall store the set of records he /she currently works with in the bin). When the record is placed in the bin the system shall show the summary content of each record.
- CF 05.04. The information system shall enable various actions with records in the bin (removal from the bin, marking for deletion, etc.).
- CF 05.05. The information shall not allow direct removal of records. The physical removal shall be anticipated by marking them for deletion.
- CF 05.06. The information system shall enable formulation of criteria for filtering the consultant's records directly in their list.
- CF 05.07. The information system shall save and attach the identifier of the user who has created the record and the identifier of the user who has made the latest change in it to the record.
- CF 05.08. The information system shall log all potentially dangerous actions with records (creation, alteration, marking for deletion and physical removal) personalizing the user who has made the potentially dangerous change.

**7.1.6. UC06: Contact Consultants or Beneficiaries**

- CF 06.01. The information solution shall have a mechanism for automated contact of beneficiaries having profiles in the *JISBIS* database.
- CF 06.02. To select the recipients that will be contacted, the consultants shall have a mechanism for development of criteria the recipients shall have to meet (using a module for search in the metadata related to the beneficiaries' profiles and services provided to them).
- CF 06.03. Out of the found results the users shall tick beneficiaries who will be included in the preference bin to be contacted.
- CF 06.04. The preference bin shall enable selecting the way of contact (by email or a letter sent by post).

**7.1.7. UC07: Email**

- CF 07.01. The information solution shall have a mechanism for emailing (automated sending of email messages to recipients).
- CF 07.02. The recipients of email messages shall be included in the preference bin of persons to be contacted.
- CF 07.03. The information solution shall have a mechanism for editing the email text (with all tools for text editing and formatting).

- CF 07.04. The information system shall enable inserting the email text from an external RTF file edited and formatted in advance preserving the exact content and visual appearance of the text.
- CF 07.05. The information system shall enable attaching files and inserting graphic images in the email message.
- CF 07.07. For each email message it shall be possible to insert automatically:
  - the email address of the recipient in the TO area;
  - the email address of the sender (taken from the user profile);
  - personalized content of the message;
  - brand elements of the sender.
- CF 07.08. The information system shall enable sending email messages both for the *JISB* beneficiaries and for the consultants working in the *JISB*.
- CF 07.09. The information system shall log all sent email messages and users who have sent the email.

#### **7.1.8. UC08: Generate Letters**

- CF 08.01. The information solution shall have a mechanism for generation of letters for windowed envelopes.
- CF 08.02. The recipients of these letters shall be taken from the preference bin with beneficiaries to be contacted.
- CF 08.03. The information solution shall have a mechanism for editing the message of the letter (with all text editing and formatting tools).
- CF 08.04. The information system shall enable inserting the letter text from an external RTF file edited and formatted in advance preserving the exact content and visual appearance of the text.
- CF 08.05. When generating the final version of the letter the information system shall create a report (that one shall be able to save in an external RTF file) containing all letters for the target beneficiary selected to be contacted.
- CF 08.06. For each letter in the report it shall be possible to insert automatically:
  - contact details of the recipient in the area opposite to the envelope window;
  - contact details of the sender (in the end of the letter);
  - personalized content of the letter;
  - brand elements of the sender.
- CF 08.07. The information system shall enable generation of letters both for the *JISB* beneficiaries and for the consultants working in the *JISB*.
- CF 08.08. In addition to letters for windowed envelopes the information system shall be able to generate sets of addresses of the recipients that afterwards will be cut and pasted on the envelope.
- CF 08.09. The information system shall log all generated letters and users who have accessed these personal data.

#### **7.1.9. UC09: View Information**

- CF 09.01. The information solution shall enable the search of documents by key words.
- CF 09.02. The information search mode shall enable formulating queries on the basis of values of metadata attached to records.



- CF 09.03. The information search mode shall enable formulating complex queries for search on the basis of the full content of the records fields.
- CF 09.04. The information system shall show the search results depending on the date of introduction or the date of alteration of the record (in the decreasing order of the introduction or updating date).
- CF 09.05. The information system shall enable increasing /decreasing arrangement of the search results for any column or set of columns.
- CF 09.06. The information solution shall enable defining filters in the found results (refining the results).
- CF 09.07. The user shall be able to mark records in a preference bin.
- CF 09.08. Depending on the user's level, he /she shall have many preference bins (documented services, users' profiles, beneficiaries' profiles, etc.).
- CF 09.09. The information system shall offer a mechanism for previewing the record content when this is accessed in the preference bin (when viewing the records in the preference bin they shall have a summary of their content attached).
- CF 09.10. The information system shall keep preference bins for each individual user.
- CF 09.11. Public records shall be accessible to all users.
- CF 09.12. The information solution shall enable searching in the database content using the system of records classification.
- CF 09.13. The information solution shall log all users' accessing and queries.

#### **7.1.10. UC10: Manage Tasks**

- CF 10.01. The tasks management system shall be capable to manage the resources appropriated for each task.
- CF 10.02. The tasks management system shall enable the person responsible for the task to add notes to tasks and set rules for viewing these notes.
- CF 10.03. Users shall be able to formulate tasks or to assign the tasks to subordinate users.
- CF 10.04. The tasks management system shall enable attaching references to the records associated to a task. The information system shall store the reference so as to allow opening it from the respective task or attaching it to an email notification.
- CF 10.05. The priority of an open task may be raised to a higher level by the recipient or the owner at any moment and shall be meant to escalate a problem and to improve the process of task implementation. The task owners shall be notified by email at the moment the task has been escalated.
- CF 10.05. The tasks management system shall enable automatic and regular generation of tasks. The system shall keep a task schedule and shall attach the current date to the template in order to determine when the task was generated and then shall use the frequency period attached to this schedule to calculate the next date when the task shall be generated.
- CF 10.06. The tasks management system shall have an interface for users to schedule the events related to an activity. The interface shall provide a weekly schedule of meetings on the system specific tasks and notify users by email about pending events.
- CF 10.07. The tasks management system shall enable notifications reminding when a task has to be discharged.
- CF 10.08. The tasks management system shall inform about critical and current tasks by means of the user interface.

#### **7.1.11. UC11: Approve Updates of the Knowledge Database**

- CF 11.01. The information solution shall have the functionality for approval of the updates in the *knowledge database* made by the local consultants.
- CF 11.02. The updates may be approved or rejected by users of the same or a higher level as the regional consultant.
- CF 11.03. At the approval stage the requested update shall be available only to the author and the user with the right to approve.
- CF 11.04. Once the update has been approved, the content of the document in the *knowledge database* shall become accessible to all users (including with anonymous access).
- CF 11.05. The information system shall record and log all attempts and results of the changes approval processes.

#### **7.1.12. UC12: Generate Statistical Reports**

- CF 12.01. The information solution shall offer a flexible functionality for reporting so as persons with administrative roles may monitor the system to ensure it is used appropriately.
- CF 12.02. The information system shall have the capability to provide a certain number of management, statistical and ad-hoc reports so as persons with administrative roles may monitor the operation and condition of the system.
- CF 12.03. The reporting mechanism is necessary for the whole system, including:
  - nomenclatures and classifiers;
  - records;
  - user's work;
  - access and security permits.
- CF 12.04. The information system shall offer persons with administrative roles a standard number of configurable reports and to allow fast generation of ad-hoc reports if needed.
- CF 12.05. The information system shall offer a set of static reports (usually implemented physically in the content of the information system) intended for the audit and analysis of the *JISB's* work. This category of reports could include:
  - the consultant's performance report;
  - the beneficiary's card (with the history of services provided by the local consultant);
  - the aggregated report on the categories of services provided during a certain calendar period;
  - the general performance report of the officer (number of received tasks, number of sent tasks, number of delayed tasks, productivity indicators, etc.);
  - the report of critical tasks that shall extract tasks whose deadline has elapsed with indication of the step where it blocked, the responsible persons, etc.
- CF 12.06. A user that views a report in the system shall be able to export it in an external editable file.
- CF 12.07. For implementation of reporting functionalities it is good to adopt the principles of similar reports provided by information systems for monitoring the quality issues (MANTIS, BUGZILLA, etc.).

#### **7.1.13. UC13: Other Administrative**

- CF 13.01. The information system shall enable persons with administrative roles to take, to post and to configure the system operation parameters and settings at the moment of configuration.
- CF 13.02. The information system shall enable dynamic administration of all nomenclatures and classifiers.
- CF 13.03. The administrator shall manage users and access groups of the *JISBIS*.
- CF 13.04. The information system shall enable persons with administrative roles to:
  - assign functions to users and roles;
  - assign one or more users to a role.
- CF 13.05. For each *JISBIS* user the administrator shall manage his /her profile.
- CF 13.06. In the profile of the local or regional consultant the administrator shall formulate rules for access to the software interface and database content.
- CF 13.07. The administrator shall access the system logs.
- CF 13.08. The administrator shall create backup copies and restore the operation of the system on the basis of these copies.
- CF 13.09. The administrator shall carry out all work for ensuring a good operation of the *JISBIS*.

#### **7.1.14. UC14: Synchronize the Database**

- CF 14.01. The information system shall have a mechanism for synchronization of the database content with the related *CPA's* information systems (*NSIF, NEA, etc.*).
- CF 14.02. The synchronization shall consist in automated receipt and integration of the relevant information for local consultants from the partner information systems (*NSIF, NEA, etc.*) and delivering the information related to local and regional consultants' work stored in the *JISBIS* to the partner information systems (*NSIF, NEA, etc.*).
- CF 14.03. The administrator shall be able to configure the parameters for launch and operation of the automated synchronization of the databases (usually the synchronization shall be carried out at night, when the information systems are less demanded).
- CF 14.04. The information system shall enable manual start of the database synchronization process.
- CF 14.05. The information solution shall use the synchronized databases to the minimum, extracting or exporting exclusively the information that is the object of synchronization.
- CF 14.06. The information solution shall enable synchronization of the databases both in online mode (used more often) and offline mode by means of typical information export /import files.
- CF 14.07. The information system shall record and log all attempts and results of the database synchronization.

#### **7.1.15. UC15: JISBIS Updating**

- CF 15.01. The information system shall contain mechanisms for automated update of the local and central databases of the information system.
- CF 15.02. The information system shall deliver a mechanism for upgrading of the informatics system Standalone version.

- CF 15.03. The information system shall deliver a mechanism for updating of the informatics system Standalone version database.
- CF 15.04. The information system shall deliver a mechanism for updating of the server database on the basis of information entered in the informatics system Standalone version.
- CF 15.05. The information system shall record and log all attempts and results of the updating processes.

**7.1.16. UC16. Update the Software Product**

- CF 16.01. The information system shall deliver an upgrading mechanism for the informatics system Standalone version.
- CF 16.02. The application upgrade module shall check for new versions of the software automatically (if the consultant's computer is connected to the Internet).
- CF 16.03. If new versions are available, it shall download upgrades automatically them and upgrade itself.
- CF 16.04. The upgrade module shall enable upgrading the software product and possible use of the database patches.
- CF 16.05. The information system shall record and log all attempts and results of the informatics system Standalone version upgrade processes.

**7.1.17. UC17. Update the Local Database**

- CF 17.01. The information system shall deliver a mechanism for the informatics system *Standalone* version database updating.
- CF 17.02. The information solution shall enable updating the database both in online mode (by connecting to the *JISBIS* server) and offline mode (by means of typical update export /import files).
- CF 17.03. The local consultant shall launch manually the database updating procedure.
- CF 17.04. The updating procedure shall take only information related to the local consultant's work from the server (*knowledge database* entities, beneficiaries' profiles from the local consultant's work area, etc.).
- CF 17.05. The updating procedure shall take only information that is relevant for the update from the server.
- CF 17.06. The information system shall record and log all attempts and results of the informatics system of the *Standalone* local database update processes.

**7.1.18. UC18. Update the Server Database**

- CF 18.01. The information system shall deliver a mechanism for updating the central database of the *JISBIS* by means of the informatics system Standalone version.
- CF 18.02. The information solution shall enable updating the database both in online mode (connecting to the *JISBIS* server) and in offline mode (by means of typical update export /import files).
- CF 18.03. The local consultant shall launch the central database update procedure manually.
- CF 18.04. The update procedure shall upload in the server only the information related to the local consultant's work.
- CF 18.05. The update procedure shall download from the server only the information that is relevant for the update process.

CF 18.06. The information system shall record and log all attempts and results of the central database update processes by means of the informatics system Standalone version.

## **7.2. General System Requirements**

The general system requirements are defined by policies and strategies of the *e-Government Center*. They include:

- Cloud First Strategy;
- Service Oriented Architecture (SOA);
- Centralized Identification and Authorization Service;
- Government Portal Policy;
- Logging Service Policy;
- Basic Security policy for Information Systems, etc.

It should be mentioned that for the time being these policies, strategies and work procedures are at the development and approval stage. To obtain information and working papers for these policies *the e-Government Center* shall be consulted.

It is also important to mention that these documents are based on good industry practices and encompass many organizational measures as well as a set of technical measures.

The developer shall ensure the possibility of the public to access the *knowledge database* by means of the *Government Portal*. This functionality shall be integrated at the moment the Government Portal is launched.

The general system requirements specific for the *JISBIS* include the following:

- The interface of the information system shall necessarily contain a Romanian and a Russian version.
- The default interface shall be in Romanian.
- Annually a *JISB* shall provide up to 10,000 consultancy services.
- The information system shall have up to 500 authorized users (local consultants, regional consultants, administrators, etc.).
- The information system shall support simultaneous work of 200 users at least.

## **7.3. Security and Protection Requirements**

The system shall comply with technical requirements for information systems imposed by *the Standard of the Republic of Moldova SMV ISO/CEI 27002:2009 Information Technology. Security Techniques. Code of Good Practice for Information Security Management*.

At the acceptance of the information system the following criteria shall be checked:

- SR001 The information system guarantees that all records related to reports on local consultants' work are full and integer.
- SR002 The access to the information system is provided in a controlled manner.
- SR003 The public information is accessible to anonymous users.
- SR004 The public information includes:
  - regulations and norms for the service provided by the system;
  - training materials on system operation;
  - *knowledge database* content.
- SR005 The access to functions provided to unauthenticated users is controlled with means of protection against overloading of service by one or a few network nodes.
- SR006 Access to functions provided for internal users is granted after their authentication.

- SR007 Data are shared in the system through secured channels only.
- SR010 Users' actions are recorded in electronic logs.
- SR011 The information system issues a regular signal showing its functional state.
- SR012 The information system has technical capabilities to validate the user's authentication data from external authentication services.
- SR013 The information system has technical capabilities to determine the level of users' authorization from external authentication services.

#### 7.4. Software and Hardware Requirements and Communication Channels

- SHC01 The architecture of the solution shall comply with the *Cloud First* strategy promoted by the *e-Government Center*.
- SHC02 The information system shall be accessed through communication channels of at least 128 kps.
- SHC03 The information system shall be able to be virtualized at the software-hardware level.
- SHC04 The virtualization capacity shall have to proven by delivering to the Beneficiary an image of the information system that can be uploaded and becomes operational with minimal configurations on one of the virtualization solutions existing on the market.
- SHC05 The client level of the information system shall have to function within the acceptable performance parameters for the reference configuration. (The reference configuration shall be a laptop *HP Compaq 8510* with a CPU of 2 GHz, RAM of 2 Gbytes, *Windows XP SP3*, *Firefox 3.6*.)
- SHC06 The parts of the service open to the public shall be neutral in terms of technology. Checking shall be carried out by means of a set of (modern) platforms and with expectation that the performance parameters are similar or better compared to the reference configuration.
- SHC07 The Bidder for server solution shall not limit the Beneficiary to use some specific software platforms. It is good that the information system be operational both on *Windows* and on *Unix (Linux, Free BSD, Solaris, etc.)* platforms. It will be welcome if the information solution is built using open source, non-proprietary solutions specific for web applications (*XML, XSL, XHTML, WSDL, SOAP, LDAP, J2EE*, etc.) for the Beneficiary to be able to develop it in the future.

#### 7.5. System Documentation Requirements

The information solution shall be accompanied by the documentation of the information system that shall include the following sections:

- DOC01 **The User Guide.** It shall describe parts of the information solution designed for various roles of human users.
- DOC02 **The Administrator's Guide.** It shall describe the administration functions, including functions exposed directly from the system as well as manual procedures required for maintenance and good operation of the service.
- DOC03 **The interface designed for human users** shall include contextual information about the work procedures and what the system expects at that moment.
- DOC04 **The solution** shall include a brief description of the information system on public pages.
- DOC05 The interface for automated interoperation with external systems of the information system shall be specified (technically) and documented (in human text).

### 8. Deliverables

The final deliverable shall be software items and documents of the system as well as of knowledge transferred to the owner and the administrator of the system.

The system items shall include:

- complete source code of modules and components necessary to compile the delivered software product;
- final product packed for easy installation in the proposed technological environment;
- technical task updated and completed during development;
- technical project;
- document on the system configuration;
- user guide;
- administrator's guide (including the contingency plan);
- technical specifications for interfaces published by the service;
- plan of tests and results of the internal test;
- all items copied to a digital medium (CD-R or DVD+-R).

The knowledge transfer and support shall include the following items and services:

- training materials;
- users and administrators' training;
- support for the system pilot testing period;
- support for testing and acceptance of the system;
- support for commissioning of the system;
- solution of deficiencies identified during the pilot testing and acceptance testing.

After the system is commissioned it shall need:

- post-implementation technical support for 24 months.
- 

## 9. Information System Implementation Stages

The *JISBIS* shall have the following implementation stages:

1. **Design and development of the information solution.** This stage shall be divided into stages coordinated with the stakeholders of the *JISBIS* implementation (district councils where pilot program is implemented, *UN Women Women's Economic Empowerment Programme*).
  - a. Based on the Terms of Reference the developer shall determine and analyze the requirements, shall design the structure of the information system and shall create the technical project (maximally 2 weeks).
  - b. The developer shall develop the software code and shall integrate its modules in the first version of the software system (the web based server solution) – maximally 3 months. (A first presentation of the parts shall be held to demonstrate the existence of all functionalities required in the Terms of Reference.)
  - c. The developer shall develop the code of the informatics system Standalone version designed for the local consultants' work in offline mode – maximally 1 month. (A first presentation of the parts shall be held demonstrating the existence of all functionalities required in the Terms of Reference.)
  - d. The developer shall test the system in alpha mode (internal test) and prepare the supporting documentation. This stage shall last 2 weeks at most for each of the 2 components (the web application and the informatics system Standalone version). In this case the functionalities of the system shall be presented with corrections and

adjustments in response to objections expressed during the previous sub stage, the set of technical documents shall be submitted etc..

2. **System implementation.** This stage shall start once the statement of the presented software system acceptance by its owner has been approved and the pilot delivery-acceptance statement has been signed. At this stage the developer shall test the system in pilot conditions, shall detect and remove errors and performance issues, etc. Besides, the developer shall prepare the final version of the information service that can be commissioned. This stage may last 1 month.
3. **System commissioning.** This stage shall start once the software system commissioning act has been signed and it has started to operate.
4. **System maintenance.** During this stage the system developer shall take on the obligation towards the owner to assist it in maintaining the software system capacity to provide services as well as to change the software product, preserving its integrity. This stage may last any period depending on the contract clauses. We think that in case of the *JISBIS* 24 months shall be enough.

## 10. Additional Information

### 10.1. Technical Proposal

The technical proposal will be developed in accordance with the structure and requirements of the current specifications and system concept. This will include a review of technical specifications to demonstrate correspondence with those specifications. To create and implement the *JISBIS*, applicants must provide:

- ISO9001:2008 certificate
- Documentation and training
- Implementation plan and indication of the required licensing system operation throughout the contract
- Risk Log
- The tenderer shall specify the warranty period for the proposed IT solution
- In the technical proposal the tenderer will present integration procedures and capabilities with other external systems.

The tenderer must indicate in the technical proposal the method for progress reporting on project activities. The tenderer will present in the technical proposal the acceptance plan that will be used in the project development life cycle. The plan will split the project into stages.

The offer must include an initial project plan as detailed as possible, to meet the requirements of stages and deadlines for enrollment in the project. Implementation of the entire system should cover the following steps:

- System analysis
- System design
- Development/configuration including internal testing
- Implementation
- Acceptance tests
- Going live
- Technical assistance and support for the requested period
- The initial plan will be submitted within the offer and should cover all the steps mentioned above.



## **10.2. Project Management Activities**

For the appropriate performance of the Project Management activities, the Tenderer shall use a team of experts as follows:

1. Project Manager's minimum requirements:
  - a. Bachelor degree in ICT;
  - b. At least 5 years relevant general experience in ICT projects
  - c. Specific professional experience as Project Manager for ICT projects demonstrated by presenting 2 previous projects, from which at least one project shall contain all the following activities: Business and Technical Analysis (Requirements Engineering), system design, software development;
  - d. Excellent knowledge of at least one international Project Management technology – Project Management Professional – PMP, Projects IN Controlled Environments 2 – PRINCE2 of equivalent is required;
  - e. Good knowledge of at least one international framework for organizing and optimizing IT processes within organizations – ITIL Foundation Certificate or equivalent is required.
  
2. Technical coordinator's minimum requirements:
  - a. Bachelor degree in ICT;
  - b. At least 5 years relevant general experience in ICT projects;
  - c. Specific professional experience in ICT projects demonstrated by presenting 2 previous ICT projects in which the expert was appointed for a similar position;
  - d. Good knowledge of ICT systems information security standards and methodologies – Certified Information Security Manager – CISM/Certified Information Systems Security Professional – CISSP or equivalent, is an advantage
  - e. Excellent knowledge of at least one international methodology for system analysis and audit – Certified Information System Auditor – CISA Certification or equivalent is an advantage
  - f. Excellent knowledge of at least one methodology in the field of governance of ICT systems - Certified in the Governance of Enterprise IT – CGEIT Certificate or equivalent is an advantage.
  
3. IT System architect's minimum requirements:
  - a. Bachelor degree in ICT;
  - b. At least 5 years relevant general experience in ICT projects;
  - c. Specific professional experience in ICT projects demonstrated by presenting one previous project in which the expert was appointed for a similar position and the mentioned project contained at least all the following components: Software development services; Implementation services;
  - d. Excellent knowledge of software solutions and application development – certificates for developing applications and solutions issued by an international software producer are required.

**The offers that will not meet the above mentioned minimum requirements will be disqualified.**



### PRICE SCHEDULE

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 UN Women is exempt from taxes as detailed in Section II, Clause 18.

The Price Schedule 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 UN Women 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 CD or diskette (IBM compatible).

<b>Price Schedule*:</b>				
<b>Ref. RFP for Development of the Information System designed for the Joint Information and Service Bureaus</b>				
	<b>Description of Activity/Item</b>	<b>Qty</b>	<b>Price/Rate</b>	<b>Total</b>
<b>1.</b>	<b>Licenses</b>			
1.1	Server Licenses			
1.2	Client licenses			
<b>2.</b>	<b>Elaboration cost</b>			
2.1	Analysis			
2.2	System Design			
<b>3.</b>	<b>Implementation costs</b>			
3.1	Development costs			
3.2	Integration cost			
3.3	Testing costs			
3.4	Deployment costs			
<b>4.</b>	<b>Support and maintenance costs</b>			
<b>5.</b>	<b>Training costs</b>			
5.1	Training preparation			
5.2	Training delivery			
<b>6.</b>	<b>Other costs (please specify)</b>			

\*Additional budget details explaining the calculations are welcomed.