

United Nations Development Programme



REQUEST FOR PROPOSAL

DEVELOPMENT OF CLIMATE CHANGE INFORMATION AND KNOWLEDGE
MANAGEMENT PORTAL OF MOLDOVA

RFP No.: **RFP22/02450**

Project: **NAP-2: Advancing Moldova's National Climate Change Adaptation
Planning**

Country: **Republic of Moldova**

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Section 1. Letter of Invitation

The United Nations Development Programme (UNDP) hereby invites you to submit a Proposal to this Request for Proposal (RFP) for the above-referenced subject.

This RFP includes the following documents and the General Terms and Conditions of Contract which is inserted in the Bid Data Sheet (BDS):

- Section 1: This Letter of Invitation
- Section 2: Instruction to Bidders
- Section 3: Bid Data Sheet (BDS)
- Section 4: Evaluation Criteria
- Section 5: Terms of Reference
- Section 6: Returnable Bidding Forms
 - o Form A: Technical Proposal Submission Form
 - o Form B: Bidder Information Form
 - o Form C: Joint Venture/Consortium/Association Information Form
 - o Form D: Qualification Form
 - o Form E: Format of Technical Proposal
 - o Form F: Financial Proposal Submission Form
 - o Form G: Financial Proposal Form

If you are interested in submitting a Proposal in response to this RFP, please prepare your Proposal in accordance with the requirements and procedure as set out in this RFP and submit it by the Deadline for Submission of Proposals set out in Bid Data Sheet.

UNDP looks forward to receiving your Proposal and thank you in advance for your interest in UNDP procurement opportunities.

Issued by:

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Section 2. Instruction to Bidders

A. GENERAL PROVISIONS	
1. Introduction	<p>1.1 Bidders shall adhere to all the requirements of this RFP, including any amendments in writing by UNDP. This RFP is conducted in accordance with the UNDP Programme and Operations Policies and Procedures (POPP) on Contracts and Procurement which can be accessed at https://popp.undp.org/SitePages/POPPBSUnit.aspx?TermID=254a9f96-b883-476a-8ef8-e81f93a2b38d</p> <p>1.2 Any Proposal submitted will be regarded as an offer by the Bidder and does not constitute or imply the acceptance of the Proposal by UNDP. UNDP is under no obligation to award a contract to any Bidder as a result of this RFP.</p> <p>1.3 As part of the bid, it is desired that the Bidder registers at the United Nations Global Marketplace (UNGM) website (www.ungm.org). The Bidder may still submit a bid even if not registered with the UNGM. However, if the Bidder is selected for contract award, the Bidder must register on the UNGM prior to contract signature.</p>
2. Fraud & Corruption, Gifts and Hospitality	<p>2.1 UNDP strictly enforces a policy of zero tolerance on proscribed practices, including fraud, corruption, collusion, unethical or unprofessional practices, and obstruction of UNDP vendors and requires all bidders/vendors observe the highest standard of ethics during the procurement process and contract implementation. UNDP's Anti-Fraud Policy can be found at http://www.undp.org/content/undp/en/home/operations/accountability/audit/office_of_audit_andinvestigation.html#anti</p> <p>2.2 Bidders/vendors shall not offer gifts or hospitality of any kind to UNDP staff members including recreational trips to sporting or cultural events, theme parks or offers of holidays, transportation, or invitations to extravagant lunches or dinners.</p> <p>2.3 In pursuance of this policy, UNDP (a) Shall reject a proposal if it determines that the selected bidder has engaged in any corrupt or fraudulent practices in competing for the contract in question; (b) Shall declare a vendor ineligible, either indefinitely or for a stated period of time, to be awarded a contract if at any time it determines that the vendor has engaged in any corrupt or fraudulent practices in competing for, or in executing a UNDP contract.</p> <p>2.4 All Bidders must adhere to the UN Supplier Code of Conduct, which may be found at http://www.un.org/depts/ptd/pdf/conduct_english.pdf</p>
3. Eligibility	<p>3.1 A vendor should not be suspended, debarred, or otherwise identified as ineligible by any UN Organization or the World Bank Group or any other international Organization. Vendors are therefore required to disclose to UNDP whether they are subject to any sanction or temporary suspension imposed by these organizations.</p> <p>3.2 It is the Bidder's responsibility to ensure that its employees, joint venture members, sub-contractors, service providers, suppliers and/or their employees meet the eligibility requirements as established by UNDP.</p>

4. Conflict of Interests	<p>4.1 Bidders must strictly avoid conflicts with other assignments or their own interests, and act without consideration for future work. Bidders found to have a conflict of interest shall be disqualified. Without limitation on the generality of the above, Bidders, and any of their affiliates, shall be considered to have a conflict of interest with one or more parties in this solicitation process, if they:</p> <ul style="list-style-type: none"> a) Are or have been associated in the past, with a firm or any of its affiliates which have been engaged by UNDP to provide services for the preparation of the design, specifications, Terms of Reference, cost analysis/estimation, and other documents to be used for the procurement of the goods and services in this selection process; b) Were involved in the preparation and/or design of the programme/project related to the services requested under this RFP; or c) Are found to be in conflict for any other reason, as may be established by, or at the discretion of UNDP. <p>4.2 In the event of any uncertainty in the interpretation of a potential conflict of interest, Bidders must disclose to UNDP, and seek UNDP's confirmation on whether or not such a conflict exists.</p> <p>4.3 Similarly, the Bidders must disclose in their proposal their knowledge of the following:</p> <ul style="list-style-type: none"> a) If the owners, part-owners, officers, directors, controlling shareholders, of the bidding entity or key personnel are family members of UNDP staff involved in the procurement functions and/or the Government of the country or any Implementing Partner receiving services under this RFP; and b) All other circumstances that could potentially lead to actual or perceived conflict of interest, collusion or unfair competition practices. <p>Failure to disclose such an information may result in the rejection of the proposal or proposals affected by the non-disclosure.</p> <p>4.4 The eligibility of Bidders that are wholly or partly owned by the Government shall be subject to UNDP's further evaluation and review of various factors such as being registered, operated and managed as an independent business entity, the extent of Government ownership/share, receipt of subsidies, mandate and access to information in relation to this RFP, among others. Conditions that may lead to undue advantage against other Bidders may result in the eventual rejection of the Proposal.</p>
B. PREPARATION OF PROPOSALS	
5. General Considerations	<p>5.1 In preparing the Proposal, the Bidder is expected to examine the RFP in detail. Material deficiencies in providing the information requested in the RFP may result in rejection of the Proposal.</p> <p>5.2 The Bidder will not be permitted to take advantage of any errors or omissions in the RFP. Should such errors or omissions be discovered, the Bidder must notify the UNDP</p>
6. Cost of Preparation of Proposal	<p>6.1 The Bidder shall bear any and all costs related to the preparation and/or submission of the Proposal, regardless of whether its Proposal was selected or not. UNDP shall not be responsible or liable for those costs, regardless of the conduct or outcome of the procurement process.</p>
7. Language	<p>7.1 The Proposal, as well as any and all related correspondence exchanged by the Bidder and UNDP, shall be written in the language (s) specified in the BDS.</p>
8. Documents	<p>8.1 The Proposal shall comprise of the following documents:</p>

Comprising the Proposal	<ul style="list-style-type: none"> a) Documents Establishing the Eligibility and Qualifications of the Bidder; b) Technical Proposal; c) Financial Proposal; d) Proposal Security, if required by BDS; e) Any attachments and/or appendices to the Proposal.
9. Documents Establishing the Eligibility and Qualifications of the Bidder	<p>9.1 The Bidder shall furnish documentary evidence of its status as an eligible and qualified vendor, using the Forms provided under Section 6 and providing documents required in those forms. In order to award a contract to a Bidder, its qualifications must be documented to UNDP's satisfaction.</p>
10. Technical Proposal Format and Content	<p>10.1 The Bidder is required to submit a Technical Proposal using the Standard Forms and templates provided in Section 6 of the RFP.</p> <p>10.2 The Technical Proposal shall not include any price or financial information. A Technical Proposal containing material financial information may be declared non-responsive.</p> <p>10.3 Samples of items, when required as per Section 5, shall be provided within the time specified and unless otherwise specified by UNDP, and at no expense to UNDP</p> <p>10.4 When applicable and required as per Section 5, the Bidder shall describe the necessary training programme available for the maintenance and operation of the services and/or equipment offered as well as the cost to the UNDP. Unless otherwise specified, such training as well as training materials shall be provided in the language of the Bid as specified in the BDS.</p>
11. Financial Proposals	<p>11.1 The Financial Proposal shall be prepared using the Standard Form provided in Section 6 of the RFP. It shall list all major cost components associated with the services, and the detailed breakdown of such costs.</p> <p>11.2 Any output and activities described in the Technical Proposal but not priced in the Financial Proposal, shall be assumed to be included in the prices of other activities or items, as well as in the final total price.</p> <p>11.3 Prices and other financial information must not be disclosed in any other place except in the financial proposal.</p>
12. Proposal Security	<p>12.1 A Proposal Security, if required by BDS, shall be provided in the amount and form indicated in the BDS. The Proposal Security shall be valid up to thirty (30) days after the final date of validity of the Proposal.</p> <p>12.2 The Proposal Security shall be included along with the Technical Proposal. If Proposal Security is required by the RFP but is not found along with the Technical Proposal, the Proposal shall be rejected.</p> <p>12.3 If the Proposal Security amount or its validity period is found to be less than what is required by UNDP, UNDP shall reject the Proposal.</p> <p>12.4 In the event an electronic submission is allowed in the BDS, Bidders shall include a copy of the Bid Security in their proposal and the original of the Proposal Security must be sent via courier or hand delivery as per the instructions in BDS.</p> <p>12.5 The Proposal Security may be forfeited by UNDP, and the Proposal rejected, in the event of any one or combination, of the following conditions:</p> <ul style="list-style-type: none"> a) If the Bidder withdraws its offer during the period of the Proposal Validity specified in the BDS, or;

	<p>b) In the event that the successful Bidder fails:</p> <p>i. to sign the Contract after UNDP has issued an award; or</p> <p>12.6 to furnish the Performance Security, insurances, or other documents that UNDP may require as a condition precedent to the effectivity of the contract that may be awarded to the Bidder.</p>
13. Currencies	<p>13.1 All prices shall be quoted in the currency or currencies indicated in the BDS. Where Proposals are quoted in different currencies, for the purposes of comparison of all Proposals:</p> <p>a) UNDP will convert the currency quoted in the Proposal into the UNDP preferred currency, in accordance with the prevailing UN operational rate of exchange on the last day of submission of Proposals; and</p> <p>b) In the event that UNDP selects a proposal for award that is quoted in a currency different from the preferred currency in the BDS, UNDP shall reserve the right to award the contract in the currency of UNDP's preference, using the conversion method specified above.</p>
14. Joint Venture, Consortium or Association	<p>14.1 If the Bidder is a group of legal entities that will form or have formed a Joint Venture (JV), Consortium or Association for the Proposal, they shall confirm in their Proposal that : (i) they have designated one party to act as a lead entity, duly vested with authority to legally bind the members of the JV, Consortium or Association jointly and severally, which shall be evidenced by a duly notarized Agreement among the legal entities, and submitted with the Proposal; and (ii) if they are awarded the contract, the contract shall be entered into, by and between UNDP and the designated lead entity, who shall be acting for and on behalf of all the member entities comprising the joint venture.</p> <p>14.2 After the Deadline for Submission of Proposal, the lead entity identified to represent the JV, Consortium or Association shall not be altered without the prior written consent of UNDP.</p> <p>14.3 The lead entity and the member entities of the JV, Consortium or Association shall abide by the provisions of Clause 9 herein in respect of submitting only one proposal.</p> <p>14.4 The description of the organization of the JV, Consortium or Association must clearly define the expected role of each of the entity in the joint venture in delivering the requirements of the RFP, both in the Proposal and the JV, Consortium or Association Agreement. All entities that comprise the JV, Consortium or Association shall be subject to the eligibility and qualification assessment by UNDP.</p> <p>14.5 A JV, Consortium or Association in presenting its track record and experience should clearly differentiate between:</p> <p>a) Those that were undertaken together by the JV, Consortium or Association; and</p> <p>b) Those that were undertaken by the individual entities of the JV, Consortium or Association.</p> <p>14.6 Previous contracts completed by individual experts working privately but who are permanently or were temporarily associated with any of the member firms cannot be claimed as the experience of the JV, Consortium or Association or those of its members, but should only be claimed by the individual experts themselves in their presentation of their individual credentials.</p> <p>14.7 JV, Consortium or Associations are encouraged for high value, multi-sectoral requirements when the spectrum of expertise and resources required may not</p>

	be available within one firm.
15. Only One Proposal	<p>15.1 The Bidder (including the individual members of any Joint Venture) shall submit only one Proposal, either in its own name or as part of a Joint Venture.</p> <p>15.2 Proposals submitted by two (2) or more Bidders shall all be rejected if they are found to have any of the following:</p> <ul style="list-style-type: none"> a) they have at least one controlling partner, director or shareholder in common; or b) any one of them receive or have received any direct or indirect subsidy from the other/s; or c) they have the same legal representative for purposes of this RFP; or d) they have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about, or influence on the Proposal of, another Bidder regarding this RFP process; e) they are subcontractors to each other's Proposal, or a subcontractor to one Proposal also submits another Proposal under its name as lead Bidder; or f) some key personnel proposed to be in the team of one Bidder participates in more than one Proposal received for this RFP process. This condition relating to the personnel, does not apply to subcontractors being included in more than one Proposal.
16. Proposal Validity Period	<p>16.1 Proposals shall remain valid for the period specified in the BDS, commencing on the Deadline for Submission of Proposals. A Proposal valid for a shorter period may be rejected by UNDP and rendered non-responsive.</p> <p>16.2 During the Proposal validity period, the Bidder shall maintain its original Proposal without any change, including the availability of the Key Personnel, the proposed rates and the total price.</p>
17. Extension of Proposal Validity Period	<p>17.1 In exceptional circumstances, prior to the expiration of the proposal validity period, UNDP may request Bidders to extend the period of validity of their Proposals. The request and the responses shall be made in writing, and shall be considered integral to the Proposal.</p> <p>17.2 If the Bidder agrees to extend the validity of its Proposal, it shall be done without any change in the original Proposal.</p> <p>17.3 The Bidder has the right to refuse to extend the validity of its Proposal, and in which case, such Proposal will not be further evaluated.</p>
18. Clarification of Proposal	<p>18.1 Bidders may request clarifications on any of the RFP documents no later than the date indicated in the BDS. Any request for clarification must be sent in writing in the manner indicated in the BDS. If inquiries are sent other than specified channel, even if they are sent to a UNDP staff member, UNDP shall have no obligation to respond or confirm that the query was officially received.</p> <p>18.2 UNDP will provide the responses to clarifications through the method specified in the BDS.</p> <p>18.3 UNDP shall endeavor to provide responses to clarifications in an expeditious manner, but any delay in such response shall not cause an obligation on the part of UNDP to extend the submission date of the Proposals, unless UNDP deems that such an extension is justified and necessary.</p>
19. Amendment of Proposals	<p>19.1 At any time prior to the deadline of Proposal submission, UNDP may for any reason, such as in response to a clarification requested by a Bidder, modify the</p>

	<p>RFP in the form of an amendment to the RFP. Amendments will be made available to all prospective bidders.</p> <p>19.2 If the amendment is substantial, UNDP may extend the Deadline for submission of proposal to give the Bidders reasonable time to incorporate the amendment into their Proposals.</p>
20. Alternative Proposals	<p>20.1 Unless otherwise specified in the BDS, alternative proposals shall not be considered. If submission of alternative proposal is allowed by BDS, a Bidder may submit an alternative proposal, but only if it also submits a proposal conforming to the RFP requirements. UNDP shall only consider the alternative proposal offered by the Bidder whose conforming proposal ranked the highest as per the specified evaluation method. Where the conditions for its acceptance are met, or justifications are clearly established, UNDP reserves the right to award a contract based on an alternative proposal.</p> <p>20.2 If multiple/alternative proposals are being submitted, they must be clearly marked as "Main Proposal" and "Alternative Proposal"</p>
21. Pre-Bid Conference	<p>21.1 When appropriate, a Bidder's conference will be conducted at the date, time and location specified in the BDS. All Bidders are encouraged to attend. Non-attendance, however, shall not result in disqualification of an interested Bidder. Minutes of the Bidder's conference will be disseminated on the procurement website and shared by email or on the e-Tendering platform as specified in the BDS. No verbal statement made during the conference shall modify the terms and conditions of the RFP, unless specifically incorporated in the Minutes of the Bidder's Conference or issued/posted as an amendment to RFP.</p>
C. SUBMISSION AND OPENING OF PROPOSALS	
22. Submission	<p>22.1 The Bidder shall submit a duly signed and complete Proposal comprising the documents and forms in accordance with the requirements in the BDS. The submission shall be in the manner specified in the BDS.</p> <p>22.2 The Proposal shall be signed by the Bidder or person(s) duly authorized to commit the Bidder. The authorization shall be communicated through a document evidencing such authorization issued by the legal representative of the bidding entity, or a Power of Attorney, accompanying the Proposal.</p> <p>22.3 Bidders must be aware that the mere act of submission of a Proposal, in and of itself, implies that the Bidder fully accepts the UNDP General Contract Terms and Conditions.</p>
Hard copy (manual) submission	<p>22.4 Hard copy (manual) submission by courier or hand delivery allowed or specified in the BDS shall be governed as follows:</p> <ol style="list-style-type: none"> The signed Proposal shall be marked "Original", and its copies marked "Copy" as appropriate. The number of copies is indicated in the BDS. All copies shall be made from the signed original only. If there are discrepancies between the original and the copies, the original shall prevail. The Technical Proposal and the Financial Proposal envelopes MUST BE COMPLETELY SEPARATE and each of them must be submitted sealed individually and clearly marked on the outside as either "TECHNICAL PROPOSAL" or "FINANCIAL PROPOSAL", as appropriate. Each envelope SHALL clearly indicate the name of the Bidder. The outer envelopes shall: <ol style="list-style-type: none"> Bear the name and address of the bidder; Be addressed to UNDP as specified in the BDS

Proposals	<p>Proposal by sending a written notice to UNDP, duly signed by an authorized representative, and shall include a copy of the authorization (or a Power of Attorney). The corresponding substitution or modification of the Proposal, if any, must accompany the respective written notice. All notices must be submitted in the same manner as specified for submission of proposals, by clearly marking them as "WITHDRAWAL," "SUBSTITUTION," or "MODIFICATION"</p> <p>24.3 eTendering: A Bidder may withdraw, substitute or modify its Proposal by Canceling, Editing, and re-submitting the proposal directly in the system. It is the responsibility of the Bidder to properly follow the system instructions, duly edit and submit a substitution or modification of the Proposal as needed. Detailed instructions on how to cancel or modify a Proposal directly in the system are provided in Bidder User Guide and Instructional videos.</p> <p>24.4 Proposals requested to be withdrawn shall be returned unopened to the Bidders (only for manual submissions), except if the bid is withdrawn after the bid has been opened</p>
25. Proposal Opening	<p>25.1 There is no public bid opening for RFPs. UNDP shall open the Proposals in the presence of an ad-hoc committee formed by UNDP, consisting of at least two (2) members. In the case of e-Tendering submission, bidders will receive an automatic notification once their proposal is opened.</p>
D. EVALUATION OF PROPOSALS	
26. Confidentiality	<p>26.1 Information relating to the examination, evaluation, and comparison of Proposals, and the recommendation of contract award, shall not be disclosed to Bidders or any other persons not officially concerned with such process, even after publication of the contract award.</p> <p>26.2 Any effort by a Bidder or anyone on behalf of the Bidder to influence UNDP in the examination, evaluation and comparison of the Proposals or contract award decisions may, at UNDP's decision, result in the rejection of its Proposal and may be subject to the application of prevailing UNDP's vendor sanctions procedures.</p>
27. Evaluation of Proposals	<p>27.1 The Bidder is not permitted to alter or modify its Proposal in any way after the proposal submission deadline except as permitted under Clause 24 of this RFP. UNDP will conduct the evaluation solely on the basis of the submitted Technical and Financial Proposals.</p> <p>27.2 Evaluation of proposals is made of the following steps:</p> <ol style="list-style-type: none"> Preliminary Examination Minimum Eligibility and Qualification (if pre-qualification is not done) Evaluation of Technical Proposals Evaluation of Financial Proposals
28. Preliminary Examination	<p>28.1 UNDP shall examine the Proposals to determine whether they are complete with respect to minimum documentary requirements, whether the documents have been properly signed, and whether the Proposals are generally in order, among other indicators that may be used at this stage. UNDP reserves the right to reject any Proposal at this stage.</p>
29. Evaluation of Eligibility and Qualification	<p>29.1 Eligibility and Qualification of the Bidder will be evaluated against the Minimum Eligibility/Qualification requirements specified in the Section 4 (Evaluation Criteria).</p> <p>29.2 In general terms, vendors that meet the following criteria may be considered qualified:</p> <ol style="list-style-type: none"> They are not included in the UN Security Council 1267/1989 Committee's

	<p>list of terrorists and terrorist financiers, and in UNDP's ineligible vendors' list;</p> <ul style="list-style-type: none"> b) They have a good financial standing and have access to adequate financial resources to perform the contract and all existing commercial commitments, c) They have the necessary similar experience, technical expertise, production capacity where applicable, quality certifications, quality assurance procedures and other resources applicable to the provision of the services required; d) They are able to comply fully with UNDP General Terms and Conditions of Contract; e) They do not have a consistent history of court/arbitral award decisions against the Bidder; and f) They have a record of timely and satisfactory performance with their clients.
30. Evaluation of Technical and Financial Proposals	<p>30.1 The evaluation team shall review and evaluate the Technical Proposals on the basis of their responsiveness to the Terms of Reference and other RFP documents, applying the evaluation criteria, sub-criteria, and point system specified in the Section 4 (Evaluation Criteria). A Proposal shall be rendered non-responsive at the technical evaluation stage if it fails to achieve the minimum technical score indicated in the BDS. When necessary and if stated in the BDS, UNDP may invite technically responsive bidders for a presentation related to their technical proposals. The conditions for the presentation shall be provided in the bid document where required.</p> <p>30.2 In the second stage, only the Financial Proposals of those Bidders who achieve the minimum technical score will be opened for evaluation. The Financial Proposals corresponding to Technical Proposals that were rendered non-responsive shall remain unopened, and, in the case of manual submission, be returned to the Bidder unopened. For emailed Proposals and e-tendering submissions, UNDP will not request for the password of the Financial Proposals of bidders whose Technical Proposal were found not responsive.</p> <p>30.3 The evaluation method that applies for this RFP shall be as indicated in the BDS, which may be either of two (2) possible methods, as follows: (a) the lowest priced method which selects the lowest evaluated financial proposal of the technically responsive Bidders; or (b) the combined scoring method which will be based on a combination of the technical and financial score.</p> <p>30.4 When the BDS specifies a combined scoring method, the formula for the rating of the Proposals will be as follows:</p> <div style="border: 1px solid black; padding: 10px; margin-top: 10px;"> <p><u>Rating the Technical Proposal (TP):</u></p> <p style="text-align: center;">TP Rating = (Total Score Obtained by the Offer / Max. Obtainable Score for TP) x 100</p> <p><u>Rating the Financial Proposal (FP):</u></p> <p style="text-align: center;">FP Rating = (Lowest Priced Offer / Price of the Offer Being Reviewed) x 100</p> <p><u>Total Combined Score:</u></p> <p style="text-align: center;">Combined Score = (TP Rating) x (Weight of TP, e.g. 60%) + (FP Rating) x (Weight of FP, e.g., 40%)</p> </div>
31. Due Diligence	<p>31.1 UNDP reserves the right to undertake a due diligence exercise, also called post qualification, aimed at determining to its satisfaction, the validity of the information provided by the Bidder. Such exercise shall be fully documented</p>

	<p>and may include, but need not be limited to, all or any combination of the following:</p> <ul style="list-style-type: none"> a) Verification of accuracy, correctness and authenticity of information provided by the Bidder; b) Validation of extent of compliance to the RFP requirements and evaluation criteria based on what has so far been found by the evaluation team; c) Inquiry and reference checking with Government entities with jurisdiction on the Bidder, or with previous clients, or any other entity that may have done business with the Bidder; d) Inquiry and reference checking with previous clients on the performance on on-going or contracts completed, including physical inspections of previous works, as necessary; e) Physical inspection of the Bidder's offices, branches or other places where business transpires, with or without notice to the Bidder; f) Other means that UNDP may deem appropriate, at any stage within the selection process, prior to awarding the contract.
32. Clarification of Proposals	<p>32.1 To assist in the examination, evaluation and comparison of Proposals, UNDP may, at its discretion, ask any Bidder for a clarification of its Proposal.</p> <p>32.2 UNDP's request for clarification and the response shall be in writing and no change in the prices or substance of the Proposal shall be sought, offered, or permitted, except to provide clarification, and confirm the correction of any arithmetic errors discovered by UNDP in the evaluation of the Proposals, in accordance with RFP.</p> <p>32.3 Any unsolicited clarification submitted by a Bidder in respect to its Proposal, which is not a response to a request by UNDP, shall not be considered during the review and evaluation of the Proposals.</p>
33. Responsiveness of Proposal	<p>33.1 UNDP's determination of a Proposal's responsiveness will be based on the contents of the Proposal itself. A substantially responsive Proposal is one that conforms to all the terms, conditions, TOR and other requirements of the RFP without material deviation, reservation, or omission.</p> <p>33.2 If a Proposal is not substantially responsive, it shall be rejected by UNDP and may not subsequently be made responsive by the Bidder by correction of the material deviation, reservation, or omission.</p>
34. Nonconformities, Repairable Errors and Omissions	<p>34.1 Provided that a Proposal is substantially responsive, UNDP may waive any non-conformities or omissions in the Proposal that, in the opinion of UNDP, do not constitute a material deviation.</p> <p>34.2 UNDP may request the Bidder to submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities or omissions in the Proposal related to documentation requirements. Such omission shall not be related to any aspect of the price of the Proposal. Failure of the Bidder to comply with the request may result in the rejection of its Proposal.</p> <p>34.3 For Financial Proposal that has been opened, UNDP shall check and correct arithmetical errors as follows:</p> <ul style="list-style-type: none"> a) if there is a discrepancy between the unit price and the line item total that is obtained by multiplying the unit price by the quantity, the unit price shall prevail and the line item total shall be corrected, unless in the opinion of UNDP there is an obvious misplacement of the decimal point in the unit price; in which case the line item total as quoted shall govern and the unit

	<p>price shall be corrected;</p> <p>b) if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and</p> <p>c) if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail.</p> <p>34.4 If the Bidder does not accept the correction of errors made by UNDP, its Proposal shall be rejected.</p>
E. AWARD OF CONTRACT	
35. Right to Accept, Reject, Any or All Proposals	35.1 UNDP reserves the right to accept or reject any Proposal, to render any or all of the Proposals as non-responsive, and to reject all Proposals at any time prior to award of contract, without incurring any liability, or obligation to inform the affected Bidder(s) of the grounds for UNDP's action. UNDP shall not be obliged to award the contract to the lowest priced offer.
36. Award Criteria	36.1 Prior to expiration of the proposal validity, UNDP shall award the contract to the qualified Bidder based on the award criteria indicated in the BDS.
37. Debriefing	37.1 In the event that a Bidder is unsuccessful, the Bidder may request a debriefing from UNDP. The purpose of the debriefing is to discuss the strengths and weaknesses of the Bidder's submission, in order to assist the Bidder in improving its future proposals for UNDP procurement opportunities. The content of other proposals and how they compare to the Bidder's submission shall not be discussed.
38. Right to Vary Requirements at the Time of Award	38.1 At the time of award of Contract, UNDP reserves the right to vary the quantity of services and/or goods, by up to a maximum twenty-five per cent (25%) of the total offer, without any change in the unit price or other terms and conditions.
39. Contract Signature	39.1 Within fifteen (15) days from the date of receipt of the Contract, the successful Bidder shall sign and date the Contract and return it to UNDP. Failure to do so may constitute sufficient grounds for the annulment of the award, and forfeiture of the Proposal Security, if any, and on which event, UNDP may award the Contract to the Second Ranked Bidder or call for new Proposals.
40. Contract Type and General Terms and Conditions	40.1 The types of Contract to be signed and the applicable UNDP Contract General Terms and Conditions, as specified in BDS, can be accessed at http://www.undp.org/content/undp/en/home/procurement/business/how-we-buy.html
41. Performance Security	41.1 40.1 A performance security, if required in BDS, shall be provided in the amount specified in BDS and form available at https://popp.undp.org/layouts/15/WopiFrame.aspx?sourcedoc=/UNDP_POPP_DOCUMENT_LIBRARY/Public/PSU_Solicitation_Performance%20Guarantee%20Form.docx&action=default within fifteen (15) days of the contract signature by both parties. Where a performance security is required, the receipt of the performance security by UNDP shall be a condition for rendering the contract effective.
42. Bank Guarantee for Advanced Payment	42.1 Except when the interests of UNDP so require, it is UNDP's preference to make no advance payment(s) (i.e., payments without having received any outputs). If an advance payment is allowed as per BDS, and exceeds 20% of the total

	contract price, or USD 30,000, whichever is less, the Bidder shall submit a Bank Guarantee in the full amount of the advance payment in the form available at https://popp.undp.org/layouts/15/WopiFrame.aspx?sourcedoc=/UNDP_POPP_DOCUMENT_LIBRARY/Public/PSU_Contract%20Management%20Payment%20and%20Taxes_Advanced%20Payment%20Guarantee%20Form.docx&action=default
43. Liquidated Damages	43.1 If specified in BDS, UNDP shall apply Liquidated Damages resulting from the Contractor's delays or breach of its obligations as per the Contract.
44. Payment Provisions	44.1 Payment will be made only upon UNDP's acceptance of the work performed. The terms of payment shall be within thirty (30) days, after receipt of invoice and certification of acceptance of work issued by the proper authority in UNDP with direct supervision of the Contractor. Payment will be effected by bank transfer in the currency of contract.
45. Vendor Protest	45.1 UNDP's vendor protest procedure provides an opportunity for appeal to those persons or firms not awarded a contract through a competitive procurement process. In the event that a Bidder believes that it was not treated fairly, the following link provides further details regarding UNDP vendor protest procedures: http://www.undp.org/content/undp/en/home/procurement/business/protest-and-sanctions.html
46. Other Provisions	<p>46.1 In the event that the Bidder offers a lower price to the host Government (e.g. General Services Administration (GSA) of the federal government of the United States of America) for similar services, UNDP shall be entitled to same lower price. The UNDP General Terms and Conditions shall have precedence.</p> <p>46.2 UNDP is entitled to receive the same pricing offered by the same Contractor in contracts with the United Nations and/or its Agencies. The UNDP General Terms and Conditions shall have precedence.</p> <p>46.3 The United Nations has established restrictions on employment of (former) UN staff who have been involved in the procurement process as per bulletin ST/SGB/2006/15 http://www.un.org/en/ga/search/view_doc.asp?symbol=ST/SGB/2006/15&referer</p>

Section 3. Bid Data Sheet

The following data for the services to be procured shall complement, supplement, or amend the provisions in the Request for Proposals. In the case of a conflict between the Instructions to Bidders, the Data Sheet, and other annexes or references attached to the Data Sheet, the provisions in the Data Sheet shall prevail.

BDS No.	Ref. to Section.2	Data	Specific Instructions / Requirements
1	7	Language of the Proposal	English
2		Submitting Proposals for Parts or sub-parts of the TOR (partial bids)	Not Allowed
3	20	Alternative Proposals	Shall not be considered
4	21	Pre-proposal conference	Will not be conducted
5	10	Proposal Validity Period	90 days
6	14	Bid Security	Not Required
7	41	Advanced Payment upon signing of contract	Not Allowed
8	42	Liquidated Damages	Will be imposed as follows: Percentage of contract price per day of delay: 0.25% Max. number of days of delay 30, after which UNDP may terminate the contract.
9	40	Performance Security	Not Required
10	18	Currency of Proposal	United States Dollar
11	31	Deadline for submitting requests for clarifications/ questions	3 days before the submission deadline

12	31	Contact Details for submitting clarifications/questions	Focal Person in UNDP: Pavel Gavrilita Address: 131, 31 August 1989 Street, Chisinau, Republic of Moldova E-mail address: pavel.gavrilita@undp.org
13	18, 19 and 21	Manner of Disseminating Supplemental Information to the RFP and responses/clarifications to queries	Posted directly to eTendering
14	23	Deadline for Submission	For e-Tendering submission - as indicated in e-Tendering system. Note that system time zone is in EST/EDT (New York) time zone. PLEASE NOTE: 1. Date and time visible on the main screen of event (on e-tendering portal) will be final and prevail over any other closing time indicated elsewhere in case they are different. The correct proposal closing time is as indicated in the e-tendering portal and system will not accept any proposal after that time. It is the responsibility of the proposers to make sure proposals are submitted within this deadline. UNDP will not accept any proposal that is not submitted directly in the system. 2. Try to submit your proposal a day prior or well before the closing time. Do not wait until last minute. If you face any issue submitting your proposal at the last minute, UNDP may not be able to assist.
14	22	Allowable Manner of Submitting Proposals	<input checked="" type="checkbox"/> e-Tendering
15	22	Proposal Submission Address	https://etendering.partneragencies.org BU Code: MDA10 Event ID number: 0000012051
16	22	Electronic submission (email or eTendering) requirements	<ul style="list-style-type: none"> Format: PDF files only File names must be maximum 60 characters long and must not contain any letter or special character other than from Latin alphabet/keyboard. All files must be free of viruses and not corrupted. Your offer, comprising of Technical and Financial Proposals, shall be submitted in separate files, while the financial proposal shall be password protected. Please, ensure that no other documents are disclosing your financial proposal apart from Forms F and G which are password protected. Password for financial proposal must not be disclosed unless required in written by UNDP.

			<ul style="list-style-type: none"> DO NOT DISCLOSE YOUR PRICE IN THE E-TENDERING LINE ITEM. YOU MUST PUT PRICE AS 1\$ IN THE SYSTEM AND PROVIDE THE FINANCIAL PROPOSAL AS ENCRYPTED FILE AS EXPLAINED IN INSTRUCTIONS.
17	27 36	Evaluation Method for the Award of Contract	<p>Combined Scoring Method, using the 60%-40% distribution for technical and financial proposals respectively</p> <p>The minimum technical score required to pass is 70%.</p>
18		Expected date for commencement of Contract	May 1, 2022
19		Maximum expected duration of contract	May 1, 2022 – May 1, 2024
20	35	UNDP will award the contract to:	One Proposer Only
21	39	Type of Contract	<p>Contract for Goods and Services for UNDP</p> <p>http://www.undp.org/content/undp/en/home/procurement/business/how-we-buy.html</p>
22	39	UNDP Contract Terms and Conditions that will apply	<p>UNDP General Terms and Conditions for Mixed Goods and Services</p> <p>http://www.undp.org/content/undp/en/home/procurement/business/how-we-buy.html</p>
23		Other Information Related to the RFP	

Section 4. Evaluation Criteria

Preliminary Examination Criteria

Proposals will be examined to determine whether they are complete and submitted in accordance with RFP requirements as per below criteria on a Yes/No basis:

- Appropriate signatures
- Power of Attorney
- Minimum documents provided
- Technical and Financial Proposals submitted separately
- Bid Validity
- Bid Security submitted as per RFP requirements with compliant validity period

Minimum Eligibility and Qualification Criteria

Eligibility and Qualification will be evaluated on Pass/Fail basis.

If the Proposal is submitted as a Joint Venture/Consortium/Association, each member should meet minimum criteria, unless otherwise specified in the criterion.

Subject	Criteria	Document Submission requirement
ELIGIBILITY		
Legal Status	Vendor is a legally registered entity.	Form B: Bidder Information Form
Eligibility	Vendor is not suspended, nor debarred, nor otherwise identified as ineligible by any UN Organization or the World Bank Group or any other international Organization in accordance with RFP clause 3.	Form A: Technical Proposal Submission Form
Conflict of Interest	No conflicts of interest in accordance with RFP clause 4.	Form A: Technical Proposal Submission Form
Bankruptcy	Not declared bankruptcy, not involved in bankruptcy or receivership proceedings, and there is no judgment or pending legal action against the vendor that could impair its operations in the foreseeable future.	Form A: Technical Proposal Submission Form
QUALIFICATION		
History of Non-Performing Contracts¹	Non-performance of a contract did not occur as a result of contractor default for the last 3 years.	Form D: Qualification Form
Litigation History	No consistent history of court/arbitral award decisions against the Bidder for the last 3 years.	Form D: Qualification Form

¹ Non-performance, as decided by UNDP, shall include all contracts where (a) non-performance was not challenged by the contractor, including through referral to the dispute resolution mechanism under the respective contract, and (b) contracts that were so challenged but fully settled against the contractor. Non-performance shall not include contracts where Employers decision was overruled by the dispute resolution mechanism. Non-performance must be based on all information on fully settled disputes or litigation, i.e. dispute or litigation that has been resolved in accordance with the dispute resolution mechanism under the respective contract and where all appeal instances available to the Bidder have been exhausted.

Previous Experience	Minimum 5 (five) years of relevant experience in developing IT systems <i>(For JV/Consortium/Association, Team leader should meet requirement).</i>	Form D: Qualification Form
	Minimum 3 (three) IT projects of similar complexity, developed in the past 5 (five) years and their brief description. <i>(For JV/Consortium/Association, all Parties cumulatively should meet requirement).</i>	Form D: Qualification Form
Minimum key personnel	<p>The contractor must provide at least 5 key experts, with professional experience as required in the Section 4, form 3. Failure to do so will be considered ground for disqualification:</p> <ul style="list-style-type: none"> • 1 Project Manager • 1 Senior Developer • 1 Developer • 1 Tester • 1 Designer <p><i>Please note: The above listed roles can be cumulated by certain team members, but not more than two roles per team member, clarifying in the Methodology the reasoning for such approach and distribution of tasks.</i></p> <p><i>(For JV/Consortium/Association, all Parties cumulatively should meet requirement).</i></p>	Attach required documents to Form E of Section 6
Financial Standing	Minimum average annual turnover of USD 100 000 for the last 3 years. <i>(For JV/Consortium/Association, Team Leader should meet requirement).</i>	Form D: Qualification Form
	Bidder must demonstrate the current soundness of its financial standing and indicate its prospective long-term profitability. <i>(For JV/Consortium/Association, all Parties cumulatively should meet requirement).</i>	Form D: Qualification Form

Technical Evaluation Criteria

Summary of Technical Proposal Evaluation Forms		Points Obtainable
1.	Bidder's qualification, capacity and experience	280
2.	Proposed Methodology, Approach and Implementation Plan	270
3.	Management Structure and Key Personnel	450
	Total	1000

Section 1. Bidder's qualification, capacity and experience		Points obtainable
1.1	Reputation of Organization and Staff Credibility / Reliability / Industry Standing <ul style="list-style-type: none"> - A company is a well-known market player, based on reference letters – <u>up to 10 pts</u>; - Financial standing (At least \$100 000 of average annual turnover for last three years – 5 pts; between \$100 000 and \$150 000 – 15 pts; more than \$150 000 – 25 pts). 	35
1.2	General Organizational Capability which is likely to affect implementation: management structure, financial stability and project financing capacity, project management controls, extent to which any work would be subcontracted <ul style="list-style-type: none"> - Age/size of the firm (<5 years – 0 pts, 5 years – 10 pts, > 5 years – 5 pts for each additional year, up to max. 30 pts); - Project management controls (organigram) - up to 15 pts. 	45
1.3	Relevance of specialized knowledge and experience on similar engagements done in the region/country <ul style="list-style-type: none"> - Minimum 5 (five) years of relevant experience in developing IT systems (<5 years – 0 pts, 5 years – 15 pts, > 5 years – 5 pts for each additional year up to max. of 45 pts); - At least 3 (three) IT projects of similar complexity, developed in the past 5 (five) years and their brief description (<3 contracts – 0 pts, 3 contracts – 10 pts, > 3 contracts – 5 pts for each additional contract, up to max. of 50 pts); - Experience of integration of Application Interface of government e-services, will be a strong advantage (no – 0 pts., yes – 20 pts) - Demonstrated experience of working with Central Public Authorities will be a strong advantage (no – 0 pts., yes – 10 pts.); - Working experience with UN Agencies and/or other international organizations will be an asset (no – 0 pts., yes – 10 pts.). 	135
1.4	Quality assurance procedures and risk mitigation measures <ul style="list-style-type: none"> - Quality assurance procedures and risk mitigation measures (no mitigation measures – 0 pts, only some mitigation measures identified – up to 10 pts, well-defined and adjusted to the assignment, including Q&A and Warranty procedures proposed – up to 25 pts). 	25
1.5	Organizational Commitment to Sustainability (mandatory weight) <ul style="list-style-type: none"> - Organization is compliant with ISO 9001, ISO 27001 or equivalent – up to 30 points - Organization demonstrates significant commitment to sustainability through some other means, for example internal company policy documents on women empowerment, renewable energies or membership of trade institutions promoting such issues, overall gender balance in the team, diversity within the team: people from minority, vulnerable or marginalized groups are part of the team, demonstrated experience in applying the Human Rights Based Approach and Gender Mainstreaming in the area (if relevant) – up to 10 points 	40

Total Section 1			280
Section 2. Proposed Methodology, Approach and Implementation Plan			Points obtainable
2.1	<p>To what degree does the Proposer understand the assignment?</p> <ul style="list-style-type: none"> - The Proposer has full understanding of the assignment. The proposed approach and methodology fully demonstrate responsiveness to the ToR – up to 70 pts.; - The Proposer has satisfactory understanding of the assignment. The proposed approach and methodology correspond to the TOR but require some adjustments to properly address all the tasks – up to 45 pts.; - The Proposer has limited understanding of the assignment. The proposed approach and methodology don't correspond to the TOR and require major adjustments to properly address the tasks – up to 25 pts. 		70
2.2	<p>Is the conceptual framework adopted appropriate for the assignment?</p> <ul style="list-style-type: none"> - The presented conceptual framework is appropriate for the assignment, all important aspects being fully described, and requirements addressed – up to 50 pts.; - The presented conceptual framework requires some adjustments to fully incorporate all aspects and requirements of the assignment – up to 30 pts.; - The presented conceptual framework requires major adjustments to address all the aspects and requirements of the assignment – up to 10 pts. 		50
2.3	<p>The preliminary implementation plan is clear, the sequence of project phases, activities, milestones and the planning is logical, realistic and the needed human and material resources promise an efficient implementation of the project:</p> <ul style="list-style-type: none"> - The proposed plan is clear, well-structured with a defined and realistic sequence of activities, all needed human and material resources to be allocated by the bidder promise an efficient implementation of the project – up to 70 pts; - The proposed plan is clear, well-structured with a defined but lowly realistic sequence of activities and the needed human and material resources to be allocated by the bidder certainly are not sufficient – up to 45 pts; - The proposed plan is not well structured and doesn't present a clear sequence of activities and the needed human and material resources to be allocated by the bidder are missing – up to 25 pts. 		70
2.4	<p>The proposed technical solution is adequate and is compliant with the System's technical requirements (functional and non-functional):</p> <ul style="list-style-type: none"> - The proposed detailed technical offer is relevant and fully responds to functional and non-functional requirements – up to 80 pts; - The proposed detailed technical offer requires clarifications to ensure its adequacy, it has some non-critical gaps and uncertainties which require clarifications – up to 50 pts; - The proposed detailed technical offer is not adequate and doesn't detail on functional and non-functional requirements – up to 20 pts. 		80
Total Section 2			270

Section 3. Management Structure and Key Personnel			Points obtainable
3.1	Qualifications of key personnel proposed		
3.1 a	Project Manager		120
	University degree in Management, Engineering, ICT or another relevant field (under master's degree –10 pts, master's degree – 20 pts.)	20	

	At least 5 (five) years of experience in project management of projects on developing IT applications/systems, services, etc. (5 years – 10 pts., each additional year– 5 pts., up to a max. of 40 pts.)	40	
	Experience in a similar position in at least 2 (two) similar projects (2 projects – 5 pts., each additional project – 5 pts., up to max 35 pts.)	35	
	Proven certification in Project Management (Prince, PMI, etc.) would be an asset (no – 0 pts., yes – 15 pts.)	15	
	Proficiency in Romanian and English languages (English, Romanian – up to 5 pts. each)	10	
3.1 b	Senior Developer		110
	University degree in Engineering, ICT, or another relevant field (under master's degree –10 pts., master's degree – 20 pts.)	20	
	At least 5 (five) years of experience in the proposed position (5 years– 10 pts., each additional year– 5 pts., up to a max. of 30 pts)	30	
	Experience in a similar position in at least 3 (three) similar projects (3 projects – 5 pts., each additional project – 5 pts., up to max 25 pts.)	25	
	Experience in the development of IT application with GIS's component would be a strong advantage (no – 0 pts., yes – 15 pts.)	15	
	Demonstrated experience in technologies related to the portal and GIS component development platform (e.g. PHP, Java, jQuery, Python) would be an advantage (no – 0 pts., yes – 15 pts.)	15	
	Proficiency in Romanian language (Romanian– up to 5 pts)	5	
3.1 c	Developer		80
	University degree in Engineering, ICT or another relevant field (under master's degree -10 pts, master's degree – 20 pts.)	20	
	Experience in a similar position in at least 2 (two) similar projects (2 projects – 5 pts., each additional project – 5 pts., up to max 25 pts.)	25	
	At least 3 (three) years of experience in the proposed position (3 years– 5 pts., each additional year– 3 pts. up to a max. of 20 pts.)	20	
	Demonstrated experience in technologies related to the portal and GIS component development platform (e.g. PHP, Java, jQuery, Python) would be an advantage (Yes – 10 pts., No – 0 pts.)	10	
	Proficiency in Romanian language (Romanian – up to 5 pts.)	5	
3.1 d	Tester		60
	University degree in Engineering, ICT or another relevant field (under master's degree – 10 pts., master's degree – 20 pts.)	20	
	Experience in a similar position in at least 2 (two) similar projects (2 projects – 5 pts., each additional project – 3 pts., up to max 20 pts.)	20	
	Demonstrated experience in technologies related to the portal and GIS component development platform (e.g. PHP, Java, jQuery, Python) would be an advantage (Yes – 15 pts., No – 0 pts.)	15	
	Proficiency in Romanian language (Romanian – up to 5 pts.)	5	
3.1 e	Designer		80

University degree in Designing or another relevant field. Additional certificates/trainings in designing and other related areas will be a strong asset (<i>under master's degree –5 pts., master's degree – 10 pts. and 2 pts. per each certification/training, up to 10 pts.</i>)	20	
Demonstrated development skill in UI /UX design (Yes-25; No - 0)	25	
At least 2 (two) years of experience in the proposed position. Experience demonstrated through the portfolio of works executed (<i>2 years – 5 pts., each additional year – 5 pts., up to a max. of 30 pts.</i>)	30	
Proficiency in Romanian language (<i>Romanian– up to 5 pts.</i>)	5	
Total Section 3		450

Section 5. Terms of Reference

PLEASE SEE ANNEX 1

Section 6: Returnable Bidding Forms / Checklist

This form serves as a checklist for preparation of your Proposal. Please complete the Returnable Bidding Forms in accordance with the instructions in the forms and return them as part of your Proposal submission. No alteration to format of forms shall be permitted and no substitution shall be accepted.

Before submitting your Proposal, please ensure compliance with the Proposal Submission instructions of the BDS 22.

Technical Proposal Envelope:

Have you duly completed all the Returnable Bidding Forms?	
▪ Form A: Technical Proposal Submission Form	<input type="checkbox"/>
▪ Form B: Bidder Information Form	<input type="checkbox"/>
▪ Form C: Joint Venture/Consortium/ Association Information Form	<input type="checkbox"/>
▪ Form D: Qualification Form	<input type="checkbox"/>
▪ Form E: Format of Technical Proposal	<input type="checkbox"/>
Have you provided the required documents to establish compliance with the evaluation criteria in Section 4?	<input type="checkbox"/>

Financial Proposal Envelope

(Must be submitted in a separate sealed envelope/password protected email)

▪ Form F: Financial Proposal Submission Form	<input type="checkbox"/>
▪ Form G: Financial Proposal Form	<input type="checkbox"/>

Form A: Technical Proposal Submission Form

Name of Bidder:	[Insert Name of Bidder]	Date:	Select date
RFP reference:	RFP22/02450		

We, the undersigned, offer to provide the services for **Development of Climate Change Information and Knowledge Management Portal of** in accordance with your Request for Proposal No. [Insert RFP Reference Number] and our Proposal. We are hereby submitting our Proposal, which includes this Technical Proposal and our Financial Proposal sealed under a separate envelope.

We hereby declare that our firm, its affiliates or subsidiaries or employees, including any JV/Consortium /Association members or subcontractors or suppliers for any part of the contract:

- a) is not under procurement prohibition by the United Nations, including but not limited to prohibitions derived from the Compendium of United Nations Security Council Sanctions Lists;
- b) have not been suspended, debarred, sanctioned or otherwise identified as ineligible by any UN Organization or the World Bank Group or any other international Organization;
- c) have no conflict of interest in accordance with Instruction to Bidders Clause 4;
- d) do not employ, or anticipate employing, any person(s) who is, or has been a UN staff member within the last year, if said UN staff member has or had prior professional dealings with our firm in his/her capacity as UN staff member within the last three years of service with the UN (in accordance with UN post-employment restrictions published in ST/SGB/2006/15);
- e) have not declared bankruptcy, are not involved in bankruptcy or receivership proceedings, and there is no judgment or pending legal action against them that could impair their operations in the foreseeable future;
- f) undertake not to engage in proscribed practices, including but not limited to corruption, fraud, coercion, collusion, obstruction, or any other unethical practice, with the UN or any other party, and to conduct business in a manner that averts any financial, operational, reputational or other undue risk to the UN and we embrace the principles of the United Nations Supplier Code of Conduct and adhere to the principles of the United Nations Global Compact.

We declare that all the information and statements made in this Proposal are true and we accept that any misinterpretation or misrepresentation contained in this Proposal may lead to our disqualification and/or sanctioning by the UNDP.

We offer to provide services in conformity with the Bidding documents, including the UNDP General Conditions of Contract and in accordance with the Terms of Reference

Our Proposal shall be valid and remain binding upon us for the period of time specified in the Bid Data Sheet.

We understand and recognize that you are not bound to accept any Proposal you receive.

I, the undersigned, certify that I am duly authorized by [Insert Name of Bidder] to sign this Proposal and bind it should UNDP accept this Proposal.

Name: _____

Title: _____

Date: _____

Signature: _____

[Stamp with official stamp of the Bidder]

Form B: Bidder Information Form

Legal name of Bidder	[Complete]
Legal address	[Complete]
Year of registration	[Complete]
Bidder's Authorized Representative Information	Name and Title: [Complete] Telephone numbers: [Complete] Email: [Complete]
Are you a UNGM registered vendor?	<input type="checkbox"/> Yes <input type="checkbox"/> No If yes, [insert UGNM vendor number]
Are you a UNDP vendor?	<input type="checkbox"/> Yes <input type="checkbox"/> No If yes, [insert UNDP vendor number]
Countries of operation	[Complete]
No. of full-time employees	[Complete]
Quality Assurance Certification (e.g. ISO 9000 or Equivalent) (If yes, provide a Copy of the valid Certificate):	[Complete]
Does your Company hold any accreditation such as ISO 14001 related to the environment? (If yes, provide a Copy of the valid Certificate):	[Complete]
Does your Company have a written Statement of its Environmental Policy? (If yes, provide a Copy)	[Complete]
Contact person UNDP may contact for requests for clarification during Proposal evaluation	Name and Title: [Complete] Telephone numbers: [Complete] Email: [Complete]
Please attach the following documents:	<ul style="list-style-type: none"> ▪ Company Profile, which should not exceed fifteen (15) pages, including printed brochures and product catalogues relevant to the goods/services being procured (incl. brief description of similar IT solutions implemented) ▪ Certificate of Incorporation/ Business Registration ▪ Quality Certificate (e.g., ISO, etc.) and/or other similar certificates, accreditations, awards and citations received by the Bidder, if any ▪ Dully filled in Forms A-G with annexes. Forms F and G password protected. Please, ensure that no other documents are disclosing your financial proposal apart from Forms F and G. Your price proposal indicated in e-Tendering system line item must equal with 1 US\$. <ul style="list-style-type: none"> ○ A copy of preliminary Agreement in case of Consortium or sub-contracting.

- Statement of Satisfactory Performance from the Top three (3) Clients in terms of Contract Value in the past three (3) years.
- Financial Statement (Income Statement and Balance Sheet) for the past 3 years (2019, 2020, 2021).
- Detailed description of the Methodology, Approach and Implementation Plan (sequence of actions) for the services required in the ToR, with clear distribution of roles and responsibilities of the proposed key personnel. The methodology shall also include the proposed detailed technical offer, including description of functional and non-functional requirements, hardware operating restrictions, estimated activities and their duration as well as methodology for providing warranty, maintenance and support services (including owned facilities).
- CVs (signed by the envisaged personnel), together with attestation certificates (if applicable) and training attendance certificates (if applicable/ e.g. diplomas, certifications) (valid at the date of presentation) clearly stipulating the relevant experience which meets the listed requirements, of the Key personnel (mentioned in Section 5: Terms of Reference). Description of the non-key staff involved in the project should be attached, if applicable.
- Other as specified.
- Official Letter of Appointment as local representative, if Bidder is submitting a Bid on behalf of an entity located outside the country
- Power of Attorney

Form C: Joint Venture/Consortium/Association Information Form

Name of Bidder:	[Insert Name of Bidder]	Date:	Select date
RFP reference:	RFP22/02450		

To be completed and returned with your Proposal if the Proposal is submitted as a Joint Venture/Consortium/Association.

No	Name of Partner and contact information (address, telephone numbers, fax numbers, e-mail address)	Proposed proportion of responsibilities (in %) and type of services to be performed
1	[Complete]	[Complete]
2	[Complete]	[Complete]
3	[Complete]	[Complete]

Name of leading partner (with authority to bind the JV, Consortium, Association during the RFP process and, in the event a Contract is awarded, during contract execution)	[Complete]
--	------------

We have attached a copy of the below document signed by every partner, which details the likely legal structure of and the confirmation of joint and severable liability of the members of the said joint venture:

☐ Letter of intent to form a joint venture **OR** ☐ JV/Consortium/Association agreement

We hereby confirm that if the contract is awarded, all parties of the Joint Venture/Consortium/Association shall be jointly and severally liable to UNDP for the fulfillment of the provisions of the Contract.

Name of partner: _____

Name of partner: _____

Signature: _____

Signature: _____

Date: _____

Date: _____

Name of partner: _____

Name of partner: _____

Signature: _____

Signature: _____

Date: _____

Date: _____

Form D: Qualification Form

Name of Bidder:	[Insert Name of Bidder]	Date:	Select date
RFP reference:	[Insert RFP Reference Number]		

If JV/Consortium/Association, to be completed by each partner.

Historical Contract Non-Performance

☐ Contract non-performance did not occur for the last 3 years

☐ Contract(s) not performed for the last 3 years

Year	Non- performed portion of contract	Contract Identification	Total Contract Amount (current value in US\$)
		Name of Client: Address of Client: Reason(s) for non-performance:	

Litigation History (including pending litigation)

☐ No litigation history for the last 3 years

☐ Litigation History as indicated below

Year of dispute	Amount in dispute (in US\$)	Contract Identification	Total Contract Amount (current value in US\$)
		Name of Client: Address of Client: Matter in dispute: Party who initiated the dispute: Status of dispute: Party awarded if resolved:	

Previous Relevant Experience

Please list only previous similar assignments successfully completed in the last 5 years.

List only those assignments for which the Bidder was legally contracted or sub-contracted by the Client as a company or was one of the Consortium/JV partners. Assignments completed by the Bidder's individual experts working privately or through other firms cannot be claimed as the relevant experience of the Bidder, or that of the Bidder's partners or sub-consultants, but can be claimed by the Experts themselves in their CVs. The Bidder should be prepared to substantiate the claimed experience by presenting copies of relevant documents and references if so requested by UNDP.

Project name & Country of Assignment	Client & Reference Contact Details	Contract Value	Period of activity and status	Types of activities undertaken

Bidders may also attach their own Project Data Sheets with more details for assignments above.

☐ Attached are the Statements of Satisfactory Performance from the Top 3 (three) Clients or more.

Financial Standing

Annual Turnover for the last 3 years	Year 2019	USD
	Year 2020	USD
	Year 2021	USD
Latest Credit Rating (if any), indicate the source		

Financial information (in US\$ equivalent)	Historic information for the last 3 years		
	Year 1	Year 2	Year 3
	<i>Information from Balance Sheet</i>		
Total Assets (TA)			
Total Liabilities (TL)			
Current Assets (CA)			
Current Liabilities (CL)			
	<i>Information from Income Statement</i>		
Total / Gross Revenue (TR)			

Profits Before Taxes (PBT)			
Net Profit			
Current Ratio			

- ☐ Attached are copies of the audited financial statements (balance sheets, including all related notes, and income statements) for the years required above complying with the following condition:
- a) Must reflect the financial situation of the Bidder or party to a JV, and not sister or parent companies;
 - b) Historic financial statements must be audited by a certified public accountant;
 - c) Historic financial statements must correspond to accounting periods already completed and audited.
- No statements for partial periods shall be accepted.

Form E: Format of Technical Proposal

Name of Bidder:	[Insert Name of Bidder]	Date:	Select date
RFP reference:	RFP22/02450		

The Bidder's proposal should be organized to follow this format of Technical Proposal. Where the bidder is presented with a requirement or asked to use a specific approach, the bidder must not only state its acceptance, but also describe how it intends to comply with the requirements. Where a descriptive response is requested, failure to provide the same will be viewed as non-responsive.

SECTION 1: Bidder's qualification, capacity and expertise

- 1.1 Brief description of the organization, including the year and country of incorporation, and types of activities undertaken.
- 1.2 General organizational capability which is likely to affect implementation: management structure, financial stability and project financing capacity, project management controls, extent to which any work would be subcontracted (if so, provide details).
- 1.3 Relevance of specialized knowledge and experience on similar engagements done in the region/country.
- 1.4 Quality assurance procedures and risk mitigation measures.
- 1.5 Organization's commitment to sustainability.

SECTION 2: Proposed Methodology, Approach and Implementation Plan

This section should demonstrate the bidder's responsiveness to the TOR by identifying the specific components proposed, addressing the requirements, providing a detailed description of the essential performance characteristics proposed and demonstrating how the proposed approach and methodology meets or exceeds the requirements. All important aspects should be addressed in sufficient detail and different components of the project should be adequately weighted relative to one another.

- 2.1 A detailed description of the approach and methodology for how the Bidder will achieve the Terms of Reference of the project, keeping in mind the appropriateness to local conditions and project environment. Details how the different service elements shall be organized, controlled and delivered.
- 2.2 The methodology shall also include details of the Bidder's internal technical and quality assurance review mechanisms.
- 2.3 Explain whether any work would be subcontracted, to whom, how much percentage of the work, the rationale for such, and the roles of the proposed sub-contractors and how everyone will function as a team.
- 2.4 Description of available performance monitoring and evaluation mechanisms and tools; how they shall be adopted and used for a specific requirement.
- 2.5 Implementation plan including a Gantt Chart or Project Schedule indicating the detailed sequence of activities that will be undertaken and their corresponding timing.
- 2.6 Demonstrate how you plan to integrate sustainability measures in the execution of the contract.
- 2.7 Any other comments or information regarding the project approach and methodology that will be adopted.

SECTION 2A: Bidder's Comments and Suggestions on the Terms of Reference

Provide comments and suggestions on the Terms of Reference, or additional services that will be rendered beyond the requirements of the TOR, if any.

SECTION 3: Management Structure and Key Personnel

- 3.1 Describe the overall management approach toward planning and implementing the project. Include an organization chart for the management of the project describing the relationship of key positions and designations. Provide a spreadsheet to show the activities of each personnel and the time allocated for his/her involvement.
- 3.2 Provide CVs for key personnel that will be provided to support the implementation of this project using the format below. CVs should demonstrate qualifications in areas relevant to the Scope of Services.

Format for CV of Proposed Key Personnel

Name of Personnel	[Insert]
Position for this assignment	[Insert]
Nationality	[Insert]
Language proficiency	[Insert]
Education/ Qualifications	<i>[Summarize college/university and other specialized education of personnel member, giving names of schools, dates attended, and degrees/qualifications obtained.]</i> [Insert]
Professional certifications	<i>[Provide details of professional certifications relevant to the scope of services]</i> <ul style="list-style-type: none"> ▪ Name of institution: [Insert] ▪ Date of certification: [Insert]
Employment Record/ Experience	<i>[List all positions held by personnel (starting with present position, list in reverse order), giving dates, names of employing organization, title of position held and location of employment. For experience in last five years, detail the type of activities performed, degree of responsibilities, location of assignments and any other information or professional experience considered pertinent for this assignment.]</i> [Insert]
References	<i>[Provide names, addresses, phone and email contact information for two (2) references]</i> Reference 1: [Insert] Reference 2: [Insert]

I, the undersigned, certify that to the best of my knowledge and belief, these data correctly describe my qualifications, my experiences, and other relevant information about myself.

Signature of Personnel

Date (Day/Month/Year)

Form F: Financial Proposal Submission Form

Name of Bidder:	[Insert Name of Bidder]	Date:	Select date
RFP reference:	RFP22/02450		

We, the undersigned, offer to provide the services for **Development of Climate Change Information and Knowledge Management Portal of Moldova** in accordance with your Request for Proposal No. **RFP22/02450** and our Proposal. We are hereby submitting our Proposal, which includes this Technical Proposal and our Financial Proposal sealed under a separate envelope.

Our attached Financial Proposal is for the sum of [Insert amount in words and figures].

Our Proposal shall be valid and remain binding upon us for the period of time specified in the Bid Data Sheet.

We understand you are not bound to accept any Proposal you receive.

Name: _____
Title: _____
Date: _____
Signature: _____

[Stamp with official stamp of the Bidder]

Form G: Financial Proposal Form

Name of Bidder:	[Insert Name of Bidder]	Date:	Select date
RFP reference:	RFP22/02450		

The Bidder is required to prepare the Financial Proposal following the below format and submit it in an envelope separate from the Technical Proposal as indicated in the Instruction to Bidders. Any Financial information provided in the Technical Proposal shall lead to Bidder’s disqualification.

The Financial Proposal should align with the requirements in the Terms of Reference and the Bidder’s Technical Proposal.

Currency of the proposal: USD

Table 1: Summary of Overall Prices

	Amount(s)
Professional Fees (from Table 2)	
Other Costs (from Table 3)	
Total Amount of Financial Proposal	

Table 2: Breakdown of Professional Fees

Name	Position	Fee Rate	No. of Days/months/ hours	Total Amount
		A	B	C=A+B
In-Country				
Home Based				
Subtotal Professional Fees:				

Table 3: Breakdown of Other Costs

Description	UOM	Quantity	Unit Price	Total Amount
International flights	Trip			
Subsistence allowance	Day			
Miscellaneous travel expenses	Trip			
Local transportation costs	Lump Sum			
Out-of-Pocket Expenses				
Other Costs: (please specify)				
Subtotal Other Costs:				

Table 4: Breakdown of Price per Deliverable/Activity

Deliverable/ Activity description	Time (person days)	Professional Fees	Other Costs	Total
Report No. 1 on analysis and development of the unrolled Specification which contains detailing of business processes, this stored in system and also structure given for the exchange with external resources, approved by the Project Manager				
Report No. 2 on elaboration and presentation of two design variants of the portal from which one will be chosen, approved by the Project Manager				
Report No. 3 on code and portal integration modules development and technical project, consisting of two documents: the SRS and SDD, approved by the Project Manager				
Report No. 4 on portal testing with accompanying documentation, approved by the Project Manager				
Report No. 5 on processing and publishing on the portal the content provided by the Beneficiary, approved by the Project Manager				
Report no. 6 Trainings and capacity support for staff				

approved by the Project Manager.				
Report no. 7 on Requirements to set of delivery according to the table 1.18., approved by the Project Manager				
Report no.8 Maintenance and Technical Support for 12 months (including description of contributions provided for maintenance and technical support)				

Section 5. Terms of Reference

DEVELOPMENT OF CLIMATE CHANGE INFORMATION AND
KNOWLEDGE MANAGEMENT PORTAL OF MOLDOVA

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General information

Knowledge and information management - including acquisition, transfer, use and sharing of knowledge - is essential element of effective climate adaptation. Each stage of CCA and DRR processes (Figure 1) is associated with a specific type of information and involve specific set of actors at all levels. The variety of objectives, sources and users of data and information make knowledge management for climate change adaptation a challenging task. The main challenges include:

- variety of thematic areas including climate change and climate projections, assessment of the risks and impacts, developing practical responses, implementation and management, monitoring and evaluation of the effectiveness of the results and others;
- variety of information sources and domains, including scientific knowledge on climate scenarios, local knowledge about impacts and effectiveness of the measures, planning and management of climate adaptation and others;
- different backgrounds of data users and providers which requires adapting the content, level and type of information to different user groups;
- attribution of different types of information to different administrative levels (e.g. the information about climate change and forecasts are usually produced at the international and national level, while information about impacts is mostly available at the local and sectoral levels);
- high level of uncertainty related to climate change and impacts and the need to communicate it to different stakeholder groups, providers and users of information;
- different time horizons for data, knowledge and information.

Information and knowledge management for climate change adaptation is a multi-level, dynamic and complex process involving different groups of information providers and users and different types of information. Effective CCA information management requires mechanisms and tools for knowledge integration, collection and sharing.

Digital solutions, including web-based CCA information and knowledge platforms, provide technological opportunity for the knowledge integration. Nevertheless, the structure, development and management of the web-based resources need to be carefully and realistically planned based on specific national circumstances, data available and stakeholder requirements.

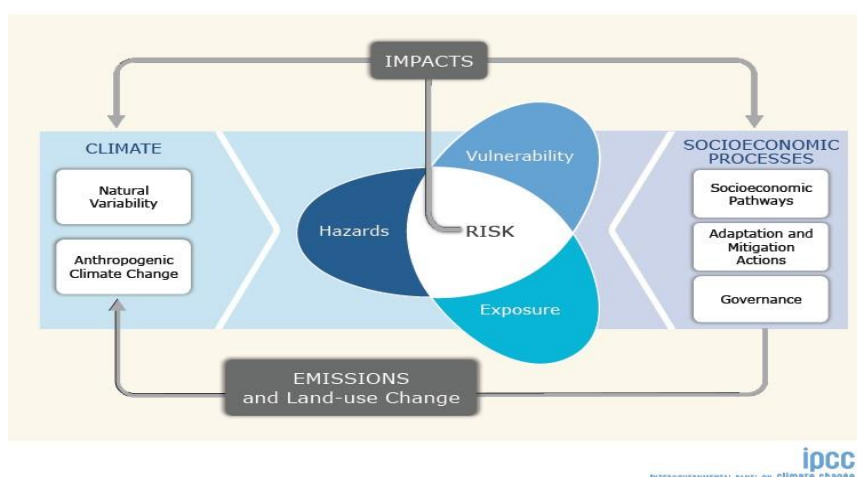


Figure 1. IPCC framing of climate risks and risk responses (AR5, IPCC, 2014b)

As Moldova progresses in its adoption of a holistic approach to adaptation and towards increased integration of CCA considerations into medium- and long-term planning, it must rely on a strong evidence base to strengthen its ability to appraise available adaptation options. There is a need to strengthen the knowledge

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base for CCA and focus on improving the accessibility and availability of climate-related information through a climate change information and knowledge management portal (CCIKMP). Web-based CCIKMP is planned as the main source of information for all target groups that have interest in CCA domain. It is expected that this resource will be a key resource that will provide data for the Republic of Moldova on historical, future climate; existing and projected vulnerabilities and possible impacts on the level of various sectors (e.g. water, health) and regions (North, South and Center). CCIKMP is seen as a “one stop shop” for climate adaptation related information, tools, data that do exist on the national level, integrate the existing open data from available regionally and globally on climate, trends, vulnerabilities.

*ToR for development of Climate Change Information and Knowledge Management Portal of Moldova***Terminology**

Set of abbreviations and acronyms used in this document are defined in table 1.1.

Table 1.1. Acronyms and abbreviations used in the document

№	Abbreviation/Acronym	Description
1.	AP	Web-based climate change adaptation platform
2.	CCA	Climate change adaptation
3.	CCIKMP	Moldova Climate Change Information and Knowledge Management Platform
4.	DRM	Disaster risk management
5.	DRR	Disaster risk reduction
6.	EEA	European Environmental Agency
7.	GIES	General Inspectorate for Emergency Situations
8.	IEG	Institute of Ecology and Geography
9.	PSA	Public Services Agency
10.	KMS	Knowledge Management Strategy
11.	LAP	Local adaptation plan
12.	MoEnv	Ministry of Environment
13.	NAP	National Adaptation Plan (in the context of the document refers to NAP 2014 – 2020)
14.	NAP-2	Second cycle of updating and developing the NAP in Moldova
15.	NCCC	National Committee on Climate Change
16.	NDC	Nationally Determined Contributions
17.	NGO	non-governmental organisation
18.	SHS	State Hydrometeorological Service
19.	SDD	Software design document - the regulating document of the IT system containing the detailed description of the following images: data structures and their restrictions, architecture of the IT system covering all concept of the IT system, the IT interface of system including design of all components of the user interface, functionality of the IT system with the detailed description of all scenarios of implementation of the IT system.
20.	SRS	Software Requirements Specification – the document which contains the detailed description of all scenarios of interaction of users with IT application.
21.	TLS/SSL	The TLS protocol, and also his predecessor the SSL protocol, are intended for providing three services to all appendices working on it namely: enciphering, authentication and integrity.

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All terms which are often used in this document are displayed and are provided in table 1.2.

Table 1.2. Determinations of the concepts used in the document

№	Term	Description
1.	CAPTCHA («Completely Automated Public Turing test to tell Computers and Humans Apart»)	A computer test used to determine whether a user of a system is a human or a computer. The main idea of the test: to offer the user a problem that a person can solve, but which is extremely difficult to teach a computer to solve. CAPTCHAs are most commonly used to prevent automated message submissions, registrations, file downloads, bulk emails, and more.
2.	CMS	A content management system, often abbreviated as CMS, is software that helps users create, manage, and modify content on a website without the need for specialized technical knowledge.
3.	IP address	The address of a node in an IP network.
4.	RSS	A data format intended for describing news feeds, article announcements, changes in blogs, etc. Information from various sources presented in RSS format can be collected, processed and presented to the user in a convenient form by special aggregator programs.
5.	World wide web (WWW)	A distributed system that provides access to related documents located on various computers connected to the Internet. The prefix "web" can be used to denote objects that are oriented to use on the WWW or that use typical WWW technologies (for example, a web interface is a web page-based interface).
6.	Administrative part of the portal	Part of the portal, closed from visitors, intended for portal management. Management is carried out by the administrator (technical support) and the portal editor (information support).
7.	Portal administrator	A specialist who provides technical support for the portal.
8.	Alternative figure signature	Text caption that appears in place of the picture if images are disabled in the web browser.
9.	Blog	A site or section of a site whose main content is regularly added posts containing text, images, or multimedia. Blogs are characterized by short entries that are relevant at the moment, sorted in reverse chronological order (last entry from the top).
10.	Web browser (browser)	Client program provided by third parties that allows you to view the content of web pages.
11.	Web Interface	A collection of screens and system controls that allow a user accessing the system via a web browser to maintain and manage the system.
12.	Web Portal (Portal)	A collection of interconnected static and dynamic pages containing text data, pictures, videos and other digital information, combined under one address (domain name or IP address) on the Internet.
13.	Hyperlink (link)	An active piece of text or image that allows you to load another page or perform a specific action.

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No	Term	Description
14.	Portal design	Structure, graphics and presentation of information unique to a particular portal.
15.	Page design template	A file that contains elements of the external design of the site pages, as well as a set of special tags used by the site publishing system to display information when creating the final pages.
16.	Dynamic page	A portal page that, using program code, processes and displays information from the database.
17.	Domain name	The symbolic name of the hierarchical space of the Internet. The fully qualified domain name consists of the names of all domains in which it belongs, separated by periods.
18.	Meta tag	Web page markup element. Used for page description, keywords and other data.
19.	Content editor of the portal	A specialist who provides information support for the portal. He can create content without the right to publish on the portal (acceptance by Content manager required).
20.	Content manager of the portal	A specialist who provides information support for the portal. Manages editors.
21.	Filling (content)	The collection of portal content. Includes texts, images, files, etc. intended for portal users.
22.	Public part of the portal	The main informational part of the portal, open to visitors.
23.	Backup copy	A collection of database objects, presented in the form of files, that allows you to restore an exact copy of the structure of the original database in a similar database management system.
24.	Content Management System (CMS)	An information system that allows authorized users to make changes to the hierarchical structure and content of the portal without using any additional special software.
25.	Static page	A portal page that does not access the database; all information is stored in the page code.
26.	Hosting	A service for the provision of disk space for the physical placement of information on a server that is permanently located on the Internet.
27.	Content element	A separate entry in the database, the external presentation of which depends on the program module that controls it (for example, in the "news feed" module, the content element is a separate news).
28.	Database	Data set, organized according to the conceptual structure describing characteristics of these data and relationship between them, and such collection of data which supports one or more scopes.
29.	Information and communication technologies	The general term which includes all technologies used for the exchange and information processing.

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No	Term	Description
30.	Information object	Virtual view of the existing material and non-material entities.
31.	Information system	The system for information processing along with the appropriate organizational resources, such as human and technical resources which deliver and to distribute information.
32.	Information resource	Set of documentary information in the IT system which is supported according to requirements and the current legislation.
33.	Logging	Function of the data recording about events. Records about the events entered into information systems include data on the date and time, users and the performed activity.
34.	Personal data	Any information relating to the identified or identified physical person (the subject of personal data). For this purpose, the identified person, is the one who can be identified, directly or indirectly, in particular, by means of the link to identification number or on one or more specific elements describing the person: physical, physiological, mental, economic, cultural or social identity.

Legal aspects for development of portal

The processes of creation, implementation and operation of CCIKMP are part of the normative-legislative framework in force. From this category of normative acts, we can mention:

- Law no. 467/2003 on computerization and state information resources;
- Law no. 71/2007 regarding the registers;
- Law no. 133/2011 on the protection of personal data;
- Law no. 142/2018 on data exchange and interoperability;
- Government Decision no. 562/2006 on the creation of state automated information systems and resources;
- The requirements for ensuring the security of personal data when processing them within the personal data information systems, approved by Government Decision no. 1123/2010;
- The Program on the Interoperability Framework, approved by Government Decision no. 656/2012;
- Regulation on the use, administration and development of the common technology platform (MCloud), approved by Government Decision no. 128/2014;
- The mandatory minimum requirements for cyber security, approved by Government Decision no. 201/2017;
- Government Decision no. 414/2018 on measures to strengthen data centers in the public sector and to streamline the administration of state information systems;
- Regulation on the use of the interoperability platform (MConnect), approved by Government Decision no. 211/2019;
- The technical regulation "Software life cycle processes" RT 38370656-002: 2006, approved by the Order of the Minister of Information Development no. 78/2006.

Portal architecture

The architecture of the CCIKMP portal is represented in figure 1.1.

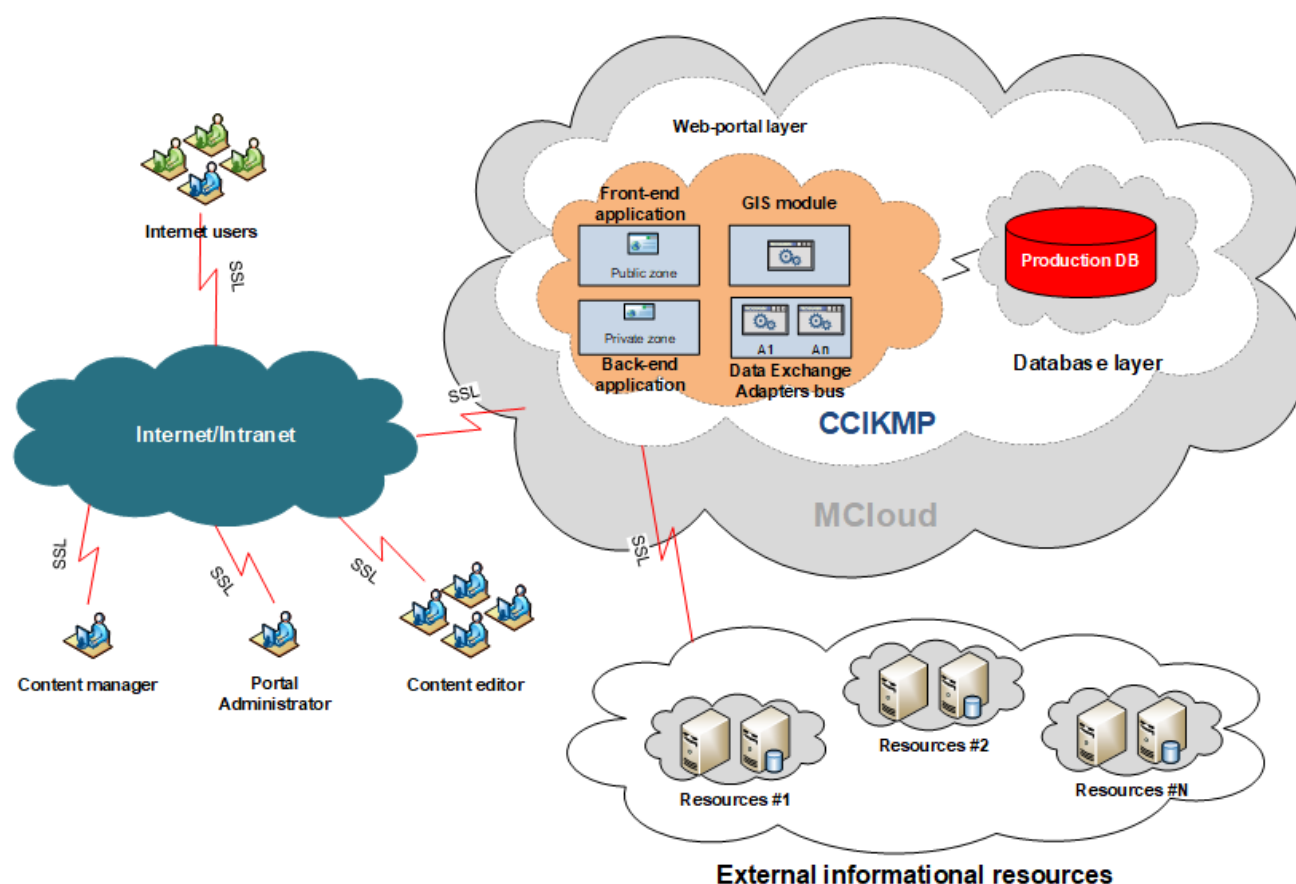


Figure 1.1. CCIKMP Portal components and the interaction between them.

Thus, the portal will contain 4 functional blocks that interact with each other:

Front-end application - is intended for Internet users to browse and view the public content of the portal.

Back-end application - it is a private zone and is intended for users responsible for completing and administering the portal (CMS).

GIS module - is intended for users responsible for managing the portal and allows the creation of templates with interactive maps using geospatial data imported from external resources. This module can use a different management engine than the portal engine. Widgets will be used to publish interactive maps from this module to the portal.

Data Exchange Adapter bus - Data Exchange Adapters Bus provides multilevel integration with external informational resources. The mentioned module is meant for the import of geospatial data delivered by the Providers both from external files and through web-services.

The involved parties and roles in portal

Business roles in Portal

Key stakeholders for the implementation of CCIKMP are as follows:

- SHS – the main beneficiary and owner of the CCIKMP;
- UNDP (Project NAP-2) – the Purchaser of the development and implementation of CCIKMP. The UNDP will monitor all Project activities;

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- Ministry of Environment - the central specialized body of the public administration that ensures the realization of the governmental policy in the fields relevant to CCIKMP;
- ITCSS – the owner of MCloud where the CCIKMP will be hosted and the Technical Administrator of the of the integrated software;
- e-Government Agency –the agency responsible for the government e-Transformation agenda implementation and access to MConnect interoperability platform and APIs of government e-services (MPass, MSign, MLog, MNotify, MPay, MPower, Open Data Portal and Public Services Portal).

Owner of Portal

SHS is the owner of CCIKMP. The role of the owner of portal reflects the administrative aspect connected with complete competence of the organization which are necessary for ensuring continuous management and development of system.

As the owner of System, the SHS will be able to assign roles and access rights to the portal to the employees of public institutions, depending on their duties.

The SHS will provide technical infrastructure for placement of the developed portal.

Users and their roles in Portal

The user roles or information systems which interact with CCIKMP are displayed in figure 1.2. Apparently in this drawing, 4 categories of human actors and a few of external resources will interact within this portal.

Internet user - a human actor, who accesses the public WEB interface of CCIKMP in order to explore the public information related to the portal. The given actor has the role of accessing the WEB interface for exploring the public content of the portal (public area).

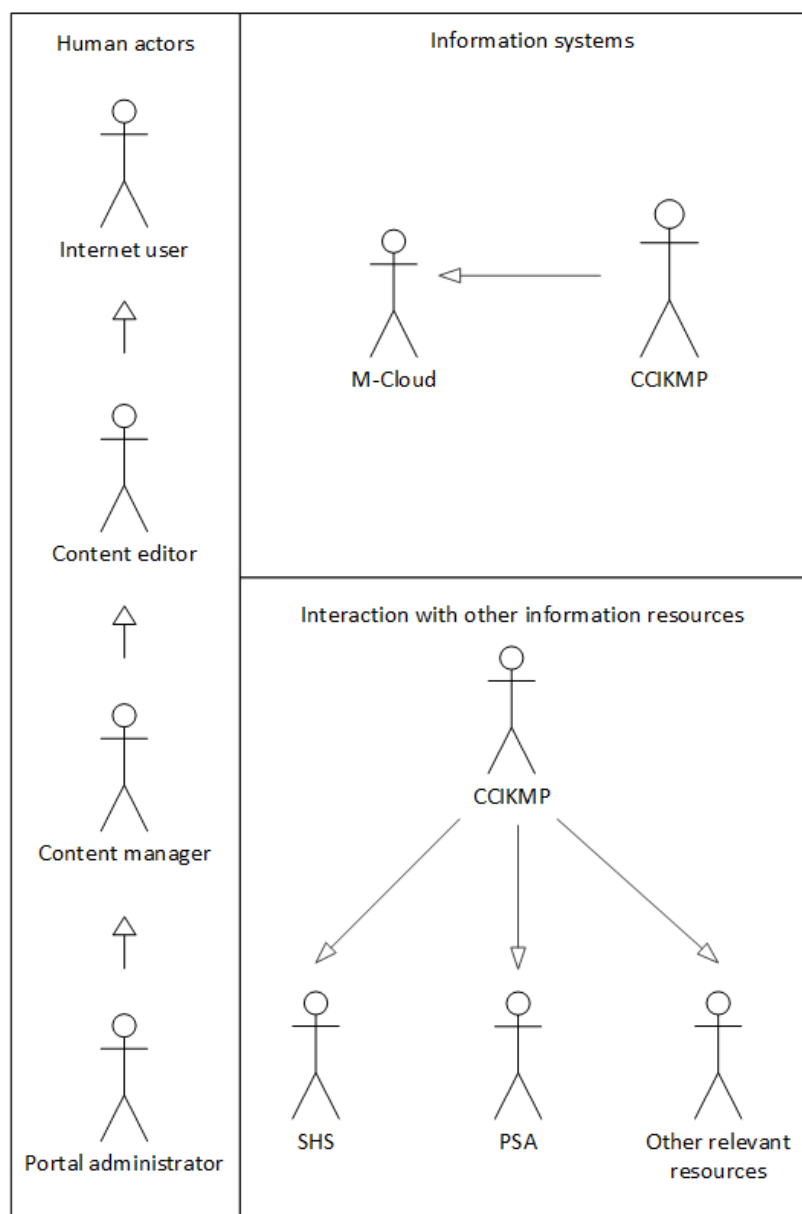
Content editor - the human actor intended for created and edited of content for portal.

Content manager - the human actor intended for management of portal's content. This category of actors has the following different roles:

- creating content on the portal;
- publishing content on the portal, including that created by publishers;
- excluding the content from the portal.

Portal administrator - the human actor intended for management of users of portal, system operation monitoring, configuring/setup of portal, start / stop / restart of portal. This category of actors has the following different roles:

- Uses everything functionality of portal;
- Generate the reports, statistics and performance indicators intended for monitoring of system;
- User management: creating, blocking, deleting, assigning role;
- manage and configure roles, access rights and profiles of authorized users of system;
- perform system configurations, including notifications of different type of users;
- manage metadata of system (the configuration, the access path, accounting data for access to external services, nomenclatures, qualifiers, variables, etc.);
- administration of the CMS;
- administration of the database;
- database backup.

**Fig. 1.2. The actors of the Portal**

External resources - represent the totality of external information resources with which CCIKMP will be integrated. It is necessary to organize access to the information resources of the following state institutions:

- SHS – providing meteorological information, hydrological, air pollution and other data (layer with data for interactive maps or widget for displaying in portal);
- PSA – providing layer with data for interactive maps (data from the State Register of administrative-territorial units and addresses);
- Other relevant resources – layer with data for interactive maps or widget for displaying in portal (ex. IEG, Apele Moldovei, Moldsilva, Environmental agency and other research institutions and agencies providing spatial information on climate parameters and risk assessments).

The list of data providers for the portal is presented in Annex # 2

M-Cloud - a common government technology platform based on the modern concept of "Cloud Computing" consisting of computing services, applications, access to information and data storage. CCIKMP will be hosted on M-Cloud.

Functional model of Portal

Information objects of Portal

Analyzing the modeled domain can be delimited all the informational objects that must be considered when developing CCIKMP. Figure 1.3 delimits all the information objects that will underlie the development of CCIKMP.

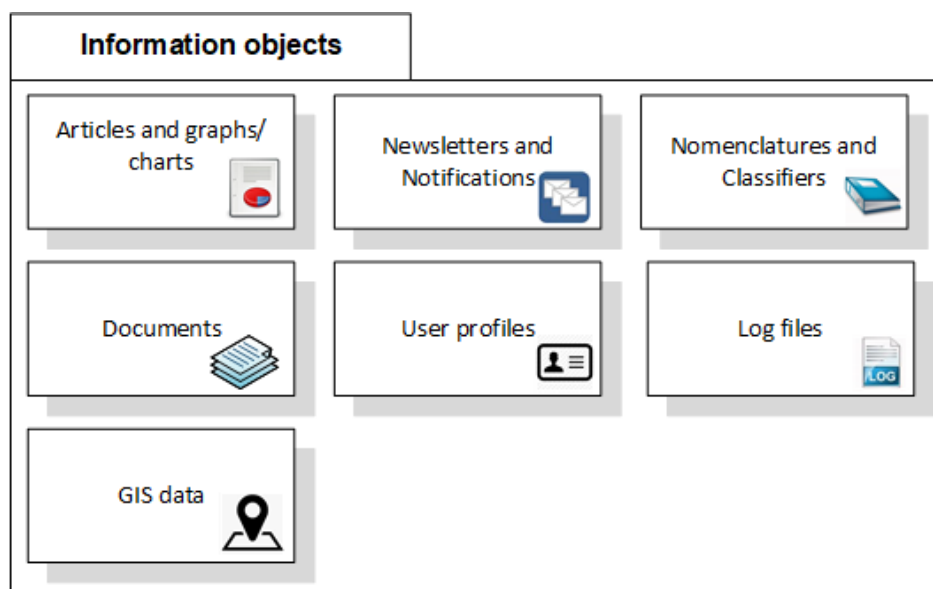


Fig. 1.3. The informational objects of the Portal

As can be seen in Figure 1.3, we can mention 7 categories of information objects that must be considered in the CCIKMP development process:

- Articles and graphs/charts;
 - Documents;
 - GIS data;
 - Newsletters and Notifications;
 - User profiles;
 - Nomenclatures and Classifiers;
 - Log files.
1. **Articles and graphs/charts.** Article is a piece of content consisting of text (HTML), possibly with links to other resources (for example, images). Articles are the basic units of information in the content system and the bottom level in the content hierarchy. Graphs and charts are visuals that show relationships between data and are intended to display the data in a way that is easy to understand and remember. Graphs and charts can be included in the article or displayed separately. Articles will be placed in Categories. Separate categories and subcategories will be created for each item in the Portal menu.
 2. **Documents.** Represents an information object of the system, which can be of study, report, policy or a normative act. It will be stored in the portal as an external file in PDF format and can be attached to any article or displayed separately.
 3. **GIS data.** Represents a category of information objects that consists of all geospatial data and related data for display on interactive maps of the portal.
 4. **Newsletters and Notifications.** This category of information objects is part of the CCIKMP notification and subscribe to newsletters mechanism. The following CCIKMP notifications and newsletters could be delineated:

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- notification of the arrival of a new article for publication;
 - notification regarding the change of the status of the article (published, rejected);
 - notification of alerts published on the portal (risk of floods, risk of frosts, others risks);
 - newsletters for subscriber users;
 - other system notifications (warnings).
5. **User profiles.** User profiles are an informational object that consists of all data related to authorized users. The user profile will contain all the information related to it (information for authorization in the system, name, surname, authentication data, postal address, contact phone, Email, subscription status, etc.) and CCIKMP functionalities accessible to the user (rights and roles related to it). The user profile will deliver the history of his activity within CCIKMP.
 6. **Nomenclatures and Classifiers.** Represents a category of information objects that consists of all metadata related to CCIKMP. It will contain national (relatively static) classifiers managed by SHS, data providers and internal portal nomenclatures.
 7. **Log files.** Represents information objects intended for IT audit and implementation of information security policy. Any changes to the content of the portal must be recorded in special logs (log files) showing the time and the user who made the change.

Functionality of Portal

All the functionalities delivered by CCIKMP and the actors that benefit within the key institutions of CCIKMP are shown in figure 1.4. It should be noted that human sketches represent external users or resources for which the interaction interfaces with them must be adapted.

According to the use case diagram described in figure 1.4, the CCKIMP actors within SHS and the state institutions responsible for providing information for the portal have access to 9 use cases.

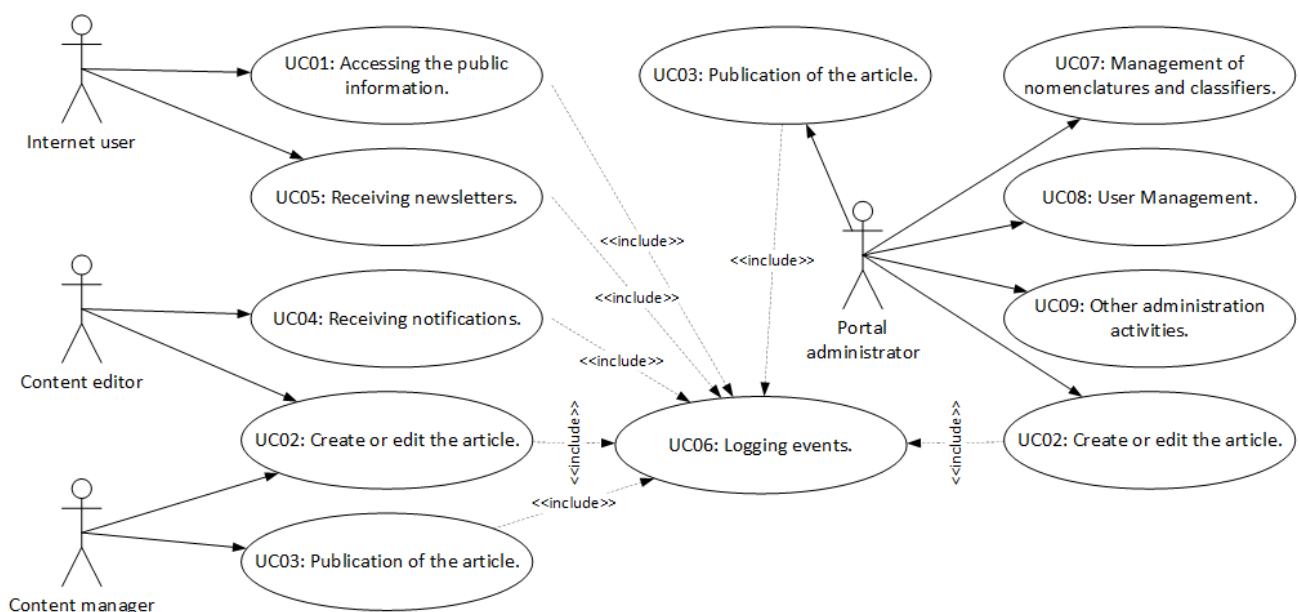


Figure 1.4. Portal functionalities

UC01: Accessing the public information.

Publicly available functionality for all Internet users - information seekers, through which they can query the database in order to search for public information or extract depersonalized public information.

UC02: Create or edit the article.

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Represents a functionality available to users with the roles "Content editor" and "Content manager" for creating or editing the new (content) or existing article in the Portal.

UC03: Publication of the article.

Represents a functionality available to users with the role of "Content manager" for publishing the new (content) or modified article on the Portal.

UC04: Receiving notifications.

Represents a feature available to CCIKMP users for receiving notification messages involved (responsible) for filling the portal with content. The portal will provide users with notifications regarding any event aimed at changing the content status of the portal.

UC05: Receiving newsletters.

This is a feature available to CCIKMP subscribers to receive newsletters. The portal will provide users with the opportunity to subscribe to newsletters.

UC06: Logging events.

The portal will contain all the functionalities that will allow the configuration of the operating principles and the generation of the events that will be logged.

UC07: Management of nomenclatures and classifiers.

Use case that provides all the functionalities necessary for the administration of the nomenclatures and classifiers of the portal.

UC08: User Management.

Represents a use case that provides all the functionality intended for the portal administrator through which he manages the list of roles and rights associated with authorized users.

UC09: Other administration activities.

Represents a use case for the portal administrator that describes all the functionalities accessible to them for CCIKMP administration and audit: maintaining the list and integrity of user credentials, extracting reports from system registers for analysis and detection of possible logical and physical security issues of CCIKMP, etc.

The Portal Administrator will have a mechanism for managing the profiles of the portal actors involved in the content completion process. This mechanism will allow you to define the parameters for accessing the interface, services, files. Additionally, the portal administrator will have a mechanism for managing the GIS component of the portal, including managing the integration part with the web-services of external resources.

The CCIKMP administration use case will implement all the functionalities of ensuring the viability and integrity of the portal (generating backups, restoring data, starting/stopping the portal, etc.).

User interface of Portal

The user interface of the portal should provide a visual, intuitive presentation of the structure of the information posted on it, a quick and logical transition to sections and pages. Navigation elements should provide an unambiguous understanding of their meaning by the user: links to pages should be provided with titles, conventions should correspond to generally accepted ones. Graphical navigation elements must be provided with an alternative signature.

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The system should provide navigation through all resources available to the user and display relevant information. The content menu system must be used for navigation. The menu should be a text box (list of hyperlinks) in the left column or at the top of the page (depending on the approved design).

For sections containing subsections, there should be a drop-down submenu.

When a user selects any of the menu items, the corresponding information page (news feed, feedback form, etc.) should be loaded, and a list of subsections of the selected section should open in the menu block (or in the main part of the page, depending on the approved design).

The CCIKMP public area will have interfaces in 2 languages: Romanian and English. When creating a portal, an adaptive design should be used that allows viewing the site both on workstations and on any mobile devices (tablets, smartphones with a minimum resolution of 640x480 px and with browsers that support HTML5), depending on the requesting device.

The design of the portal must be attractive, with the sobriety necessary for the image of a public institution, but without giving the impression of rigidity.

The contrast between the letters / writing and the background must be large enough for a quick view of the content. The fonts used will ensure the readability of the text regardless of the browser or the users' platform.

Graphic proposals must create a unified and recognizable visual concept and adhere to the attached draft layout. The developer will present two design variants of the portal from which one will be chosen (a report will be drawn up with the chosen proposal attached). The selected variant of design will include the icon sets for the portal.

Content management system (CMS) and portal content

Pages of all sections of the portal must be generated programmatically based on information from the database on the server.

The content management system should be convenient for the average user in terms of:

- Ease of transferring content from MS Office applications, editing it, placing tables and images, as well as downloading them from the outside.
- Ease of placing banners (start of publication and completion date of publication on the site), attached files (pdf, doc, xls, etc), photo galleries (including the article itself).
- Convenient search for the desired page for editing by word combination, link. The search function must be able to search for a product by name in any of the 2 languages of the site, regardless of the language selected for viewing the site.
- At the article level, specify the intro text and intro image, and of course the full text with the corresponding image.
- At the article level, indicate the start date of publication and the date of completion of the publication on the site.

Modification of the content of the sections should be carried out through the administrator's web interface (content management system), which, without the use of special programming skills (without the use of programming and special coding or formatting), should provide for the possibility of editing the information content of the portal pages. Filling with information should be carried out using the templates of the portal pages.

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As part of the development of the portal, the Contractor must ensure that the static information provided by the Customer is entered into the dynamic sections being created (considering the functionality provided for in this TOR). Text information will have to be provided by the Customer in the form of separate files in MS Word, MS Excel, html format. The file names will correspond to the titles of the sections. Before transferring the texts to the Contractor, they will be proofread and edited. Graphic material will be provided in psd/png/tiff format. Whenever possible, the names of the graphic files will reflect the contents of the file. Images for galleries and portal sections will be placed in folders or archives with names corresponding to the gallery or portal section for which they are intended.

The contractor must ensure the processing of illustrations to bring them in line with the technical requirements and HTML-layout of the prepared materials. If additional processing is required (typing, proofreading, scanning, retouching, editing, translation, etc.), this will be done by the Customer.

After the portal is put into operation, the content of the sections, including the processing and preparation for publication of graphic materials, must be carried out by the Customer independently or on the basis of a separate contract for the portal support.

Portal analytics

There are various web analytics tools for collecting statistics, which are classified into two types.

The first is Internet statistics systems. These are external programs for which a small piece of code is installed on the portal. The data is entered into a database located on the server of the service provider. They are available to the owner of the web resource. Such programs are simple and easy to use. They provide visual information. Examples: Google Analytics, Yandex.Metrica, Liveinternet and others.

Log analyzers are programs installed on a user's computer. Log files are collected at regular intervals, processed and stored in an internal archive. As a rule, working with such tools requires special knowledge and skills. Examples: Webalizer, AWStats (they are usually provided by hosting providers).

The proposed Internet statistics system should provide the following indicators:

- attendance indicators:
 - o how many pages were viewed in total;
 - o detailed path on the site of one visitor - where he visited, how often;
 - o total number of users;
 - o new visitors to the portal.
- audience characteristics:
 - o geographic location - determined by the IP address of the user's device;
 - o indicators of audience activity;
 - o visitor's interest is determined by the time spent by the user on the portal.
- traffic sources:
 - o sites from which visitors came;
 - o where users came from - search engines, individual resources and blogs, social networks and others;
 - o transitional search queries - for what key phrases the visitor found the portal.
- popularity of pages and sections of the portal:
 - o most visited pages - calculated from the total number of views;
 - o most viewed page groups - similar metrics are shown for the pages of the subdirectory;
 - o list of pages visited by the user during one session.
- internal indicators of the portal:
 - o information about subscribers: a list of subscribers for an arbitrary period;

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- search queries on the portal for an arbitrary period.

Requirements to Portal

Remark:

The requirements set out in this document are marked using the following convention: X Y Z, where:

X - represents the requirement category and can have one of the following values: FR - functional requirement or NFR - non-functional requirement, TDR - testing and documentation requirement

Y - represents the use case number (UC).

Z - represents the serial number of the requirement for the given use case.

Example: FR 02.05 - is the functional requirement with order number 05 corresponding to the use case UC 02

For each functional or non-functional requirement, indicate whether it is mandatory (M), optional (D) or Informative (I).

The tender submitted by the tenderer must comply with all the requirements indicated as mandatory (M).

The bid submitted by the bidder will gain a competitive advantage for each optional requirement (D) to which it corresponds.

Information requirements (I) are intended to provide more information in order to better understand the context of other requirements.

Functional requirements to Portal

UC01: Accessing the public information.

Functional requirements for use case UC01: Accessing the public information are outlined in Table 1.3.

Table 1.3. All functional requirements for use case UC01

Identifier	Type	Description of the functional requirement
FR 01.01	M	CCIKMP will provide a WEB interface for accessing the public content of the portal.
FR 01.02	M	The public WEB interface will display information that does not contain personal data.
FR 01.03	M	Due to the responsive design, the Portal will be accessible from any device: desktop, laptop, tablet, smartphone.

UC02: Create or edit the article.

Functional requirements for use case UC02: Create or edit the article are outlined in Table 1.4.

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Table 1.4. All functional requirements for use case UC02

Identifier	Type	Description of the functional requirement
FR 02.01	M	The back-end of portal will offer users the role of "Content editor" the ability to create new articles or modify existing articles created by them. Articles can only be created in the Categories attached to this user group.
FR 02.02	M	The back-end of portal will offer users with roles "Content manager", "Portal administrator" the ability to create new articles or modify existing articles regardless of their author. This category of users can remove articles from the portal.
FR 02.03	M	Due to the responsive design, the back-end of Portal will be accessible from any device: desktop, laptop, tablet, smartphone.
FR 02.04	M	The portal will allow the insertion of predefined interactive maps from the GIS module of Portal or widgets from external resources in the body of the articles.
FR 02.05	M	To create/modify of articles, Portal will provide to users a special tool (WYSIWYG HTML editor).
FR 02.06	M	The portal will allow to create and insert of charts of different types (bar graphs, pie charts, line graphs) in the body of the articles.

UC03: Publication of the article.

Functional requirements for use case UC03: Publication of the article are outlined in Table 1.5.

Table 1.5. All functional requirements for use case UC03

Identifier	Type	Description of the functional requirement
FR 03.01	M	The portal will offer users with roles "Content manager", "Portal administrator" the opportunity to publish new articles created or modified by users with the role of "Content editor".
FR 03.02	M	The portal will offer users with the role of "Content manager" the possibility of refusing to publish new articles created or modified by users with the role of "Content editor" with their submission for correction to the authors of the articles.

UC04: Receiving notifications.

Functional requirements for use case UC04: Receiving notifications are outlined in Table 1.6.

Table 1.6. All functional requirements for use case UC04

Identifier	Type	Description of the functional requirement
FR 04.01	M	The portal will send to the users with the role of "Content manager" notifications regarding the publication of new / modified articles.
FR 04.02	M	The portal will send users with the role of "Content editor" notifications regarding the publication of new / modified articles or their rejection.

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Identifier	Type	Description of the functional requirement
FR 04.03	M	The portal will send to the users with the role of "Portal administrator" notifications regarding the events that affect the security of the portal (unsuccessful authentication of users, etc.).

UC05: Receiving newsletters.

Functional requirements for use case UC05: Receiving newsletters are outlined in Table 1.7.

Table 1.7. All functional requirements for use case UC05

Identifier	Type	Description of the functional requirement
FR 05.01	M	The portal will offer internet users the possibility to subscribe/unsubscribe to newsletters.
FR 05.02	M	<p>The component for subscribing and mailing letters should provide the following capabilities:</p> <ul style="list-style-type: none"> - Subscription / Unsubscribe to mailing lists for portal users; - Verification of the postal address and its confirmation; - Creation of mailing lists; - User unsubscribe notifications; - Administrator notifications about user subscription/unsubscription; - Creation of newsletters; - Inserting personal data into any letter (placeholders); - Management of letter templates; - Sending letters on a schedule; - Insert images; - Adding files in the attachment; - Insert link "Send to a friend"; - Automatic creation and distribution of emails based on content; - Creation of automatic e-mail companies (a series of letters sent automatically based on user information); - Sending letters to one or more lists.

UC06: Logging events.

Functional requirements for use case UC06: Logging events are outlined in Table 1.8.

Table 1.8. All functional requirements for use case UC06

Identifier	Type	Description of the functional requirement
FR 06.01	M	The portal will designate the events to be journalized.
FR 06.02	M	The portal will offer users with the role of "Portal administrator" the ability to view and systematization of logs.

*ToR for development of Climate Change Information and Knowledge Management Portal of Moldova***UC07: Management of nomenclatures and classifiers.**

Functional requirements for use case UC07: Management of nomenclatures and classifiers are outlined in Table 1.9.

Table 1.9. All functional requirements for use case UC07

Identifier	Type	Description of the functional requirement
FR 07.01	M	The portal will have a mechanism for managing the nomenclatures and classifiers that contain all the metadata of the portal.
FR 07.02	M	The classifiers managed by SHS and data providers will be taken over in full.
FR 07.03	M	For data provider classifiers, the rights to make changes will be limited. Changes will be made to this category of classifiers only if they are operated by Data Providers.
FR 07.04	M	For the system of internal nomenclatures and classifiers, the IT solution will deliver a mechanism for their dynamic definition and administration.
FR 07.05	M	The portal will not allow deleting a metadata category if it is used in at least one database record.

UC08: User Management.

Functional requirements for use case UC08: User Management are outlined in Table 1.10.

Table 1.10. All functional requirements for use case UC08

Identifier	Type	Description of the functional requirement
FR 08.01	M	The portal will allow users with the role of "Administrator portal" to create new users, attach the role in the portal, reset the password, block or delete the user.
FR 08.02	M	The portal will allow users with the role of "Administrator portal" to dynamically configure roles and attach them to users.
FR 08.03	I	The beneficiary will provide all the necessary information to complete the profiles of the users involved in the operation of the portal (Portal administrators, Content editors, Content managers).
FR 08.04	D	The portal will contain several default user categories created by the developer upon delivery of the final product. The user category will be delivered by the beneficiary.

UC09: Other administration activities.

Functional requirements for use case UC09: Other administration activities are outlined in Table 1.11.

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Table 1.11. All functional requirements for use case UC09

Identifier	Type	Description of the functional requirement
FR 09.01	M	The portal must allow administrative roles to take over, display, and reconfigure parameters and settings of configuring the portal.
FR 09.02	M	The portal must allow the dynamic administration of all nomenclatures and classifiers.
FR 09.03	M	The administrator manages CCIKMP users and access groups.
FR 09.04	M	The portal must allow administrative roles to: <ul style="list-style-type: none"> - assign functions to users and roles; - assigns one or more users to a role.
FR 09.05	M	For each user of the Portal, the administrator manages his profile.
FR 09.06	M	The administrator manages the portal interaction module with external resources, including the GIS module.
FR 09.07	M	The administrator backs up and restores the functionality of the portal based on these copies.
FR 09.08	M	The administrator performs all the activities of ensuring the functionalities in good conditions of the portal.
FR 09.09	M	The portal must allow administrative roles to create an unlimited number of web feeds (RSS).

Nonfunctional requirements to Portal

General requirements to Portal and requirements to performance

General requirements to Portal and requirements to performance are outlined in Table 1.12.

Table 1.12. General requirements to Portal and requirements to performance

Identifier	Type	Description of the functional requirement
NFR 01.01	M	The developed portal will be hosted on the M-Cloud government technology platform and will run on this platform.
NFR 01.02	M	The average response time of the server will not exceed 3 seconds at the nominal load of the portal.
NFR 01.03	M	The portal must be able to allow the activity of more than 10 authorized users of the Portal.
NFR 01.04	M	The portal must be able to allow annual access to over 50,000 publicly accessible Internet users.
NFR 01.05	M	All CCIKMP performance tests will be performed prior to the delivery of the IT solution.
NFR 01.06	M	All user interfaces and the contents databases will be prepared in the Romanian and English languages.

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Identifier	Type	Description of the functional requirement
NFR 01.07	M	The portal shall have possibility of setup of the user interface (the adaptive interface) depending on the used device (the notebook, the netbook, the desktop PC, the Tablet).
NFR 01.08	M	The portal should use open standards for formats and communication protocols.
NFR 01.09	M	The portal shall be displayed identically in the latest version of browsers: Chrome, Firefox, IE(Edge).
NFR 01.10	M	The portal must integrate with the following social networks and external resources: <ul style="list-style-type: none"> - Facebook - for each news / event the Like, Share and Send buttons. - Twitter - for each news / event the Share a link and Follow buttons. - LinkedIn - for each news / event the Follow button.

Requirements to GIS module

Requirements to GIS module are outlined in Table 1.13.

Table 1.13. Requirements to GIS module

Identifier	Type	Description of the functional requirement
NFR 02.01	I	This module can use a different management engine than the portal engine.
NFR 02.02	M	Widgets will be used to publish interactive maps from this module to the portal.
NFR 02.03	M	It is necessary to provide for the import of vector maps from external files: SXF, KML, DXF and other frequently used formats, as well as their manual completion with additional data (not geospatial). It is necessary to be able to import data from external web-services.
NFR 02.04	M	The engine used must offer to users the following possibilities through widgets: <ul style="list-style-type: none"> - segmentation of map; - cutting on the map according to a defined area; - modeling.

Requirements to safety and protection of Portal

Requirements to safety and protection of Portal are outlined in Table 1.14.

Table 1.14. Requirements to safety and protection of Portal

Identifier	Type	Description of the functional requirement
NFR 03.01	M	The portal must report attempts to abusively enter the private area of the portal or to gain unauthorized access to the information.
NFR 03.02	M	The system will be protected from the following vulnerabilities: <ul style="list-style-type: none"> - Cross-site scripting (XSS) and reflected (RXSS)

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Identifier	Type	Description of the functional requirement
		<ul style="list-style-type: none"> - Information leakage - Content spoofing - Predictable resource location - SQL injection - Insufficient authentication - Insufficient authorization - Abuse of functionality - Directory indexing - HTTP response splitting - Other known vulnerabilities in the programs used in the development of the platform.
NFR 03.03	M	On interaction of the Portal with other external resources, digital certificates for identification shall be used.
NFR 03.04	M	The portal shall provide confidentiality of the transmitted data obtained on communication links.
NFR 03.05	M	Access to the portal is controlled.
NFR 03.06	M	User actions are logged by portal.

Software, Hardware and requirements to communication link

Requirements to software, hardware and communication link are outlined in Table 1.15.

Table 1.15. Requirements to software, hardware and communication link

Identifier	Type	Description of the functional requirement
NFR 04.01	M	The portal shall have opportunity to be installed both on dedicated servers and on the virtual (Cloud).
NFR 04.02	M	<p>The portal shall be available on communication links at the speed, at least:</p> <ul style="list-style-type: none"> - For internet users - 256 kbps - For authenticated users - 100Mbps.
NFR 04.03	M	The developer shall specify the name of the software platform (CMS) on the basis of which the portal and type of databases necessary for functioning of portal will be developed in the sentence. Also, the developer shall be providing the requirements to hosting infrastructure.
NFR 04.04	M	If the platform of the software (CMS, GIS module and databases) used for development and operation of portal is based on the commercial IT solutions demanding purchase of licenses, the developer will include in the sentence delivery of all necessary licenses for development and operation of portal (The developer buys all licenses necessary for development and operation of portal on behalf of the Beneficiary).

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Requirements to documentation of Portal

IT solution shall be followed by the complete documentation package on the deliverable portal consisting of the sections included in Table 1.16.

Table 1.16. Requirements to documentation of Portal

Identifier	Type	Description of the functional requirement
NFR 05.01	M	The developer shall prepare and deliver the Engineering design of portal (SRS+SDD).
NFR 05.02	M	The developer shall prepare and deliver the user guide in the Romanian language for all roles in portal.
NFR 05.03	M	The developer shall prepare and deliver the Administrator guide in the Romanian language.
NFR 05.04	M	The developer to prepare and deliver the Installation guide and setup of portal.

Requirements to technical maintenance of Portal

The developer shall provide the maintenance of portal after implementation. Requirements to the level of the maintenance are described in Table 1.17.

Table 1.17. Requirements to the level of the maintenance

Identifier	Type	Description of the functional requirement
NFR 06.01	M	The developer shall provide support within 12 months after acceptance of portal.
NFR 06.02	M	Support of portal shall conform to requirements of the national standard SM ISO / CEI 14764: 2005 - Information technologies. Service of the software.
NFR 06.03	M	The developer shall provide to the Receiver the service Help Desk available in all working days during the required period of maintenance.
NFR 06.04	M	For communication with Help Desk service will use one of the following languages: English or Romanian.
NFR 06.05	M	The developer shall provide documentation of technical requests of the Customer, and their traceability for the Receiver.
NFR 06.06	M	Terms for reaction and the decision for the registered requests: <ul style="list-style-type: none"> - Term for reaction - 4 hours - Term for implementation critical after reaction - 4 hours - Term for implementation noncritical after reaction - shall not exceed 24 hours eight working hours after their registration

End product and set of delivery

The end product consists of program artifacts and documentation of portal, and also knowledge transfer to the Beneficiary. The artifacts included in the set of delivery of portal are displayed in Table 1.18.

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Table 1.18. Requirements to set of delivery

Identifier	Type	Description of the functional requirement
NFR 07.01	M	Engineering design of portal (SRS+SDD).
NFR 07.02	M	The manual on the installation and configuration of portal.
NFR 07.03	M	User guides for all roles in the portal.
NFR 07.04	M	The administrator guide (including the plan for the case of emergency situations).
NFR 07.05	M	The training documentation (it is intended for teachers who will train employees of other state institutions in operation of portal).
NFR 07.06	M	Testing plan, test cases and results of internal testings (functional).
NFR 07.07	M	All artifacts of system, copied on the electronic medium (CD or DVD).
NFR 07.08	M	The end product packed for easy installation in the offered technology environment.

In addition to the artifacts, which are included in the portal of delivery, all the services necessary for the transfer of knowledge are listed in Table 1.19.

Table 1.19. Requirements to knowledge transfer

Identifier	Type	Description of the functional requirement
NFR 07.09	M	User training and system administrators.
NFR 07.10	M	The help in the period of final portal testing.
NFR 07.11	M	The help during installation and start of portal.
NFR 07.12	M	Remedial action, revealed during acceptance tests of portal.

Stages of implementation of the Portal

Design, development, testing and portal implementation shall be made according to the following diagram:

1. The stage of development of system which shall be divided on under - stages, approved with the Customer as follows:
 - a) The developer starts the analysis and development of the unrolled Specification which contains detailing of business processes, this stored in system and also structure given for the exchange with external resources. This document is approved with the Customer. Under - the stage will not exceed these 2 weeks;
 - b) The developer will elaborate and present two design variants of the portal from which one will be chosen (a report will be drawn up with the chosen proposal attached). The selected variant of design will include the icon sets for the portal. Under - the stage will not exceed these 2 weeks;

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- c) Developer starts to develop code and portal integration modules. In parallel, the developer prepares a technical project, consisting of two documents: the SRS and SDD. This sub-phase will not exceed 3 months;
 - d) The developer starts portal testing and prepares the set of the accompanying documentation. Duration of this stage makes 2 weeks. Procedure of testing shall include obligatory following stages:
 - joint check of all test cases according to all functional requirements in system;
 - on the basis of results of testing, in case of need, necessary adjustments and changes in system will be executed.
2. The stage of filing portal with data will begin after first stage of development of portal. The developer will process and publish on the portal the content provided by the Beneficiary. Duration of this stage will not exceed this 1 month;
 3. The stage of training begins along with the stage of filling portal and shall cover training of 2 system administrators and 5 internal users of portal. Duration of this stage makes 2 weeks;
 4. The stage of implementation will begin after second stage and provides works of installation of the portal in production environment together Beneficiary's team. Duration of this stage makes 1 week.
 5. The stage of support of portal is the period during which the Developer assumes obligations for support of the delivered portal and error correction revealed during this period. Technical support after implementation (after start of system) within 12 months according to the standard ISO / IEC 14764.

KEY DELIVERABLES AND INDICATIVE TIMEFRAME

The selected Contractor is expected to provide the following deliverables according to the schedule below:

Deliverable	Target Date
1. Report No. 1 on analysis and development of the unrolled Specification which contains detailing of business processes, this stored in system and also structure given for the exchange with external resources, approved by the Project Manager	4 weeks after contract signature
2. Report No. 2 on elaboration and presentation of two design variants of the portal from which one will be chosen, approved by the Project Manager	4 weeks after contract signature
3. Report No. 3 on code and portal integration modules development and technical project, consisting of two documents: the SRS and SDD, approved by the Project Manager	3 months since submission of Deliverable 2
4. Report No. 4 on portal testing with accompanying documentation, approved by the Project Manager	2 weeks since submission of Deliverable 3
5. Report No. 5 on processing and publishing on the portal the content provided by the Beneficiary, approved by the Project Manager	1 month since submission of Deliverable 4
6. Report no. 6 Trainings and capacity support for staff approved by the Project Manager.	2 weeks since submission of Deliverable 4

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7. Report no. 7 on Requirements to set of delivery according to the table 1.18., approved by the Project Manager	2 weeks since submission of Deliverable 5
8. Report no.8 Maintenance and Technical Support (including description of contributions provided for maintenance and technical support)	12 months since submission of Deliverable 7

Note: The indicated tentative timeframe has been estimated as being sufficient/feasible for the envisaged volume of work to be completed successfully and is proposed as a guideline for the duration of the assignment. The provision of the envisaged deliverables approved by UNDP shall be the only criteria for Contractor's work being completed and eligible for payment/s.

INSTITUTIONAL ARRANGEMENTS

Expected duration of the contract/assignment: The duration of current assignment is May 2022 – May 2024. The deliverables and timeframe are presented in the section above. It is expected the company will allocate the number of experts/days that will be required for the implementation of this contract. In case if the experts will be changed during the implementation process the company should ensure that they meet the criteria for each position indicated in this ToR and timely notification should be sent to the project. The company should submit all deliverables due time and allocating the time for review and feedback from the project implementation team.

UNDP will require maximum of 14 (fourteen) days (depending on the implementation stage) to review the deliverables, provide comments, approve/deny, or certify acceptance of deliverables.

Language for deliverables' submission: The Contractor shall submit Reports according to section above, which highlights the current status of performed activities and main findings, key issues, and preliminary conclusions. The Inception and Progress Reports, including all deliverables should be submitted in Romanian, in electronic version.

All the deliverables and reports must be endorsed by the UNDP and the final beneficiaries. All activities under this assignment shall be performed in a gender-sensitive manner, with respect of blue /green principles and applying human rights-based approach.

Key Performance Indicators and Service Level: All deliverables presented by the Company should be in accordance with the requirements stated in ToR, be written in a clear and concise language. References for the data sources should be provided, and no plagiarism is acceptable in the text. The employer reserves the right to return the documents and give the deadline for addressing identified irregularities.

Governance and Accountability: The contractor will work under the direct supervision of the NAP-2 Project Manager, and NAP-2 Team Leader. The contractor shall take overall responsibility on the quality and timeliness of project implementation process within its competency. All deliverables shall be coordinated with the beneficiaries.

Facilities and costs of the assignment: All services that are a part of the current ToR and proposed methodology by the contractor are a solely responsibility of the subcontractor. All costs, including travels, logistics, translation, bank fees, taxes etc. should be included into the financial offer. UNDP shall not accept any additional expenses which were not included in the company's financial offer unless UNDP revises the scope work during the contract implementation within allowable margins.

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COVID-19 implications: The selected contractor shall abide by the latest recommendations of WHO and National Commission for Emergency Situations of the Republic of Moldova pertaining to safety measures in the COVID-19 context. The Offeror's proposal shall be clear on the activities, costs entailed, and approach proposed to ensure the delivery of the assignment in the current pandemic context whereby objectives of the assignment are met, while enforced safety standards are adhered to.

Shall it be feasible to conduct any meetings, or any other activities under the assignment with physical presence of participants, the contractor will abide by the safety rules and regulations set by the Moldovan authorities in regard to gatherings/meetings at that particular time.

PAYMENT

The payment for services will be made in tranches upon submission of deliverables stated in deliverable table. All deliverables shall be endorsed by the Project Manager within 14 calendar days from their submission.

Deliverable	Target Date
1. Report No. 1 on analysis and development of the unrolled Specification which contains detailing of business processes, this stored in system and also structure given for the exchange with external resources, approved by the Project Manager	10%
2. Report No. 2 on elaboration and presentation of two design variants of the portal from which one will be chosen, approved by the Project Manager	
3. Report No. 3 on code and portal integration modules development and technical project, consisting of two documents: the SRS and SDD, approved by the Project Manager	40%
4. Report No. 4 on portal testing with accompanying documentation, approved by the Project Manager	
5. Report No. 5 on processing and publishing on the portal the content provided by the Beneficiary, approved by the Project Manager	20%
6. Report no. 6 Trainings and capacity support for staff approved by the Project Manager.	
7. Report no. 7 on Requirements to set of delivery according to the table 1.18., approved by the Project Manager	15%
8. Report no.8 Maintenance and Technical Support (including description of contributions provided for maintenance and technical support)	15%

QUALIFICATIONS AND SKILLS REQUIRED

The selected Company/Organization should:

- Be legally registered entity or consortium of companies/organizations where each member of legally registered;
- Minimum 5 (five) years of relevant experience in developing IT systems;
- At least 3 (three) IT projects of similar complexity, developed in the past 5 (five) years and their brief description;
- Experience of integration of Application Interface of government e-services, will be a strong advantage;

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- Demonstrated experience of working with Central Public Authorities will be a strong advantage;
- Working experience with UN Agencies and/or other international organizations will be an asset.

Composition and requirements for the Team of experts

The bidder should propose the team of experts which will be involved into the implementation of the current assignment as per the positions indicated below.

Project Manager

- University degree in Management, Engineering, ICT, or another relevant field
- At least 5 (five) years of experience in project management of projects on developing IT applications/systems, services, etc.
- Experience in a similar position in at least 2 (two) similar projects
- Proved certification in Project Management (Prince, PMI, etc.) would be an asset
- Proficiency in Romanian and English languages

Senior Developer

- University degree in Engineering, ICT or another relevant field
- At least 5 (five) years of experience in the proposed position
- Experience in a similar position in at least 3 (three) similar projects
- Experience in the development of IT application with GIS's component would be a strong advantage
- Demonstrated experience in technologies related to the portal and GIS component development platform (e.g. PHP, Java, jQuery, Python) would be an advantage
- Proficiency in Romanian language

Developer

- University degree in Engineering, ICT or another relevant field
- Experience in a similar position in at least 2 (two) similar projects
- At least 3 (three) years of experience in the proposed position
- Demonstrated experience in technologies related to the portal and GIS component development platform (e.g. PHP, Java, jQuery, Python) would be an advantage
- Proficiency in Romanian language

Tester

- University degree in Engineering, ICT or another relevant field
- Experience in a similar position in at least 2 (two) similar projects
- Demonstrated experience in technologies related to the portal and GIS component development platform (e.g. PHP, Java, jQuery, Python) would be an advantage
- Proficiency in Romanian language

Designer

- University degree in Designing or another relevant field. Additional certificates/trainings in designing and other related areas will be a strong asset
- Demonstrated development skill in UI /UX design
- At least 2 (two) years of experience in the proposed position. Experience demonstrated through the portfolio of works executed
- Proficiency in Romanian language

The applicant should present the CVs of each team member, individually signed, that allow to identify the

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roles and responsibilities for the process. Each CV should clearly state:

- Contact information and main data about the person;
- Role in the project and level of involvement;
- Information on education (formal and courses/trainings);
- Previous experience relevant to the assignment;
- Contact information (name, title, organization, mailing address, phone, and email) for a minimum of three business references;
- Linguistic and other skills.

The competencies and skills of the above-listed key-personnel will be evaluated as per Section 4. Technical Evaluation Criteria Form. The Company could consider other non-key personnel that is required for the successful implementation of the present assignment; however, their competencies will not be evaluated. The Company should demonstrate substantial human resource capacity, proportionate to the workload to mitigate negative effects on the pace of implementation.

The Company shall take all reasonable measures necessary to ensure that the personnel deployed under this assignment shall respect local customs and conform to the highest standards of moral and ethical conduct and adherence to UNDP values (human rights, gender equality, respecting differences of culture, gender, religion, ethnicity, nationality, language, age, HIV status, disability, and sexual orientation, or other status). UNDP may at any time request the withdrawal or replacement of any of the key-personnel if these standards are not adhered to. Replacement will be made at the Company expense.

The company shall ensure no substitution of the team of experts during the implementation of this assignment prior to the written approval from the NAP-2 Project Manager. In case substitution occurs, the company shall ensure that all required qualifications for this assignment remain available within the expert's team.

APPLICATION

Interested entities must submit a technical and price offer containing:

- Detailed description of the enterprise (experience, human resources, managerial and technical capacities, etc.);
- Copies of the registration documents;
- The company's portfolio with the indication of similar implemented projects;
- References of the company's beneficiaries for the last 3 years;
- CVs of the key staff involved in the project;
- Description of the non-key staff involved in the project;
- Brief description of similar IT solutions;
- The proposed detailed technical offer, including description of functional and non-functional requirements, hardware operating restrictions, estimated activities and their duration;
- Methodology for providing warranty, maintenance and support services (including owned facilities);
- Detailed financial offer.

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Annexes

Annex 1 – Structure of Portal

News	
	Events
	Calls for proposals projects
	Climate Change Jobs, Education, Opportunities in Moldova
Weather forecast	
	Weather Forecast
	Agricultural Forecast
	Satellite and Radar data
	Hazard Warning
Climate Change	
	Global Climate Change
	Climate Change in Moldova
	Climate Change Mitigation
	Climate Change Adaptation
	DRR
	NCCC
	Monitoring and Evaluation
Hazards	
	Overview
	Floods
	Droughts
	Windstorms
	Frosts
	Hailstorms
	Wildfires
	Heatwaves
Sector	
	Overview
	Agriculture
	Energy
	Transport
	Health

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	Water resources
	Forestry and Biodiversity
	Infrastructure and Buildings
	Urban
	Disaster management
	Insurance
Regions	
	Country level
	Districts
	Municipalities
Tools and resources	
	Policies and plans
	Adaptation planning support tools
	Moldova Climate Data Tool (MCDT)
	Moldova Climate GIS
	Climate Services
	Finance and investments
	Education and awareness
	Case studies
About the Platform	
	To use information
	Provide information
	Glossary & Library
	Data policy
	Contacts

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Annex 2 – List of data providers

Portal section	Name of dataset	Provider	Method of delivery
Weather forecast			
	Weather Forecast	SHS	widget
	Agricultural Forecast	SHS	widget
	Satellite and Radar data	SHS	widget
	Hazard Warning	SHS	widget
Moldova Climate Data Tool (MCDT)			
	Upper Atmosphere	SHS	Layer for Interactive maps (GIS) via web-services or file to import
	Surface Atmosphere	SHS	Layer for Interactive maps (GIS) via web-services or file to import
	Atmospheric composition	SHS	Layer for Interactive maps (GIS) via web-services or file to import
	Hydrosphere	SHS, Apele Moldovei	Layer for Interactive maps (GIS) via web-services or file to import
	Biosphere and Land Cover	Ministry of Agriculture, Environment Agency	Layer for Interactive maps (GIS) via web-services or file to import
	Soil	Ministry of Agriculture, Environment Agency	Layer for Interactive maps (GIS) via web-services or file to import
	Agriculture	SHS, Ministry of Agriculture	Layer for Interactive maps (GIS) via web-services or file to import
	Antroposphere	SHS	Layer for Interactive maps (GIS) via web-services or file to import
	Individual pages for indicators of MCT	SHS	from imported layers
Moldova Climate GIS			
	Surface temperature (mean and extremes)	SHS	Layer for Interactive maps (GIS) via web-services or file to import
	Precipitation (mean and extremes)	SHS	Layer for Interactive maps (GIS) via web-services or file to import

ToR for development of Climate Change Information and Knowledge Management Portal of Moldova

Portal section	Name of dataset	Provider	Method of delivery
	Wind Speed and Direction	SHS	Layer for Interactive maps (GIS) via web-services or file to import
	Solar radiation	SHS	Layer for Interactive maps (GIS) via web-services or file to import
	Evapotranspiration from land	SHS	Layer for Interactive maps (GIS) via web-services or file to import
	River discharge (annual, seasonal)	SHS	Layer for Interactive maps (GIS) via web-services or file to import
	Land Cover structure	Environment Agency	Layer for Interactive maps (GIS) via web-services or file to import
	Sum of active temperatures	SHS	Layer for Interactive maps (GIS) via web-services or file to import
	Aridity index	SHS	Layer for Interactive maps (GIS) via web-services or file to import
	Index of Biological Effectiveness of Climate (IBEC)	SHS	Layer for Interactive maps (GIS) via web-services or file to import
	Hydrothermal coefficient (HTC) indexed for vegetation period	SHS	Layer for Interactive maps (GIS) via web-services or file to import

Annex 3 - General template layout for Portal

Page Title

Title

Main Body

Left

Area content

Right

Bottom

Bottom 1

Bottom 2

Bottom 3

Bottom 4

Footer

Footer 1

Footer 2

Annex 4 - List of climate indicators for “Moldova Climate Data Tool (MCDT)”

Name of Indicator
Upper Atmosphere
Upper air atmosphere temperature
Upper Air Wind Speed and Direction
Upper Air Atmosphere Water Vapour
Sunshine duration
Lighting
Clouds
Surface Atmosphere
Surface Air temperature (mean and extremes)
Surface Wind Speed and Direction
Surface water vapour (humidity)
Surface Atmospheric Pressure
Surface Radiation budget / Solar radiation
Precipitation (mean and extremes)
Present and past weather
Visibility
Atmospheric Composition
Carbon dioxide
Methane
Other green house gases
Ozone
Aerosols
Precursors for Aerosole and Ozone
Hydrosphere
Snow depth
Snow-water equivalent
Evaporation from land
River discharge (annual, seasonal)
Groundwater indicators
Lake ecosystem indicators
Other available indicator on water ecosystems (river, lakes, etc.)
Biosphere and Land Cover
Land Cover structure
Albedo
Land Surface Temperature
Above-ground biomass
Invasive species
Fraction of Absorbed Photosynthetically Active Radiation (FAPAR)
Other biodiversity indicators
Soil
Soil Temperatures
Soil Moisture

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Name of Indicator
Depth of ground freeze
Depth of ground thaw,
Thickness and density of the snow layer on the farmlands in the winter season
Soil Carbon
Agriculture
Sum of active temperatures
Hydrothermal coefficient
Development phases of the crops (phenology)
Crops state
Crops state during the cold season
Damage of sowings due to unfavourable meteorological phenomena, agricultural pests and diseases
Damage to agricultural crops in winter and during the growing season
General visual estimation of the crops vegetation state
Quantitative estimation of the crops vegetation state
Visual assessment of the state of crops
Crop Pests
Antroposphere
Anthropogenic GHG emission
Anthropogenic Water Use

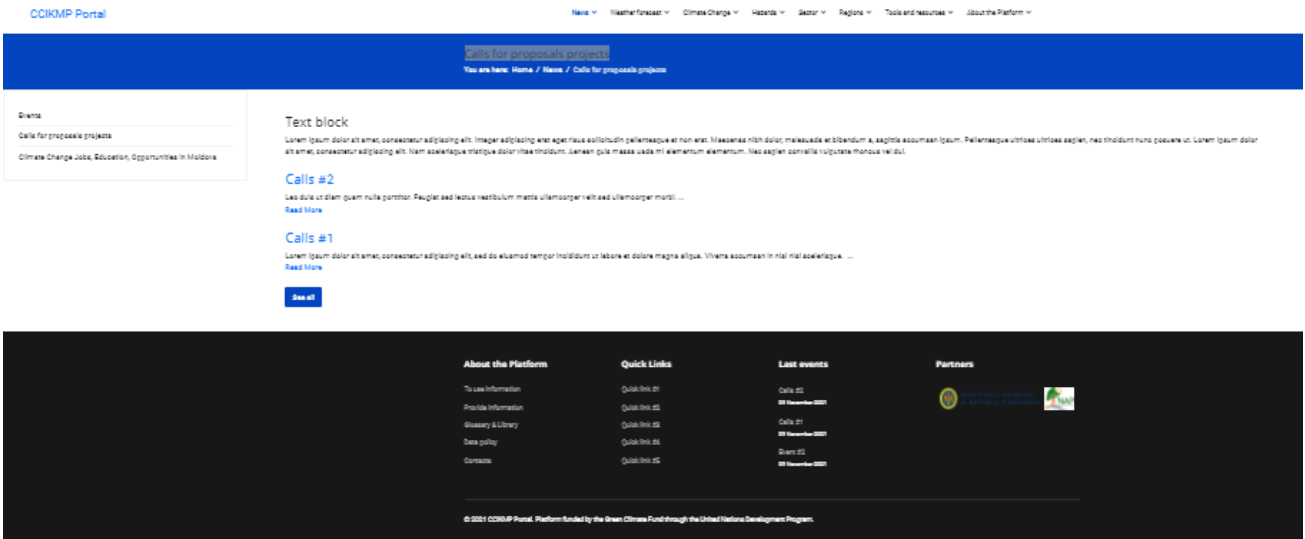
ToR for development of Climate Change Information and Knowledge Management Portal of Moldova

Annex 5 - List of climate indicators for “Moldova Climate GIS”

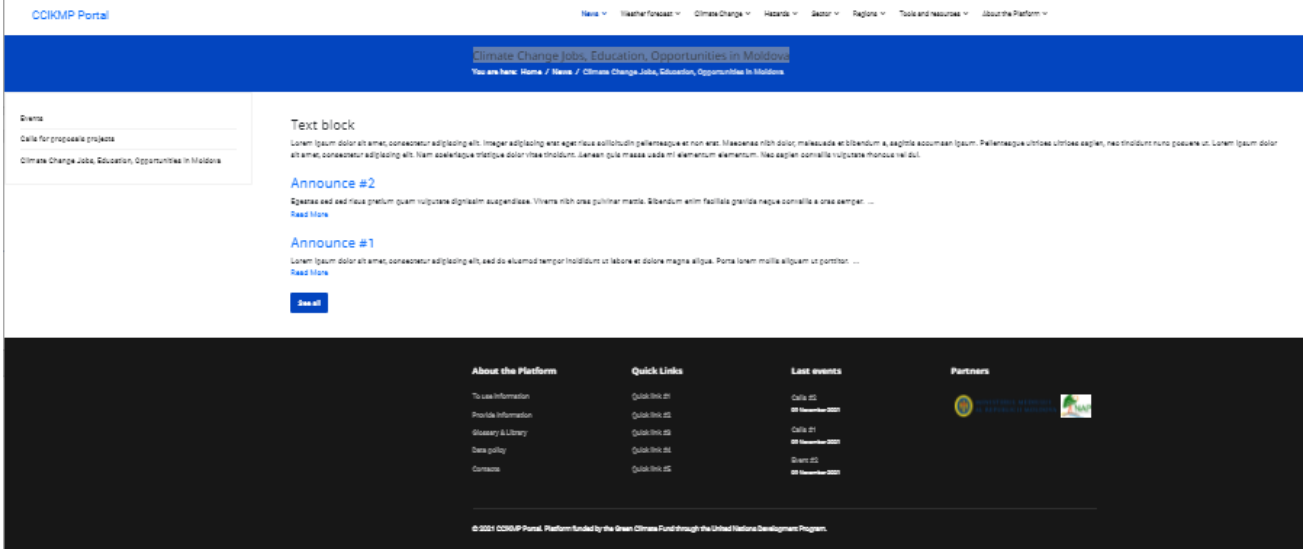
Name of Indicator
Surface temperature (mean and extremes)
Precipitation (mean and extremes)
Wind Speed and Direction
Solar radiation
Evapotranspiration from land
River discharge (annual, seasonal)
Land Cover structure
Sum of active temperatures
Aridity index
Index of Biological Effectiveness of Climate (IBEC)
Hydrothermal coefficient (HTC) indexed for vegetation period

ToR for development of Climate Change Information and Knowledge Management Portal of Moldova

Draft mockup for page "Calls for proposals projects"

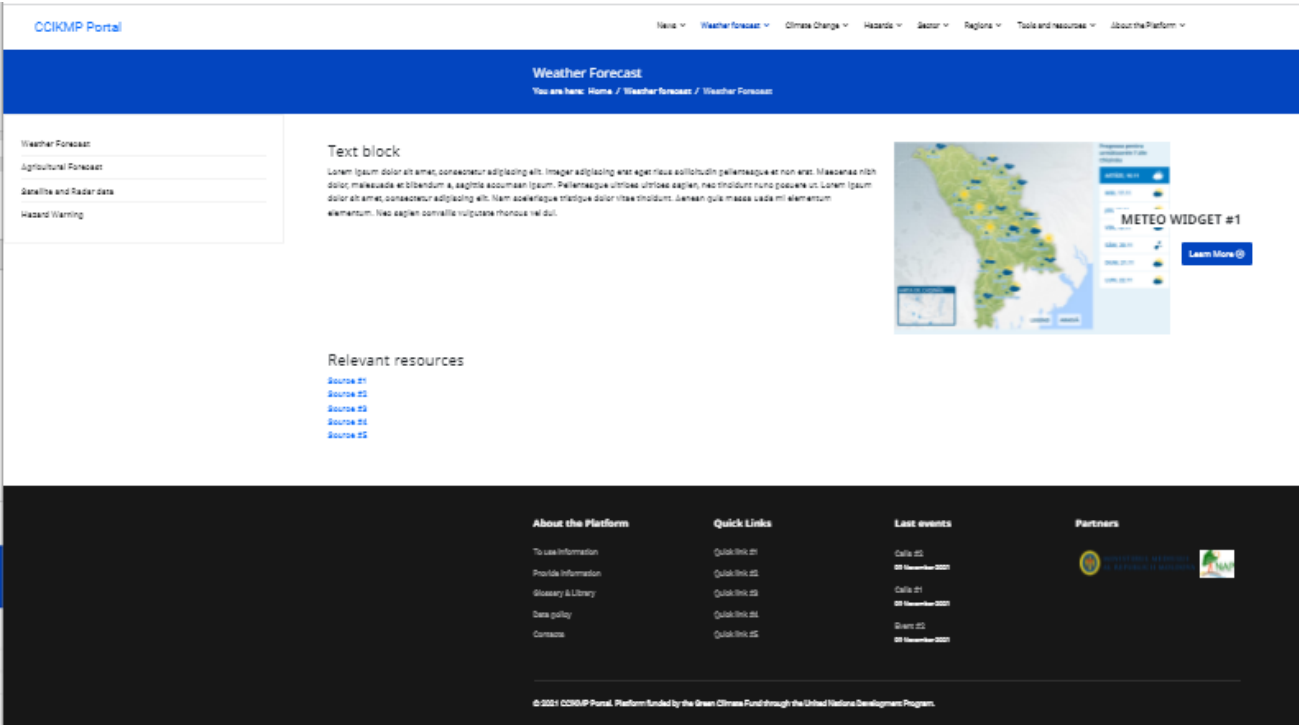


Draft mockup for page "Climate Change Jobs, Education, Opportunities in Moldova"

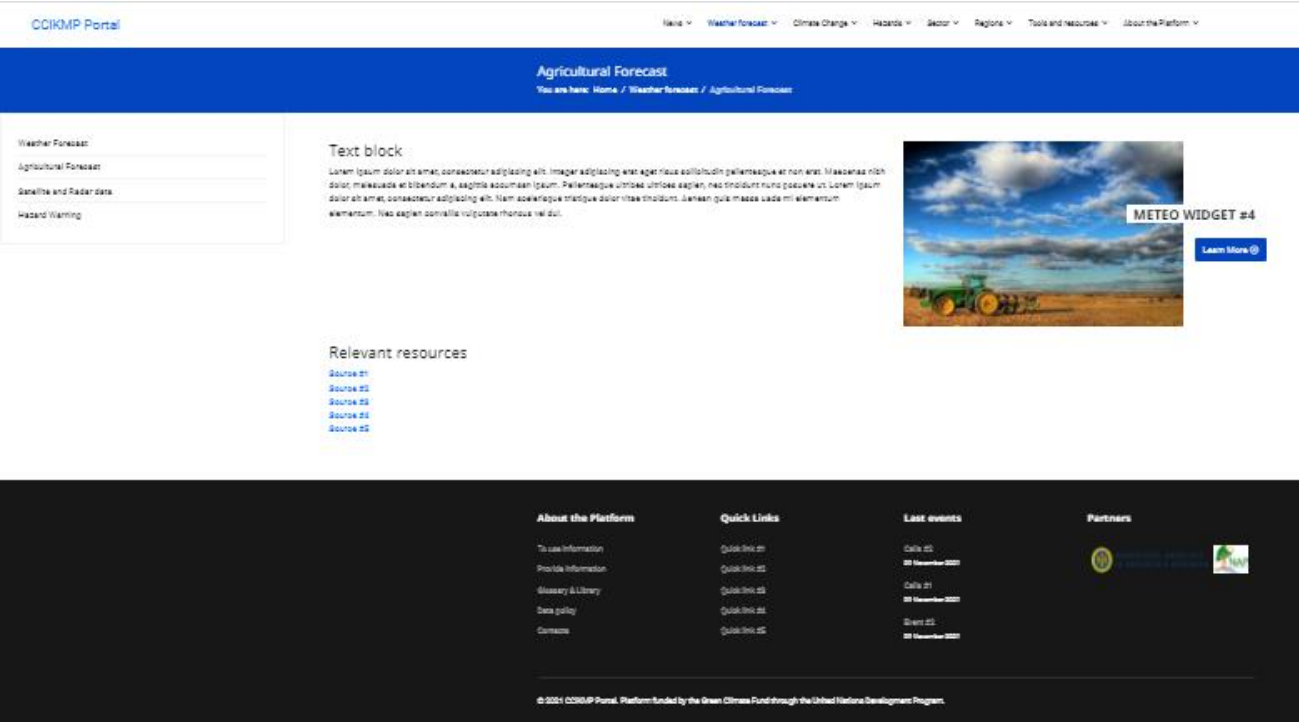


ToR for development of Climate Change Information and Knowledge Management Portal of Moldova

Draft mockup for page "Weather Forecast"

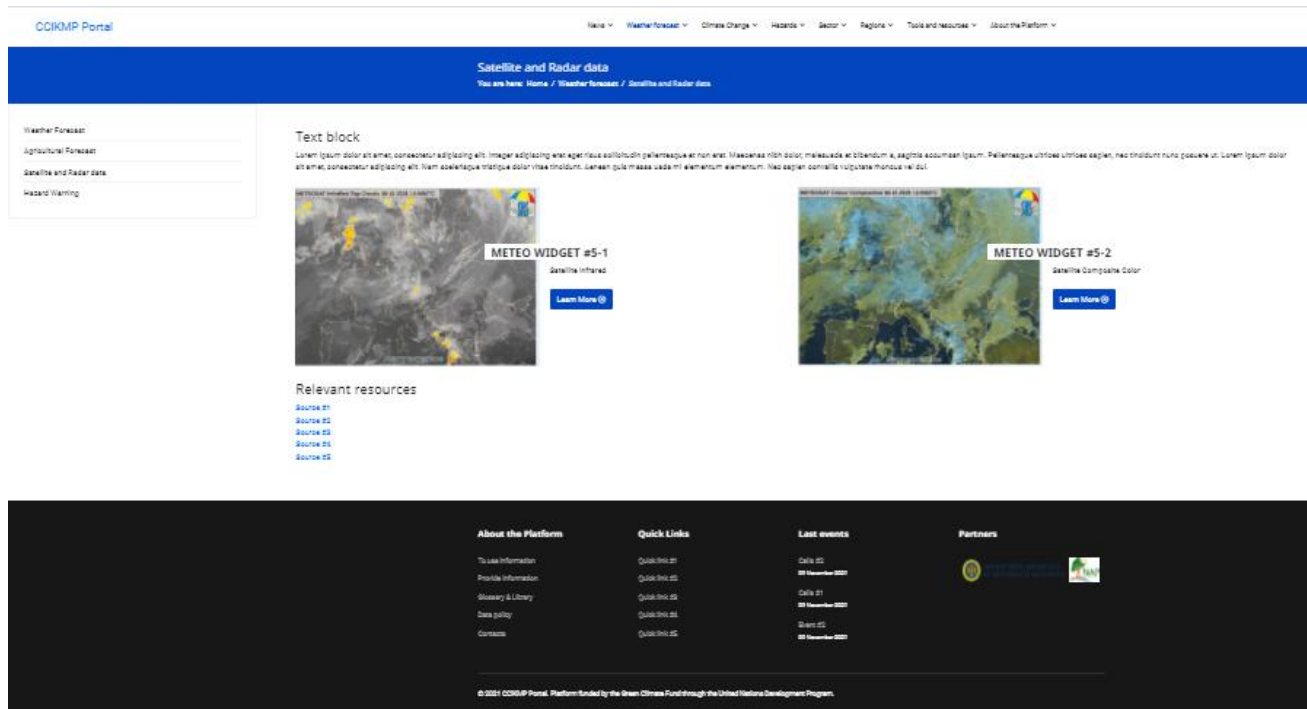


Draft mockup for page "Agricultural Forecast"

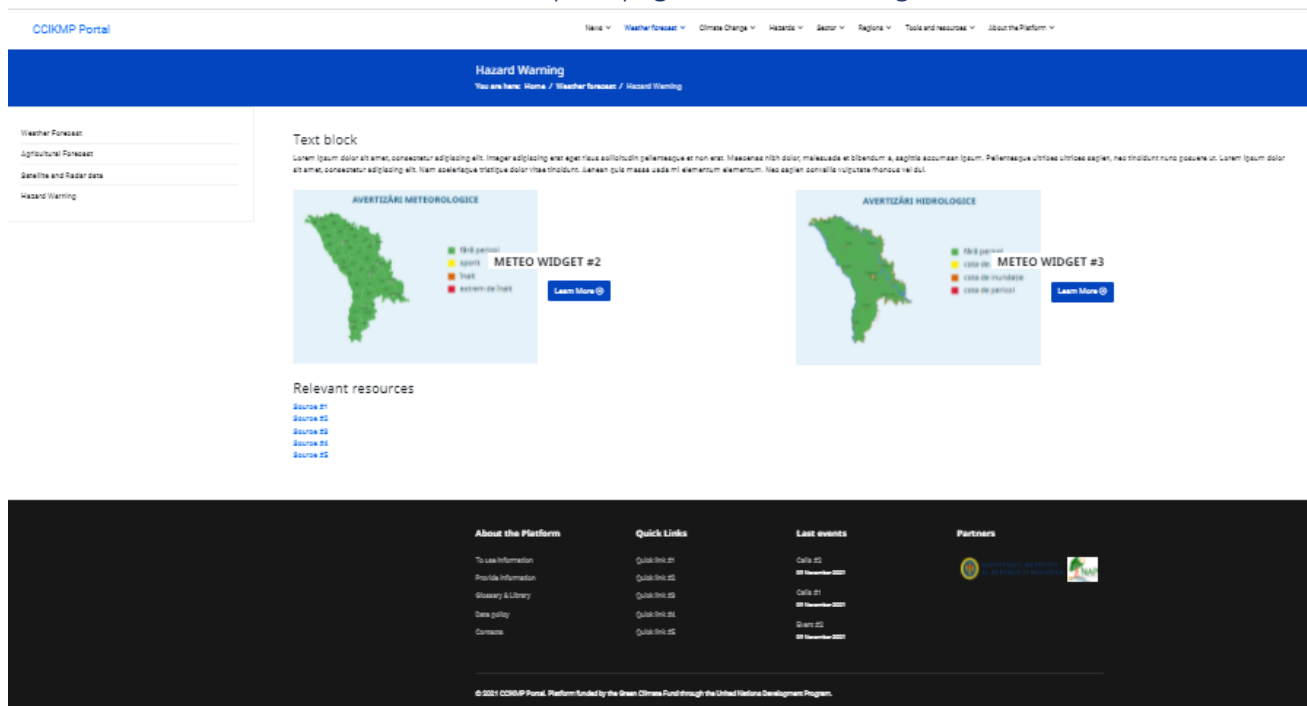


ToR for development of Climate Change Information and Knowledge Management Portal of Moldova

Draft mockup for page "Satellite and Radar data"

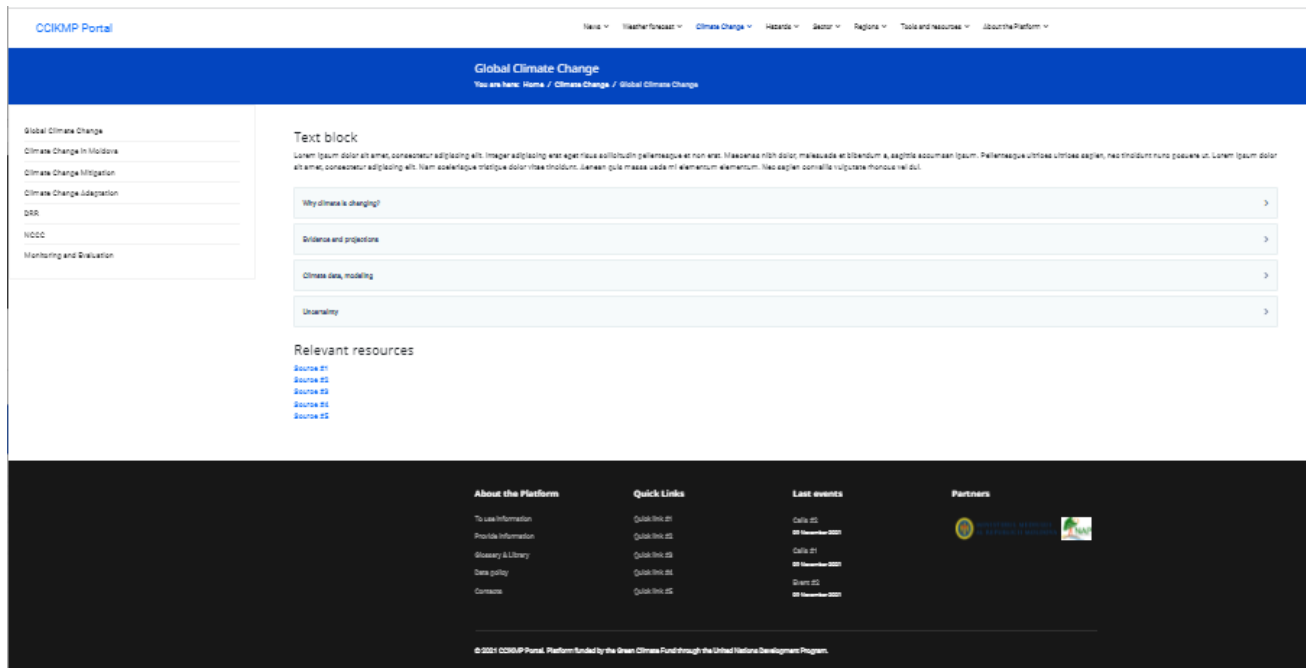


Draft mockup for page "Hazard Warning"

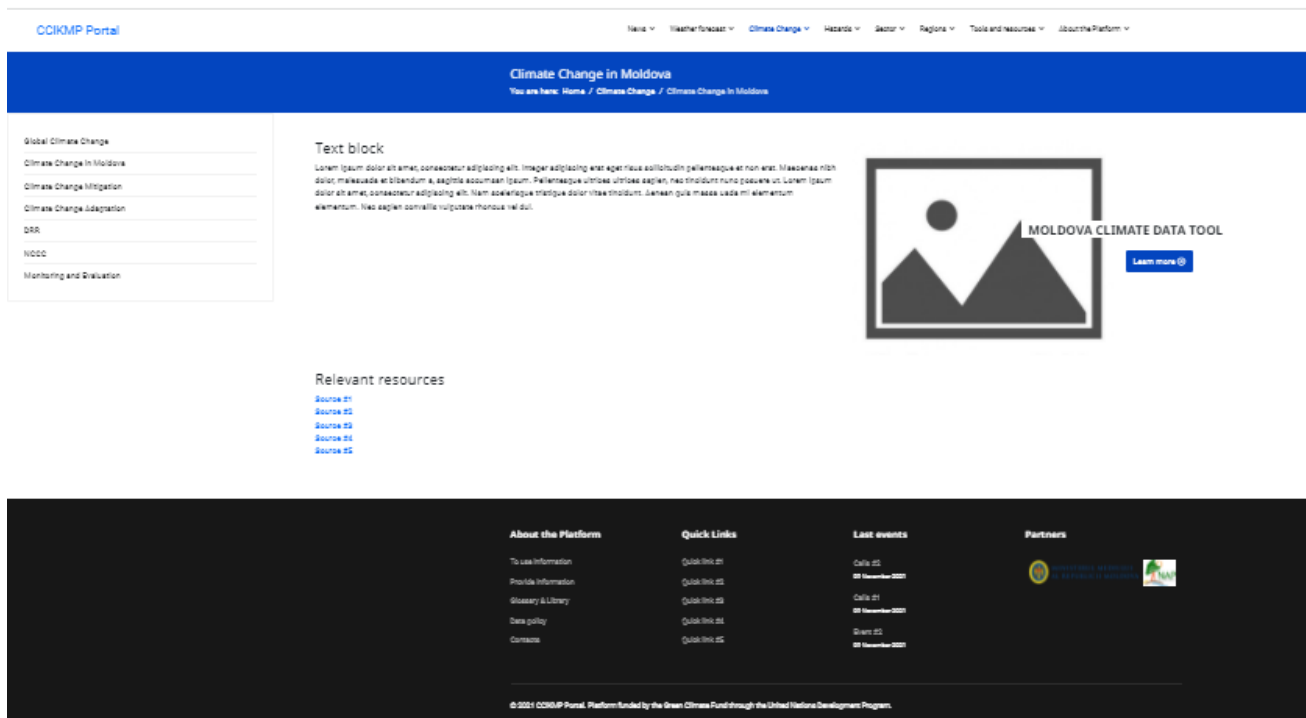


ToR for development of Climate Change Information and Knowledge Management Portal of Moldova

Draft mockup for page "Global Climate Change"

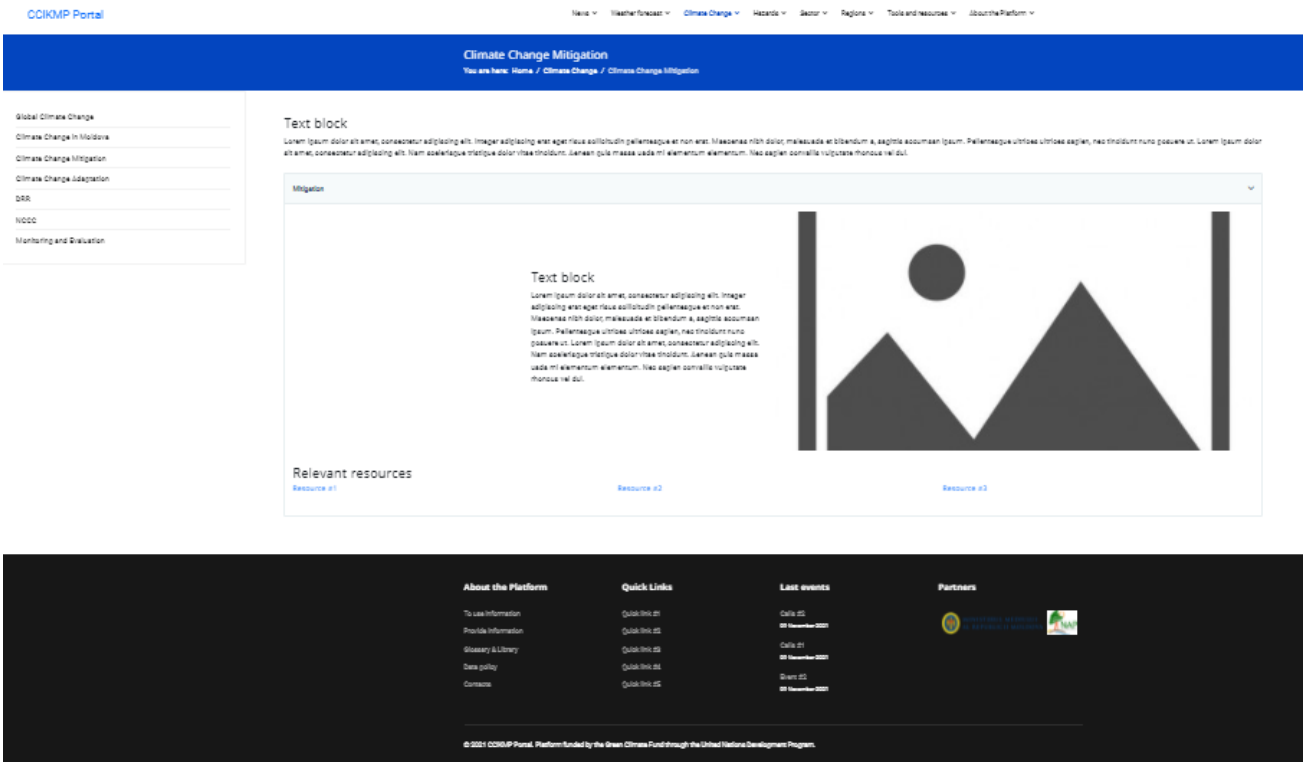


Draft mockup for page "Climate Change in Moldova"

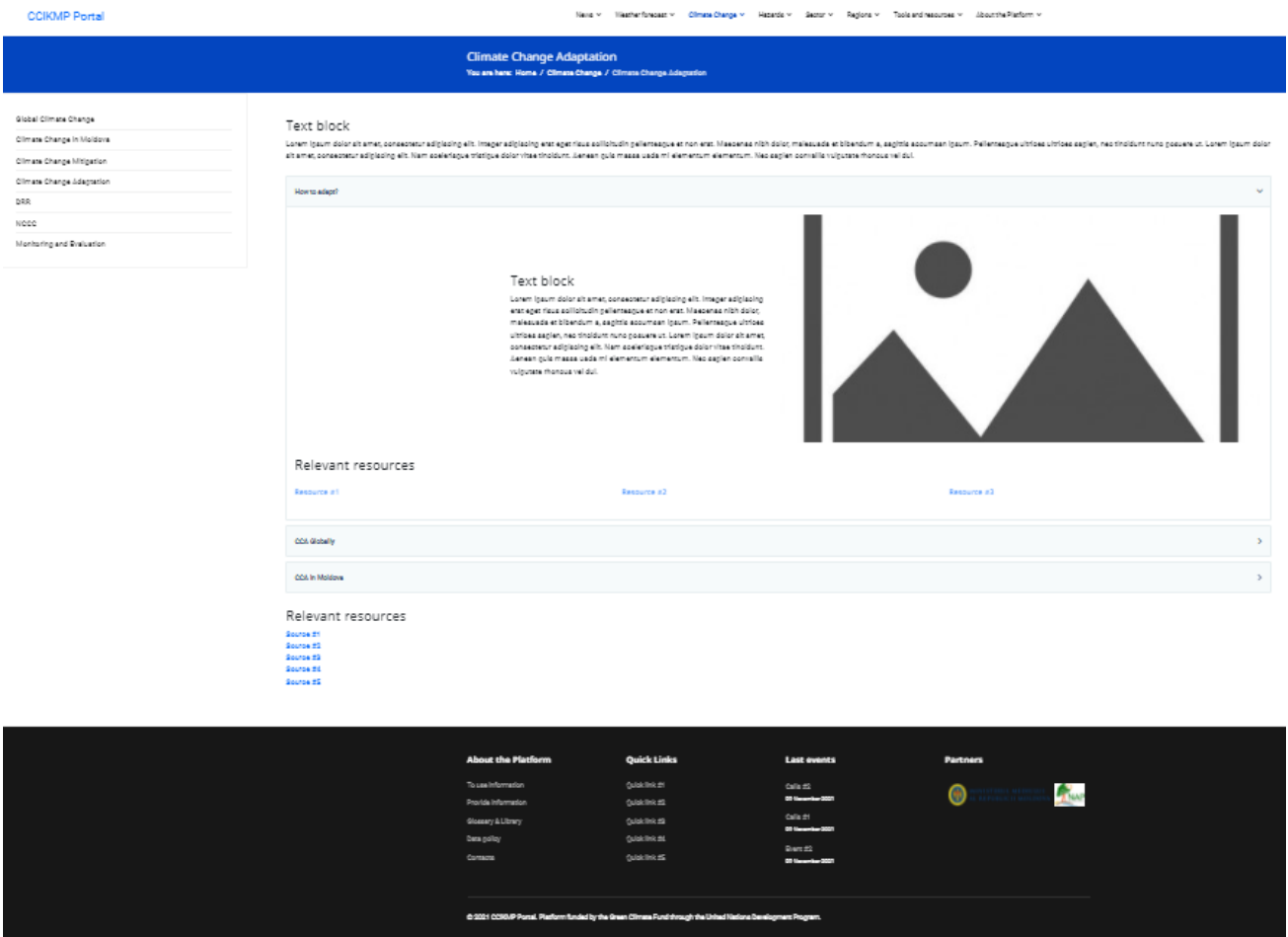


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Draft mockup for page "Climate Change Mitigation"

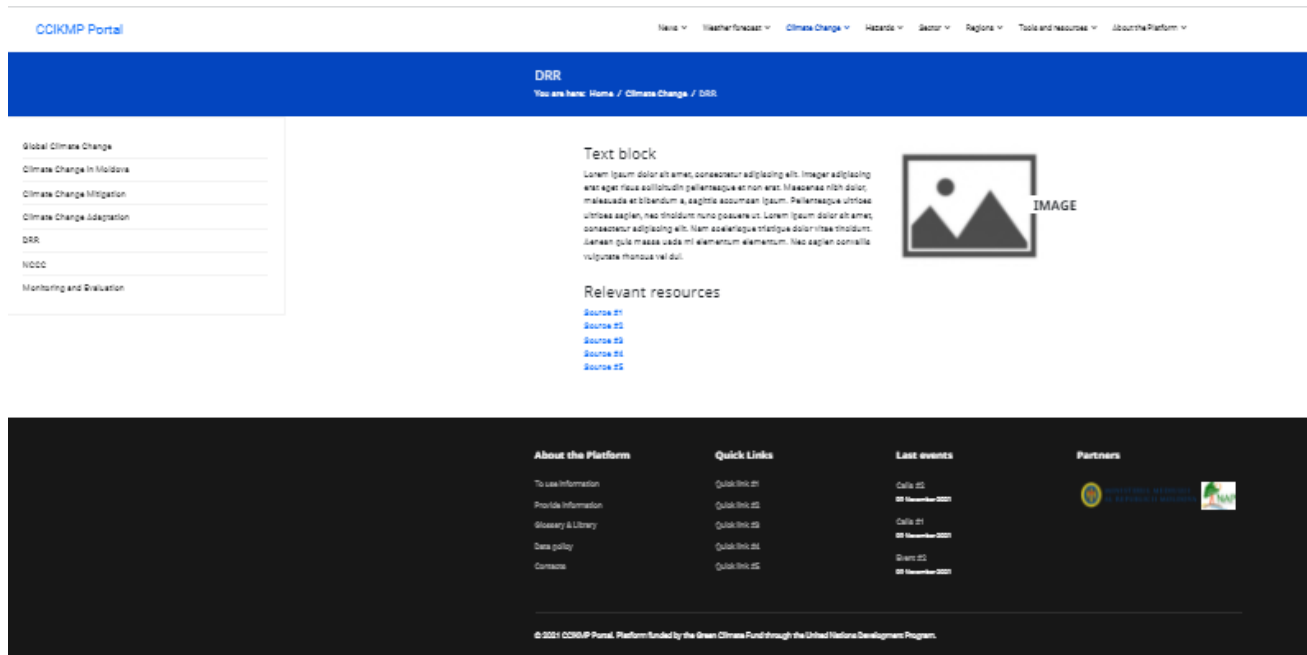


Draft mockup for page "Climate Change Adaptation"

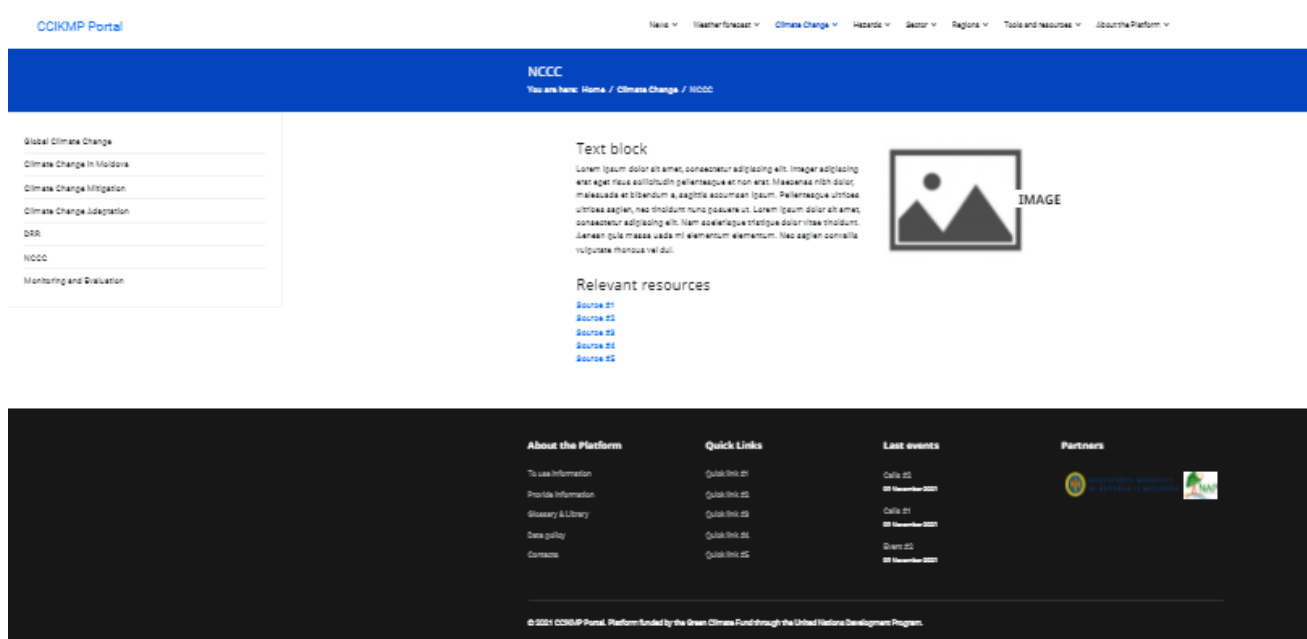


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Draft mockup for page "DRR"



Draft mockup for page "NCCC"



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Draft mockup for page "Monitoring and Evaluation"

CCIKMP Portal

HomeWeather forecastClimate ChangeHazardsSectorRegionsTools and resourcesAbout the Platform

Monitoring and Evaluation

You are here: Home / Climate Change / Monitoring and Evaluation

Global Climate Change

Climate Change in Moldova

Climate Change Mitigation

Climate Change Adaptation

DRR

NCCD

Monitoring and Evaluation

Text block

Placeholder for text content

Relevant resources

Source 01

Source 02

Source 03

Source 04

Source 05

IMAGE

Placeholder for image content

About the Platform

Quick Links

Last events

Partners

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Draft mockup for page "Hazards - Overview"

CCIKMP Portal

HomeWeather forecastClimate ChangeHazardsSectorRegionsTools and resourcesAbout the Platform

Overview

You are here: Home / Hazards / Overview

Overview

Floods

Droughts

Wildfires

Floods

Wildfires

Wildfires

Wildfires

Placeholder for text content

Floods

Droughts

Wildfires

Floods

Wildfires

Wildfires

Relevant resources

Source 01

Source 02

Source 03

Source 04

Source 05

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Draft mockup for pages "Floods", "Droughts", "Windstorms", "Frosts", "Hailstorms", "Wildfires", "Heatwaves"

CCIKMP Portal

HomeWeather forecastClimate ChangeRecordsSectorRegionsTools and resourcesAbout the Platform

Floods

You are here: Home / Records / Floods

Overview

Floods

Droughts

Windstorms

Frosts

Hailstorms

Wildfires

Heatwaves

Text block

Indicator #1

Indicator #2

Indicator #3

Indicator #4

State - dynamic maps

Climate parameters

Adaptation practices

Relevant resources

Source #1

Source #2

Source #3

Source #4

Source #5

About the Platform





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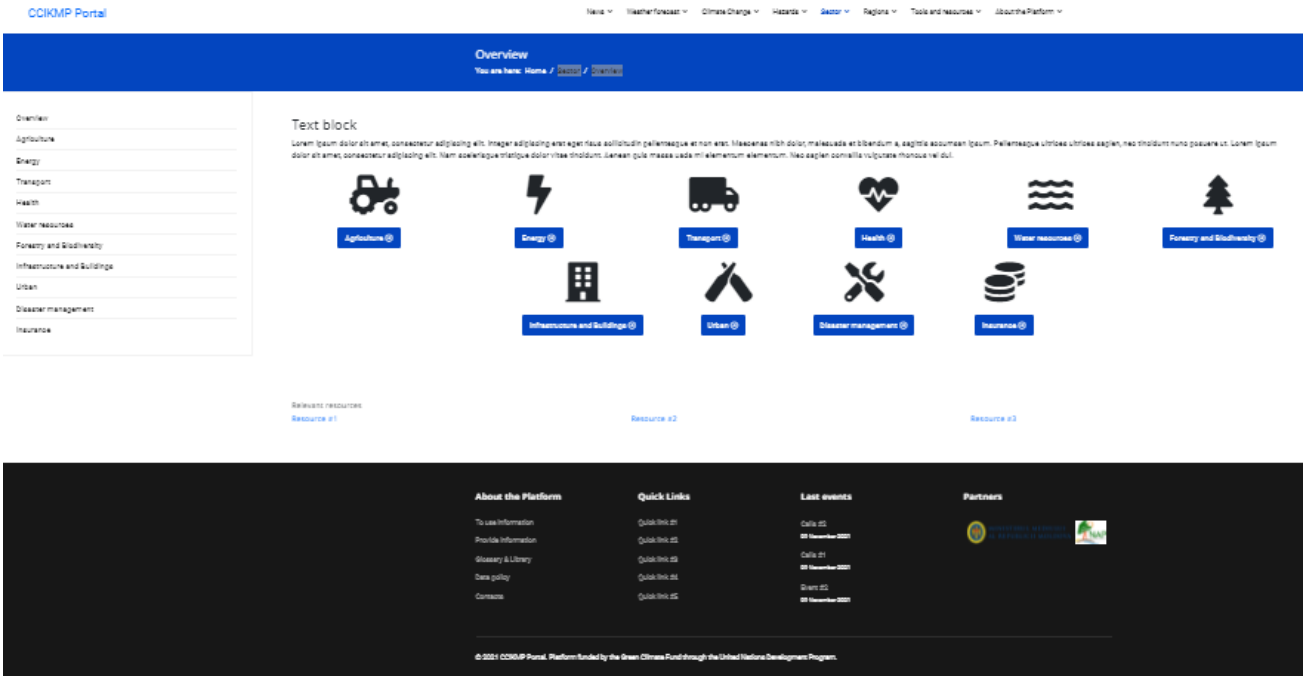
© 2021 CCIKMP Portal. Platform funded by the Green Climate Fund through the United Nations Development Program.

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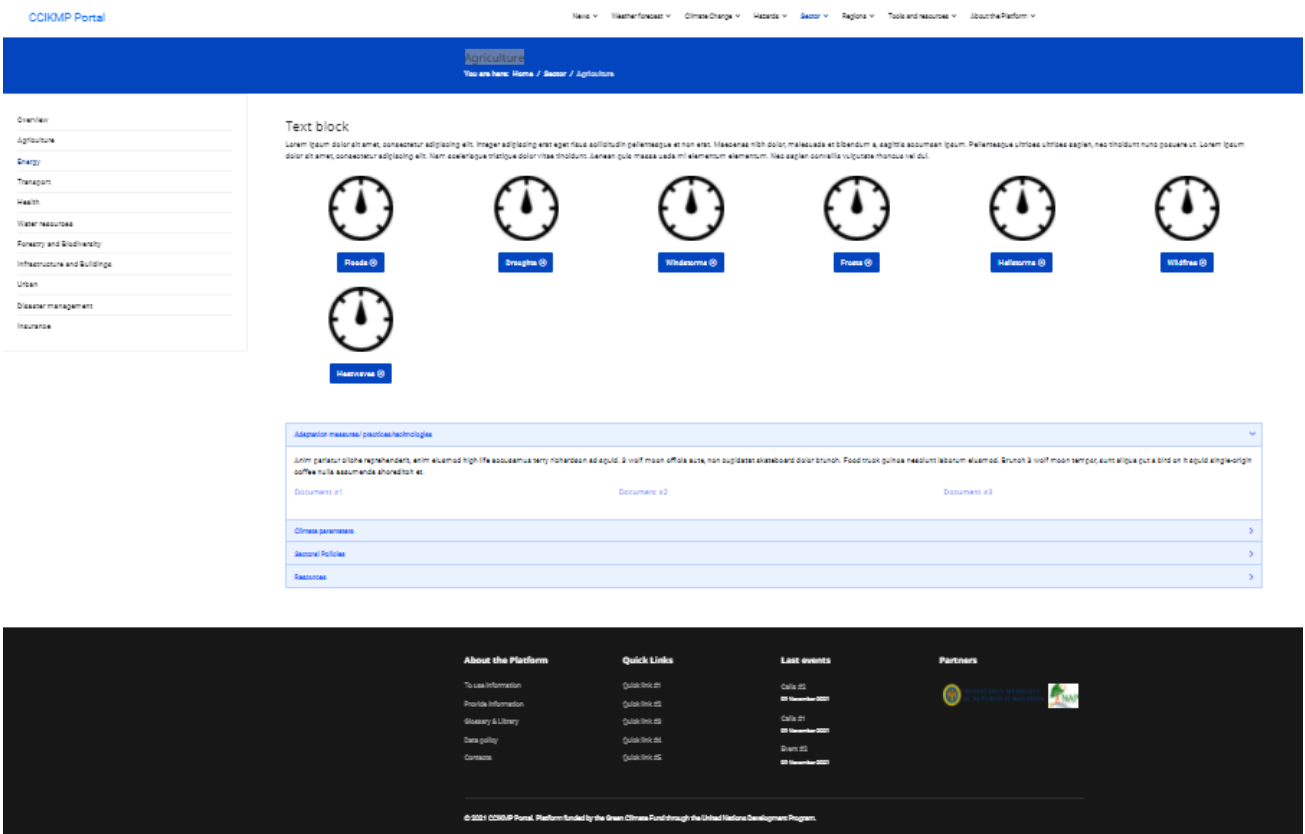
Risks - dynamic maps >		
Climate parameters v		
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	<h3>Parameter #3</h3> <p>Non quam lacus suspendisse faucibus interdum posuere lorem ipsum. Ultricies integer quis auctor elit sed vulputate. Pellentesque eu tincidunt tortor aliquam nulla facilisi cras. Consectetur purus ut faucibus pulvinar elementum integer. Nunc non blandit massa enim nec. Et tortor consequat id porta nibh venenatis.</p>	
	<h3>Parameter #4</h3> <p>Non quam lacus suspendisse faucibus interdum posuere lorem ipsum. Ultricies integer quis auctor elit sed vulputate. Pellentesque eu tincidunt tortor aliquam nulla facilisi cras. Consectetur purus ut faucibus pulvinar elementum integer. Nunc non blandit massa enim nec. Et tortor consequat id porta nibh venenatis.</p>	
Adaptation practices >		
Risks - dynamic maps >		
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Case studies #1	Case studies #2	Case studies #3

ToR for development of Climate Change Information and Knowledge Management Portal of Moldova

Draft mockup for page "Sector - Overview"

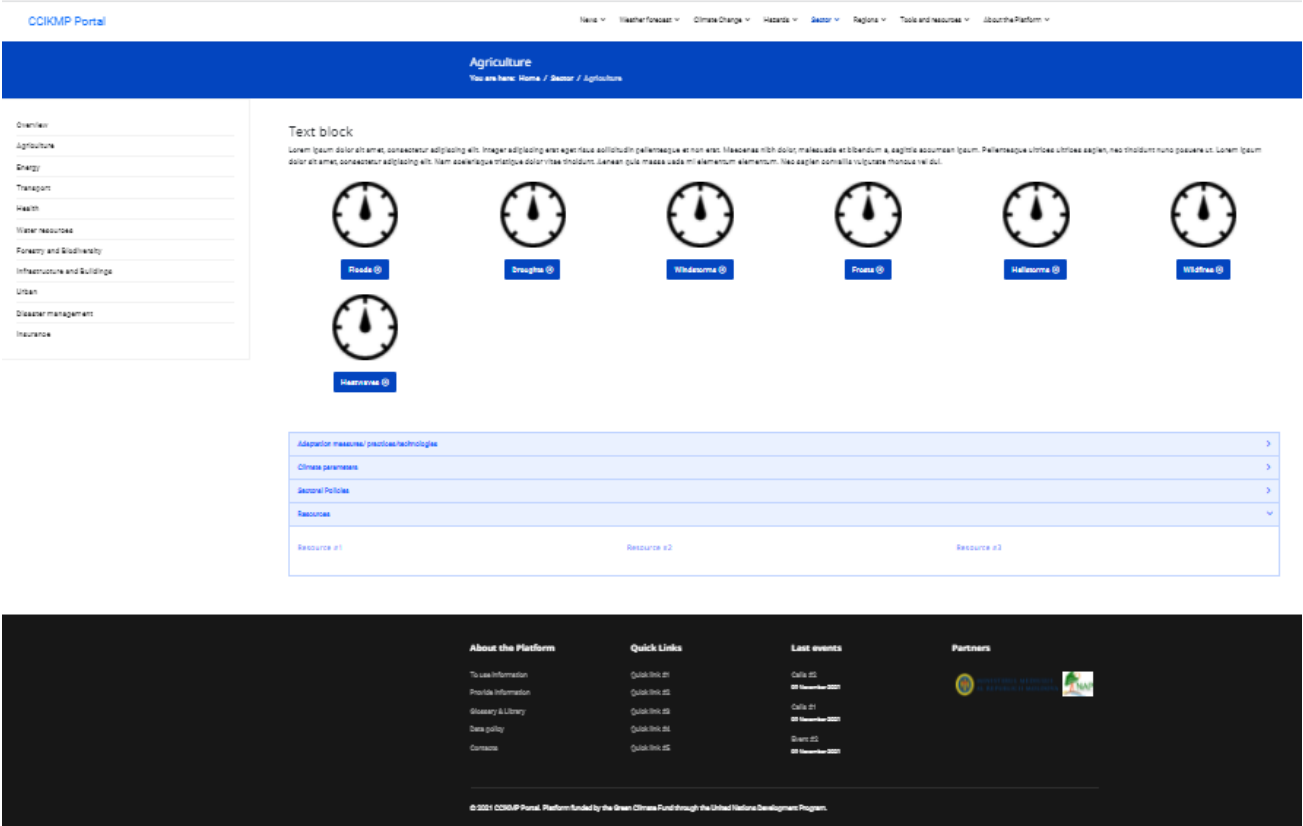
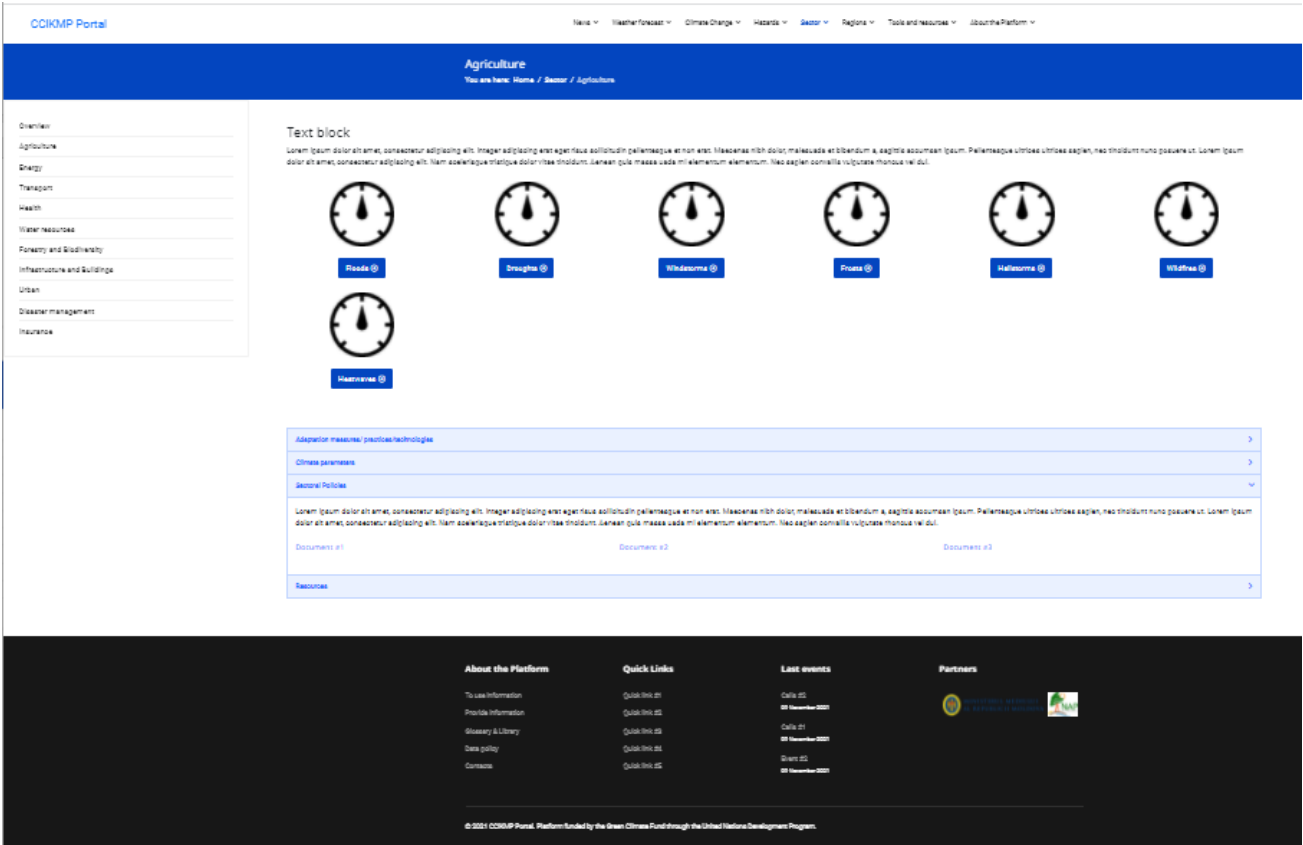


Draft mockup for page "Agriculture"



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Draft mockup for page "Energy"

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Draft mockup for page "Transport"

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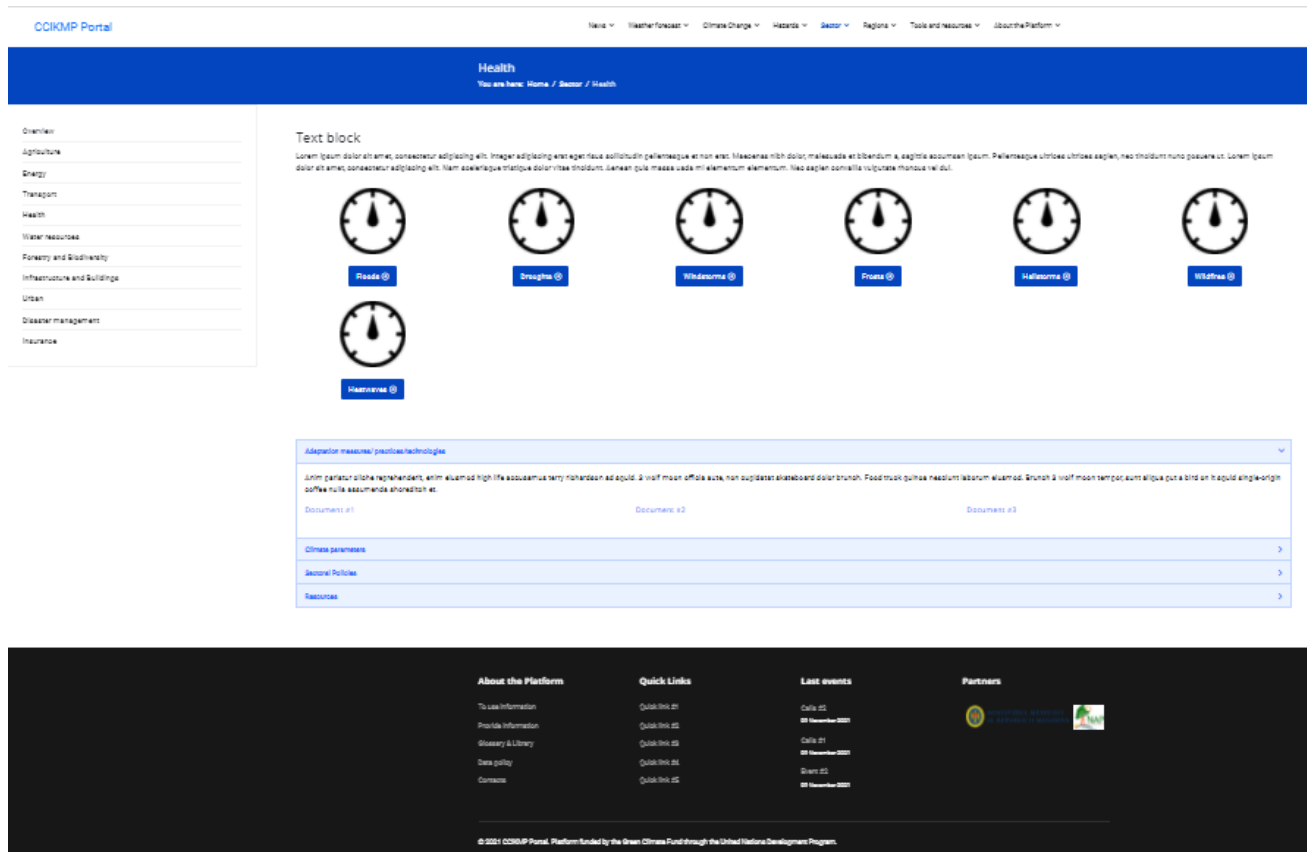
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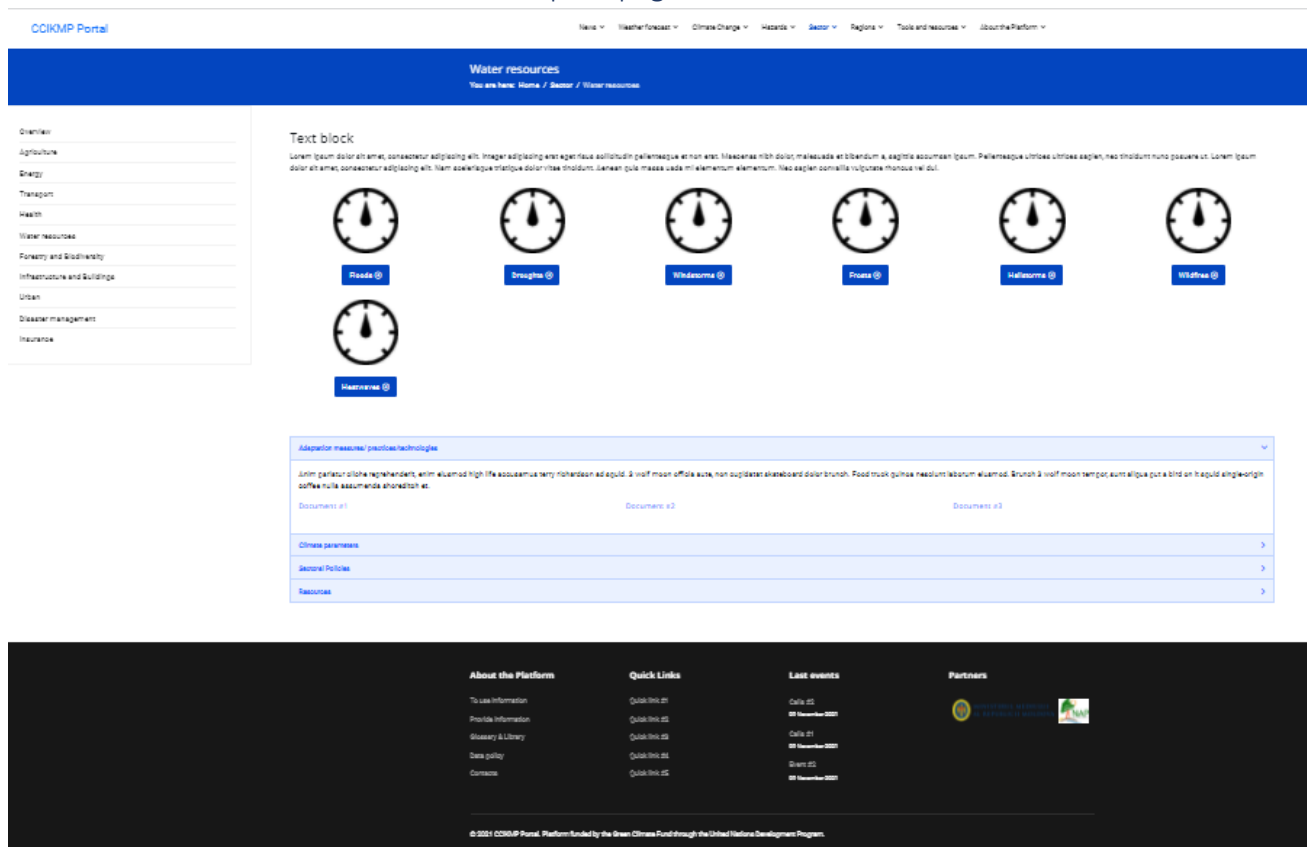
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Draft mockup for page "Health"



Draft mockup for page "Water resources"



Draft mockup for page "Forestry and Biodiversity"

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Icons with labels: Roads, Droughts, Wildfires, Floods, Hurricanes, etc.

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Draft mockup for page "Infrastructure and Buildings"

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Text block

Icons with labels: Roads, Droughts, Wildfires, Floods, Hurricanes, etc.

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- Text block

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Legends:

- With adaptation policy
- In processing
- Without adaptation policy

Vulnerable groups and sectors

Vulnerable group #1



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Vulnerable group #2



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National risk maps

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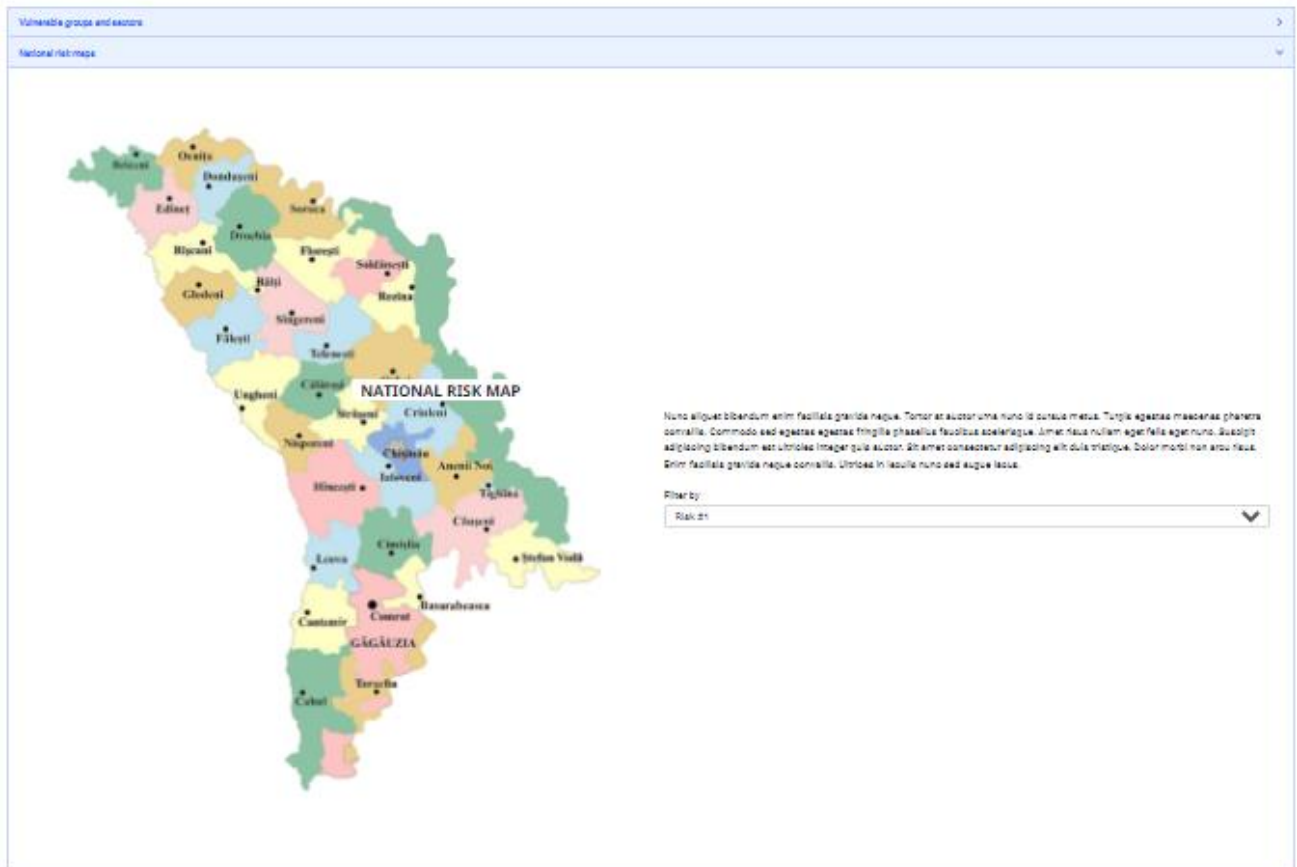
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- Moldova Climate Data Tool (MCDT)
- Moldova Climate GIS
- Climate Services
- Finance and investments
- Education and awareness
- Case studies

Text block

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- International policies >
- National and Regional Policies >
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International policies

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Document #1

Document #2

Document #3

National and Regional Policies

Sectoral policies

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National and Regional Policies	▼
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Sectoral policies	▼
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Draft mockup for page "Adaptation planning support tools "

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1. Monitor & review

2. Current climate vulnerability

3. Future climate vulnerability

4. Adaptation options

5. Getting started

Text block

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1 Getting started

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Process

Tasks

Resources

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3 Future climate vulnerability

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UNEP

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Draft mockup for page "Moldova Climate Data Tool (MCDT)"

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Upper-air Atmosphere															
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	<p>Upper Air Wind Speed and Direction</p> <p>Non quam lacus suspendisse faucibus interdum posuere lorem ipsum. Ultricies Integer quis auctor elit sed vulputate. Pellentesque eu rhinodum titorit aliquam nulla facilis oras. Consectetur purus ut faucibus pulvinar elementum Integer. Nunc non blandit massa enim nec. Orcitor conseqat id porta nisl venenatis.</p> <p>Learn more</p>														
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<table> <tr> <td>Surface Atmosphere</td><td>></td></tr> <tr> <td>Atmospheric Composition</td><td>></td></tr> <tr> <td>Hydrosphere</td><td>></td></tr> <tr> <td>Biosphere</td><td>></td></tr> <tr> <td>Soil</td><td>></td></tr> <tr> <td>Agriculture</td><td>></td></tr> <tr> <td>Anthroposphere</td><td>></td></tr> </table>		Surface Atmosphere	>	Atmospheric Composition	>	Hydrosphere	>	Biosphere	>	Soil	>	Agriculture	>	Anthroposphere	>
Surface Atmosphere	>														
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Upper-air Atmosphere

Surface Atmosphere

Atmospheric Composition

Hydrosphere

Biosphere

Soil

Agrosphere

Anthroposphere

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Anthropogenic GHG emission

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Learn More

Anthropogenic Water Use

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Draft mockup for page Individual pages for indicators of MCDT

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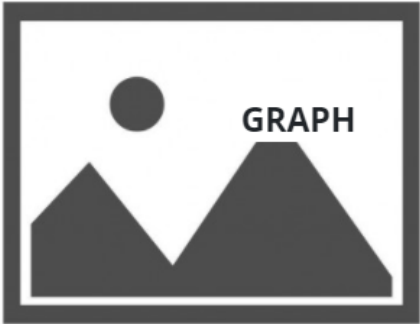
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Individual page for each indicator of MCT

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Trends

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ȘI CLIMATEI
AL REPUBLICII MOLDOVA



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Draft mockup for page "Moldova Climate GIS"

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Climate variableMap divisionTerritorySeasonDisplay of the values

TemperatureMunicipalitiesAnenii NoiAll yearChange

INTERACTIVE MAP

Indicators:

- Surface temperature (mean and extremes)
- Precipitation (mean and extremes)
- Wind Speed and Direction
- Solar radiation
- Evapotranspiration from land
- River discharge (annual, seasonal)
- Land Cover structure
- Sum of active temperatures
- Aridity index
- Index of Biological Effectiveness of Climate (IBEC)
- Hydrothermal coefficient (HTC) indexed for vegetation period

Start century 2011-2040Mid-century 2041-2070End of the century 2071-2100

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Trainings materials

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Video #1



Video #2



Audio #1



Audio #2

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A

Adaptation

Adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities.

Adaptive Capacity

The ability of a system to adjust to climate change(including climate variability and extremes),to moderate potential damages, to take advantage of opportunities, or to cope with the consequences.

B

Baseline

The baseline (or reference) is any datum against which change is measured. It might be a "current baseline", in which case it represents observable, present-day conditions. It might also be a "future baseline", which is a projected future set of conditions excluding the driving factor of interest. Alternative interpretations of the reference conditions can give rise to multiple baselines.

Biodiversity

The variability among living organisms from terrestrial, marine and other ecosystems. Biodiversity includes variability at the genetic, species and ecosystem levels.

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Data policy

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Goal of the data protection policy

The goal of the data protection policy is to depict the legal data protection aspects in one summarising document. It can also be used as the basis for statutory data protection inspections, e.g. by the customer within the scope of commissioned processing. This is not only to ensure compliance with the European General Data Protection Regulation (GDPR) and Data protection Act (DPA) 2018 but also to provide proof of compliance.

Preamble

Brief description of the company and motivation to comply with data protection.

Security policy and responsibilities in the company

- For a company, in addition to existing corporate objectives, the highest data protection goals are to be defined and documented. Data protection goals are based on data protection principles and must be individually modified for every company.
- Determination of roles and responsibilities (e.g. representatives of the company, operational data protection officers, coordinators or data protection team and operational managers)
- Commitment to continuous improvement of a data protection management system
- Training, sensitisation and obligation of the employees

Legal framework in the company

- Industry-specific legal or conduct regulations for handling personal data
- Requirements of internal and external parties
- Applicable laws, possibly with special local regulations

Documentation

- Conducted internal and external inspections
- Data protection need: determination of protection need with regard to confidentiality, integrity and availability.

Existing technical and organisational measures (TOM)

Appropriate technical and organisational measures that must be implemented and substantiated, taking into account, inter alia, the purpose of the processing, the state of the technology and the implementation costs.

The description of the implemented TOM can, for example, be based on the structure of ISO/IEC 27002, taking into account ISO/IEC 29151 (guidelines for the protection of personal data). The respective chapters should be substantiated by referencing the existing guidelines.

Examples of such guidelines include:

- Guideline for the rights of data subjects
- Access control
- Information classification (and handling thereof)
- Physical and environmental-related security for end users such as:
 - Permissible use of values
 - Guideline for information transfer based on the work environment and screen locks
 - Mobile devices and telecommuting
 - Restriction of software installation and use
- Data backup
- Information transfer
- Protection against malware
- Handling technical weak points
- Cryptographic measures
- Communication security
- Privacy and protection of personal information
- Supplier relationships: Noting regular inspection and evaluation of data processing, especially the efficacy of the implemented technical and organisational measures.

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Subject

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Signatures: 2

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Certificate Pages: 2

Initials: 10

Maria Nicolaev

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One United Nations Plaza

Enveloped Stamping: Enabled

New York, NY 10017

Time Zone: (UTC-08:00) Pacific Time (US & Canada)

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Viewed: 4/5/2022 12:12:22 AM

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Signature Adoption: Pre-selected Style

Signed by link sent to maria.nicolaev@undp.org

Using IP Address: 93.116.206.51

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Cristina Gnaciuc

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Procurement Associate

United Nations Development Program

Security Level: Email, Account Authentication (None)

DS
CG

Sent: 4/5/2022 12:12:34 AM

Viewed: 4/5/2022 12:15:10 AM

Signed: 4/5/2022 12:17:01 AM

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Corina Oprea

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Operations Manager

United Nations Development Program

Security Level: Email, Account Authentication (None)

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Corina Oprea

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In Person Signer Events**Signature****Timestamp****Editor Delivery Events****Status****Timestamp****Agent Delivery Events****Status****Timestamp****Intermediary Delivery Events****Status****Timestamp****Certified Delivery Events****Status****Timestamp**

Carbon Copy Events	Status	Timestamp
Witness Events	Signature	Timestamp
Notary Events	Signature	Timestamp
Envelope Summary Events	Status	Timestamps
Envelope Sent	Hashed/Encrypted	4/5/2022 12:12:15 AM
Certified Delivered	Security Checked	4/5/2022 2:00:27 AM
Signing Complete	Security Checked	4/5/2022 2:00:44 AM
Completed	Security Checked	4/5/2022 2:00:44 AM
Payment Events	Status	Timestamps